THE EFFECT OF ONLINE TAX SYSTEM ON TAX COMPLIANCE AMONG
SMALL TAXPAYERS IN EAST OF NAIROBI TAX DISTRICT

BY

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the Award of the Degree of Masters of Science in Finance of the
University of Nairobi

OCTOBER 2014
DECLARATION

I, the undersigned declare that this research project is my original work and affirm to the best of my knowledge that it has not presented for any academia award in any university.

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This research project has been submitted for examination with my approval as the university supervisor

Signature ______________________  Date ______________________

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ACKNOWLEDGEMENTS

Throughout the long period of preparation of this project, I have been greatly assisted by many wonderful and excellent people. It is with the utmost appreciation that I thank all those who contributed time, resources and thought to the success of this research project.

First, I thank the Almighty God and Creator, for being my guide and provider and for giving me strength, good health and wisdom to accomplish this study.

I am indebted to my esteemed supervisor Mr. Cyrus Iraya for the advice, directions and invaluable counsel she constantly gave to me when I needed it.

I owe special thanks to my friends, colleagues, classmates and relatives for the inspiring and supportive deeds they performed.
DEDICATION

This project is sincerely dedicated to my loving wife Brigid and our Daughter Caisey Wasao for accepting me to spend most of their time out of the normal outing schedules to offering the same to library and my parents and siblings for the unquantifiable support they also offered. I could not have completed this research without constant encouragement from my colleagues and friends even if time may not allow me to mention you by names.

May the Lord God bless you all
ABSTRACT

The Objective of this study was to establish the effects of online filing system on tax compliance among small taxpayers in East of Nairobi tax District. The objective of the study was answered using three research questions which revolved around online tax registration, online tax filing and online tax remittances, and how each is affected by online system in order to enhance compliance.

Review of the past research studies, books, journals and articles were carried out. The study adopted quantitative and descriptive methods as a research designs. Data was collected using structured questionnaire, which covered all the variables of the study from 160 sampled taxpayers based in East of Nairobi tax District. Data obtained was subjected to quantitative methods of data analysis using SPSS (version 20). Results obtained were presented using tables and graphs for ease of understanding and interpretation. In addition, both correlation and regression analyses were done and summaries presented.

The findings of the study were that online system do affect tax compliance level among small taxpayers in East of Nairobi as far as registration, filing and payments were concerned. From the regression analysis, it was revealed that holding online tax registration, filing and payment to a constant zero, tax compliance would stand at 3.663. A unit increase in online tax registration would lead to increase in tax compliance among small tax payers in east of Nairobi by factor of 0.051 and a unit increase in tax filing would lead to an increase in tax compliance by factors of 0.161 while a unit increase of online tax payment would result to increase in tax compliance by factor of 0.086. Though the degree of compliance would differ from one sector of the population to another. Mining and mines sector seemed not to have embraced online filing as it recorded the least of the findings.

The study recommends that a further study should be done to establish how online system not only affect compliance in mines and minerals sector but also other tax districts of small taxpayers which are considered more/less advanced than East of Nairobi tax District.
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<th>Abbreviation</th>
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<tr>
<td>DR</td>
<td>Domestic Revenue</td>
</tr>
<tr>
<td>EFP</td>
<td>Electronic Fiscal Printer</td>
</tr>
<tr>
<td>EON</td>
<td>East of Nairobi</td>
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<tr>
<td>ESD</td>
<td>Electronic Signature Device</td>
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<td>ETR</td>
<td>Electronic Tax Register</td>
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<td>IRS</td>
<td>Internal Revenue Services</td>
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<td>ITMS</td>
<td>Integrated Tax Modernisation System</td>
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<td>KRA</td>
<td>Kenya Revenue Authority, also referred to as authority</td>
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<tr>
<td>LTO</td>
<td>Large Taxpayers Office</td>
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<td>MTO</td>
<td>Medium Taxpayers Office</td>
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<td>SAS</td>
<td>Self-Assessment System</td>
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<td>VAT</td>
<td>Value Added Tax</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

Declaration .................................................................................................................................. ii  
Acknowledgements ................................................................................................................... iii  
Dedication ................................................................................................................................... iv  
Abstract ..................................................................................................................................... v  
List of Abbreviations ................................................................................................................ vi  
Table of Contents .................................................................................................................... vii  
List of Tables .......................................................................................................................... x  

## CHAPTER ONE: INTRODUCTION

1.1 Background of the Study .......................................................................................................... 1  
   1.1.1 Electronic Filing ......................................................................................................... 2  
   1.1.2 Tax Compliance ......................................................................................................... 3  
   1.1.3 Electronic Tax Filing and Compliance ...................................................................... 5  
   1.1.4 Small Taxpayers and East of Nairobi Tax District .................................................... 7  
1.2 Research Problem ................................................................................................................... 10  
1.3 Research Objective ................................................................................................................ 13  
1.4 Value of the Study .................................................................................................................. 13  

## CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction ............................................................................................................................. 14  
2.2 Ability to Pay Theory .............................................................................................................. 14  
2.3 Benefit Theory ......................................................................................................................... 15  
2.4 Determinants of Tax Compliance among Small Tax Payers ................................................ 16  
   2.4.1 Social Psychological Determinants of Tax Compliance .......................................... 16  
   2.4.2 Political Determinants of Tax Compliance .............................................................. 18  
   2.4.3 Economic Determinants of Tax Compliance ........................................................... 19  
2.5 Empirical Literature ................................................................................................................ 22  
2.6 Summary of Literature Review ............................................................................................. 24  

## CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction ............................................................................................................................. 26  
3.2 Research Design ...................................................................................................................... 26  
3.3 Study Population .................................................................................................................... 26
3.4 Sample Design ........................................................................................................................ 27
3.5 Data Collection ........................................................................................................................ 27
3.6 Data Validity and Reliability .................................................................................................. 27
3.7 Data Analysis ......................................................................................................................... 28

DATA ANALYSIS, RESULTS AND DISCUSSION ............................................................... 30
4.1 Introduction ............................................................................................................................. 30
4.2 Data Collection and Response Rate .................................................................................... 30
4.3 Demographic Information ..................................................................................................... 31
4.4 Descriptive results of the research variables ........................................................................ 32
4.5 Results of Online System Tax Registration ...................................................................... 34
   4.5.1 Internet Connectivity ............................................................................................... 34
   4.5.2 Automation as way of Doing Business .................................................................... 35
   4.5.3 Why not embraced automation ................................................................................ 36
4.6 Result of Online Tax Filing of Returns .............................................................................. 36
   4.6.1 Have you been filing tax returns online ................................................................... 37
   4.6.2 Taxes Registered for Online .................................................................................... 37
   4.6.3 Filing of Taxes Levels ............................................................................................. 38
4.7 Result of Online system and Compliance Perception ......................................................... 39
4.8 Results of Online Tax System and Tax Remittances .......................................................... 40
   4.8.1 Online system has ease Tax Payments ................................................................. 40
   4.8.2 Paying Taxes online is more accurate ...................................................................... 41
   4.8.3 Paying Taxes online is more accurate ...................................................................... 41
   4.8.4 Adopting online payments updates Ledger Real Time ............................................ 42
   4.8.5 Server downtime makes online payments a nightmare ............................................ 42
   4.8.6 Accessing Online on due dates is hectic .................................................................. 43
   4.8.7 Online System and Tax Compliance ........................................................................ 44
4.9 Results of Online Registration and Compliance .............................................................. 44
   4.9.1 Online tax filing and compliance ............................................................................. 45
   4.9.2 Online Tax Payments and Compliance .................................................................... 46
4.10 Correlation analysis .............................................................................................................. 47
4.11 Regression analysis ............................................................................................................... 48
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction.................................................................................................................. 51
5.2 Summary of Findings................................................................................................... 51
5.3 Conclusion ................................................................................................................... 53
5.4 Recommendations for policy and Practice ............................................................... 53
5.5 Limitations of the Study.............................................................................................. 54
5.6 Suggestions for Further Research.............................................................................. 54

REFERENCES..................................................................................................................... 55

APPENDICES...................................................................................................................... 57

Appendix I: Letter of Transmittal.................................................................................... 57
Appendix II: Research Questionnaire.............................................................................. 58
LIST OF TABLES

Table 1.1. Tax Due Dates ............................................................................................................... 6

Table 4.2.1 Profile of Respondents ............................................................................................... 31

Table 4.3 Descriptive Statistics ..................................................................................................... 33

Table 4.11.1a Model Summary ..................................................................................................... 48

Table 4.11.2 ANOVA ................................................................................................................... 48

Table 4.11.3 Model Coefficient .................................................................................................... 49
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

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

The rapidly increasing pace of technological change will have a significant impact, positive and negative, direct and indirect, on tax compliance. Information technology, which includes telecommunications and computerized systems, looks set to increase tax processes substantially, with savings in time as well as money, while at the same time affording customers a better service. On the other hand, the human element is affected by technological changes in different ways, by making jobs more important for some, while posing a threat to others (Lee et al., 2005).

All the tax information systems and data bases should be integrated and have available the tools required to combat tax non-compliance; facilitate tax compliance and satisfy information requirements at the operational and internal control levels for the effective management of a modern Tax Administration (CIAT Handbook for Tax Administrations - July 2000).
There are a number of methods employed today by tax agencies to capture tax return and payment data electronically. Additionally, electronic methods are increasingly being used for administrative functions, such as business tax registration, and name and address changes for both businesses and individuals.

**1.1.1 Electronic Filing**

Electronic tax filing or e-filing is a process where tax documents or tax returns are submitted through the internet, usually without the need to submit any paper return. The e-filing system encompasses the use of internet technology, the Worldwide Web and Software for a wide range of tax administration and compliance purposes. Electronic taxation differs among countries hence the name of the system differs from country to country. According to Gellis (1991), electronic declaration is named electronic tax filing. It has also been called online taxation payment by UN, (2007) or e-tax lodgement by Turner and Apelt (2004).

Electronic tax filing was first coined in United States, where the Internal Revenue Services (IRS) began offering tax return e-filing for tax refunds only (Muita, 2011). This has now grown to the level that currently approximately one out of every five individual taxpayers is now filing electronically. This however, has been as a result of numerous enhancements and features being added to the program over the years. Today, electronic filing has been extended to other developed countries like Australia, Canada, Italy United Kingdom, Chile, Ireland, Germany, France, Netherlands, Finland, Sweden, Switzerland, Norway, Singapore, Brazil, Mexico, India, China, Thailand, Malaysia and Turkey (Ramayah *et al.*, 2006). Equally developing countries have also been embracing electronic filing of tax returns. Some of the countries which are embracing the electronic filing include Uganda, Nigeria, Rwanda and Kenya (Muita, 2011).
Globally, the tax environment is changing rapidly. The advancement of Information and Communication Technology (ICT) is challenging the operation of tax revenue systems (Muita, 2011). Tax authorities are being challenged to maintain a modernized and responsive tax administration system. Since 1990s, several tax authorities, particularly those from developed countries have progressively harnessed the power of ICT by embracing an electronic tax filing (Lai et al., 2005). Electronic filing is the modern way of tax authorities interacting with taxpayers.

According to Andarias (2006), electronic filing is dependent on the use of technology. Technology used in e-filing comprise of computer, internet and software applications. Electronic filing can be measured when the desired outputs are realized. According to Fu et al. (2006), some of the measures of electronic filing should include, reducing life of tax, improving efficiency and reducing errors in procedures, increasing multi-tasking levels of tax officers and facilitating taxpayers in complying with tax regulations. One of the pillars of e-filing is to have a single database which covers all proceedings in relation to taxable activities of the taxpayer, that is, valuation, billing, collection and enforcement. Taking cognizance of the existence and impact of tax operating cost is not a recent phenomenon. It was started in 1776 by Adam Smith’s four well-known maxims of good tax practice (equity, certainty, convenience and economy).

1.1.2 Tax Compliance

Tax compliance is defined as the full payment of all taxes due (Braithwaite, 2009). Tax non-compliance is referred to as any difference between the actual amount of taxes paid and the amount of taxes due. This difference occurs because of overstating and understating income, expenses, and deductions. Non-compliance comprises both intentional evasion and unintentional
non-compliance, which is due to calculation errors and an inadequate understanding of tax laws (Robben et al., 1990 and Webley, 2004). According to Robben and Antonides (1995), taxpayer’s mistakes can be unintended and thus, do not necessarily represent attempts to evade or may even lead to tax over reporting.

According to Jones (2009) tax compliance is the timely filling and reporting of required tax information, the correct self-assessment of taxes owed, and the timely payment of those taxes without enforcement action. From this definition, there are three dimensions of tax compliance: filing, reporting, and payment compliance. Filing compliance refers to whether the taxpayer submitted the correct forms to the revenue authority. Reporting compliance refers to whether the return was accurate, while payment compliance refers to whether the taxpayer paid his/her reported tax liability in a timely manner. Therefore, a taxpayer would be called non-compliant if the three dimensions are not properly accomplished.

Getting citizens to pay their taxes painlessly without hissing has been the dream of all governments. The task has however, never been simple, until the introduction of the modern information technology. Since the early 1980s the world has experienced an unprecedented pace of advancement in the field of information technology. These technological innovations are having a profound impact on the administration of fiscal systems and the way in which taxation is administered (Teltscher, 2002). Tax compliance is mainly achieved when majority of taxpayers voluntarily file their tax returns and pay resultant tax liabilities as stipulated in the tax laws, without the intervention of the tax authorities through enforcement. However, if the voluntary compliance is low, then enforcement measures like audit and collection are resorted to.
Tax compliance has been extensively reviewed (Andreoni et al., 1998; Cuccia, 1994; Kinsey, 1996). Three theoretical perspectives have been used to explain and measure the degree of tax compliance, namely economic models, uncertainty models, norms of compliance models and inertia models (Picur et al., 2006). Economic models explain that taxpayers’ main goal is to maximise their financial taxes whenever the benefits from tax delinquency outweigh the risk of detection and punishment. On the other hand, uncertainty models extend the work of economic models. While retaining the assumption that rational taxpayers seek to maximize their financial interests, adherents to this model point out that in the real world information about penalty provisions and the risk of audit is imperfect. Finally, norms of Compliance models explain that standards of taxpayer behaviour are influenced by the tax culture.

1.1.3 Electronic Tax Filing and Compliance

The main aim of electronic filing is to enable taxpayers to meet their normal tax obligations in a convenient manner without visiting tax office. Tax compliance has always been an area of concern to policy makers, tax administrators and society in general. This is mainly because tax compliance affects revenue collection and the ability of the government to achieve its fiscal and social goals (Tan and Sawyer, 2003). Measures to improve compliance include providing excellent taxpayer services that generate better long-term outcomes such as higher tax collection and reduction in the tax gap.

The aim of tax reforms in many countries is therefore, to achieve higher voluntary compliance and one way to do this is by introducing electronic filing system (Khadijah, 2013). In Kenya, various taxes are filed and remitted by due dates, which are mandatory dates for either tax return
or payment thereon, to be remitted to KRA failure of which leads to non-compliance and attract penalties. For example, the table below shows such due dates.

**Table 1.1. Tax Due Dates**

<table>
<thead>
<tr>
<th>Tax Head</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>PAYE</td>
<td>9th day of the month following the payroll month</td>
</tr>
<tr>
<td>VAT</td>
<td>20th day of the month following the month of transaction</td>
</tr>
<tr>
<td>IT1</td>
<td>30th June following the calendar year of Jan – Dec preceding the payroll deductions</td>
</tr>
</tbody>
</table>

Paper returns are tedious to file on the part of the taxpayer and in the same magnitude to reconcile on the part of KRA (Muita, 2011), hence the use of electronic filing, which is aimed at ensuring accuracy and timely reconciliation of the data contained, since KRA’s iTax systems does automatic reconciliation and validation of the returns.

The aim of tax reform in many countries is to achieve higher voluntary compliance and one way to achieve this is by introducing a self-assessment system (SAS). (Khadijah, 2014). Tax compliance is a product of filing of tax returns. The role of any tax authority is to verify through tax audits and compliance checks that the details as declared in tax returns reflect the true position of a taxpayer. A study done in India by Ojha et al. (2006 by) after the introduction of electronic filing of tax returns showed that despite the heavy investment outlay on the system, by the Malaysian Tax Authority, only forty percent of targeted taxpayers managed to file their tax returns through online, with a majority of taxpayers still using the paper return.
In Kenya, a report by KRA’s Research and Policy Department (2012), indicated that out of the over five thousand taxpayers categorised both as Medium and Large only 40% had registered as online users by the end of the year 2011 while only 10% out of this number were regularly filing tax through KRA online system. The report treated as negligible the number of small taxpayers who were using online for tax returns except majority of KRA employees (whom were instructed to only use online for their individual annual tax returns).

1.1.4 Small Taxpayers and East of Nairobi Tax District

This study refers to the Organisation for Economic Co-operation and Development (2004, p.10) which characterises small businesses as: “Small business owners are responsible for collecting as well as remitting taxes (Christensen et al., 2001). They are hence important players in a country’s tax system”. Tax authorities world over have classified taxpayers as small, medium or large (Terkper, 2003). The categorization generally depends on the turnover, level of complexity and other specific categorization as per each tax authority. Small and medium taxpayers are grouped with the traditionally “hard-to-tax” group, which may also include large entities such as commercial farmers and retail outlets. Since, recent trends in tax administration reforms in developing countries often place large entities in a large taxpayer unit (LTU) and roughly equate medium entities with VAT- registered taxpayers (i.e. outside LTUs), small taxpayers are automatically deemed to fall below VAT registration thresholds.

In general, Medium taxpayers are in the formal sector, are structured and have the capacity to keep records that conform to the accounting standards and corporate or tax laws. In contrast, Small Taxpayers mostly fall in the informal entities. They are not well structured and they may
have genuine difficulty in keeping adequate records, more so using electronic filing of tax returns (Picur et al., 2006). In Kenya for example, Ouko (2010), asserts that any person who has registered for and obtains a Personal Identification Number (PIN), technically qualifies as a small taxpayer. This wider classification includes but not limited to employees and even students who mandatorily register for PIN to obtain loan facilities for their higher educational needs.

Small taxpayers in Kenya were brought to tax bracket in the year 2006 through the Finance Bill of 2006 which introduced Turn Over Tax (TOT), before then small taxpayers would voluntarily register as tax payers. According to the speech read by KRA’s Commissioner-General during the Kenya Institute of Management annual dinner in 2010, KRA collects 95% of the total Government revenue and over the last ten years of its existence, KRA has increased revenue collection from Kshs. 122 billion in the Financial Year 1995/1996 up to Kshs. 937.8 billion in Financial Year 2013/2014. One way of meeting its objective is to improve tax compliance by enhancing tax collection, compliance with filing of tax returns and bringing more taxpayers into the tax bracket through recruitment and registration of taxpayers. In order to enhance tax compliance, KRA has heavily invested in technology since 2003. To achieve this KRA has categorized its taxpayers as small, medium and large and has created separate tax department for each category (KRA, 2009).

Electronic filing in Kenya was introduced in the year 2007, initially on a voluntary usage basis for all categories of income tax payers, through an online system called KRA Online. But in the year 2013, a new online system called iTax was introduced with improved qualities and features to make it simpler for taxpayers to e-file their tax returns and remit taxes as they fall due. Most of small taxpayers in East of Nairobi are found in the informal (Jua kali) sector. According to
Kamleitner et al., 2010), this group of taxpayers are characterised by low business turnover, small capital, unspecialized merchandize, sole employee structure (in most cases the proprietor runs the business with assistance of one or two assistance), poor records keeping and generally non-compliance with tax matters.

Kenya Revenue Authority has introduced e-filing system known as iTax. Through this system, a taxpayer is able to register as a taxpayer, file tax returns, make payments (through tax e-slip), view ones ledger record, apply for and receive tax refunds, apply for and obtain through e-mail Tax Compliance Certificate (TCC), and even make follow-up on KRA audit queries. Majority of taxpayers who have embraced this online system are either in Medium or Large category of taxpayers, yet majority of taxpayers in Kenya are categorised as small taxpayers (KRA, 2010).

KRA has divided taxpayers into tax districts for ease of tax Administration and efficient service delivery to taxpayers (KRA, 2010). The current Domestic Taxes Districts are three: Large Tax Payers Office (DTD - LTO), Medium Taxpayers Office (DTD –MTO) and Small Taxpayers Office (DTD – STO). Under the last categories there are other several tax districts. Nairobi County alone is divided into four tax districts which are East of Nairobi (EON) covering Eastlands, west of Nairobi tax district (WON) covering Westlands, North of Nairobi (NON) tax district and South of Nairobi Tax District (SON) covering Southlands.

Out of the four tax districts in Nairobi, EON is considered to have majority of taxpayers (Approximately 800,000) majority of whom are small taxpayers who comprise of employees, few industries and small businesses. Since majority of taxpayers in EON are considered to
belong to the low income generating bracket, the ones operating small businesses and kiosks have poor structures and a number have no knowledge of computers. It might therefore be a challenge to embrace online filing should it be made mandatory by KRA that all registered taxpayers to only use e-filing in order to enhance tax compliance in Kenya.

1.2 Research Problem

Worldwide, taxpayers’ resistance, underutilization and reluctance to use electronic filing system remain a great concern and still plague various tax agencies which are embracing electronic tax administration systems (EATAAC, 2002). The importance of understanding and influencing taxpayer’s acceptance of electronic filing system is critical, given the investment in technology and the potential for cost saving. Despite the increasing need to increase revenue collection and enforcement so as to provide public services, developing countries still face the challenges of low tax compliance and tax administration.

Small taxpayers are instrumental in the growth of the economy as they create jobs and help fight poverty. The government of Kenya recognized the potential lying within the small taxpayers through the introduction of turnover tax in the Finance Act 2006 through the provision of the Income Tax Act, Cap 470. The sector has for long operated without formal structures. However since the Small taxpayers were brought to tax bracket, no documented and empirical studies exists on tax compliance behaviour among small tax payers, more so the effect of electronic filing on their tax compliance levels. This casts doubts on the ability of the government to actually increase revenue collection and improve tax enforcement efforts.
If the small services sector is found to be the engine of economic growth, then it is the responsibility of tax administrations to successfully target that sector for tax intake and to assimilate it as quickly as possible within the overall tax administration framework, rather than devising minimalist tax structures for them. In Kenya, there are about twenty million registered taxpayers (KRA, 2013). Out of this number less than five million taxpayers comprising of Large Taxpayers, Medium Taxpayers and Public Servants are active taxpayers. Majority of taxpayers fall in the category of small taxpayers which include everybody who has registered for and obtained a PIN number, such as small business owners, students and every other PIN holder. It goes without saying that small taxpayers carry the burden of tax payment in Kenya, however no empirical studies have been done in Kenya to establish the effect of electronic filing on compliance among small tax payers in Kenya. Electronic filing entails adapting to structured approach to business operations which has been lacking among small taxpayers, in addition, taxpayers will have to acquire basic information technology knowledge, which majority of these taxpayers lack. It would be therefore, interesting to study how KRA intends to achieve compliance among such small taxpayers.

A number of studies have been done on various factors related to tax compliance and small taxpayers. For instance, from the 1950s to the 1970s, small taxpayers were perceived as marginal to the mainstream of economic activity, and were typically cast as habitual tax avoiders and evaders. By the early 1980s, however, as the services sector took off and represented a higher and growing proportion of GDP in many countries, it was small firms that accounted for much of this growth, creating employment and efficient utilization of capital along the way (Poutziouris et al., 2001). While they are increasingly seen as engines of economic growth, many tax policy
researchers believe that compliance costs for tax payment by small taxpayers are quite high. It is not, therefore, their habit but rather, the complex tax structure as well as the little resources the tax administration invests in them. Relatedly, these factors tend to lead to high compliance costs that might in turn result in a pattern of behavior of tax avoidance or evasion. On the other hand, Ritchie (2001), while studying a sample of small businesses for payment of the value added tax in New Zealand (GST), indicates, that businesses with computerized accounting systems report a very minimal amount of time spent on end-of-year tax activities. On the other hand, Rametse (2001) while carrying out the cost implications small taxpayers will encounter on electronic filing, established that, use of electronic filing does not affect the compliance costs, which remained considerably higher for small businesses (2 percent of a turnover of say A$100,000) than for larger-than small businesses (0.04 percent of a turnover of say A$2 million).

However, Muita (2011), while studying the factors influencing the adoption of e-filing in Kenya, found out that by use of electronic filing will lead to managerial benefits and savings of costs. For example, on-line lodgment and transfers and the greater use of electronic submission and transfers, are likely to reduce compliance costs for small businesses. From the existing empirical studies, it appears no study has been done in Kenya on the effect electronic filing on small taxpayers as far as tax compliance is concerned. The assumption has been that it is a new initiative by Kenya Revenue Authority, which has been done world over, so it will improve compliance. The study therefore, seeks to fill this gap in knowledge, by answering the following research question. What is the effect of electronic filing on compliance among small tax payers in east of Nairobi?
1.3 Research Objective

The objective of the study will be to examine the effect of electronic filing on tax compliance among small taxpayers in East of Nairobi tax district.

1.4 Value of the Study

The Kenyan government relies heavily on taxes to fund its development expenditure. An increase or decline in tax revenues has a direct bearing on the economy of Kenya as a country. The study is likely to reveal the strengths or weaknesses 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.

The research will also contribute to the existing body of knowledge and may form the basis for further research in the area of technology and tax compliance in Kenya. Finally, the recommendations made will be of great help to KRA and the small taxpayers in carrying out a cost-benefit analysis on the use of technology in efficient tax administration. This may aid in future policy formulation on the same.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In this section we review the theoretical discussion and empirical literature on impact of technology on tax compliance. Specifically, section discusses the theories in taxation, general determinants of tax compliance among small tax payers in and lastly a brief summary.

2.2 Ability to Pay Theory

This theory was developed by Smith and Pigou (1903) “The subjects of every state ought to contribute towards the support of the government, as nearly as possible, in proportion to their respective abilities; that is, in proportion to the revenue which they respectively enjoy under the protection of the state.” The ability-to-pay principle requires that the total tax burden will be distributed among individuals according to their capacity to bear it, taking into account all of the relevant personal characteristics. This is the most popular and commonly accepted principle of equity or justice in taxation as citizens of a country pay taxes to the government in accordance with their ability to pay. It seems that if the taxes are levied on this principle as stated above, then justice can be achieved The most suitable taxes from this standpoint are personal levies (income, net worth, consumption, and inheritance taxes). The economists are not unanimous as to what should be the exact measure of a person's ability or faculty to pay. The main viewpoints advanced in this connection are as follows:

Ownership of Property: Some economists are of the opinion that ownership of the property is a very good basis of measuring one's ability to pay. This idea is out rightly rejected on the ground that if a person earns a large income but does not spend on buying any property, he will then escape taxation. On the other hand, another person earning income buys property; he will be
subjected to taxation. Is this not absurd and unjustifiable that a person, earning large income is exempted from taxes and another person with small income is taxed?

Tax on the Basis of Expenditure: It is also asserted by some economists that the ability or faculty to pay tax should be judged by the expenditure which a person incurs. The greater the expenditure, the higher should be the tax and vice versa. The viewpoint is unsound and unfair in every respect. A person having a large family to support has to spend more than a person having a small family. If we make expenditure as the test of one's ability to pay, the former person who is already burdened with many dependents will have to pay more taxes than the latter who has a small family. So this is unjustifiable.

Income as the Basics: Most of the economists are of the opinion that income should be the basis of measuring a man's ability to pay. It appears very just and fair that if the income of a person is greater than that of another, the former should be asked to pay more towards the support of the government than the latter. That is why in the modern tax system of the countries of the world, income has been accepted as the best test for measuring the ability to pay of a person.

2.3 Benefit Theory

The benefit approach was initially developed by Knut Wicksell (1896) and Erik Lindhl (1919). According to this theory, the state should levy taxes on individuals according to the benefit conferred on them. The more benefits a person derives from the activities of the state, the more he should pay to the government. This principle has been subjected to severe criticism on the following grounds:

The state maintains a certain connection between the benefits conferred and the benefits derived. It will be against the basic principle of the tax. A tax, as we know, is compulsory contribution
made to the public authorities to meet the expenses of the government and the provisions of
general benefit. There is no direct *quid pro quo* in the case of a tax. Most of the expenditure
incurred by the state is for the general benefit of its citizens, it is not possible to estimate the
benefit enjoyed by a particular individual every year.

If we apply this principle in practice, then the poor will have to pay the heaviest taxes, because
they benefit more from the services of the state. If we get more from the poor by way of taxes, it
is against the principle of justice? The implication of this theory is that small tax payers may
have to pay more taxes than medium and large tax payers.

### 2.4 Determinants of Tax Compliance among Small Tax Payers

Tax Compliance has been dependent on a number of factors according to a study done by
Batrancea *et al.*, (2012). Accordingly they argued that Tax Compliance is influenced by three
factors namely, Socio Psychological factors, Political Factors and Economic Factors. Each of
these factors is discussed here below.

#### 2.4.1 Social Psychological Determinants of Tax Compliance

Schmolders (1960) argues that every evaluation of the taxpayers’ tax compliance behaviours
should start from the answer to the question “How is the state mirrored in taxpayers’ minds?”
He further argues that “Consciousness about the state leads to citizens’ civic and tax
‘sentiments’ and to a fundamental attitude with regard to problems of ‘their’ state”. In other
words, the way people express their attitudes, act, interact, react, and generally behave is
grounded on the way they think rather than on reality. What happens in citizens’ minds when
dealing with issues like tax policy, public goods, tax regulations, etc., constitutes the social
psychological determinants of tax compliance behaviour.
Attitudes are generally assumed to influence compliance behaviour because they represent taxpayer’s propensity to respond positively or negatively to a particular situation (Eagly and Chaiken, 1993). There is a manifold of ways to operationalize and measure attitudes towards tax compliance starting from general judgments of the tax authorities, subjective assessments of tax evasion and ending with moral attitudes towards tax evasion (Orviska and Hudson, 2002). According to Kirchler (2007), norms are behavioural standards set at personal, social reference group, and collective level. Personal norms refer to internalized standards of behaviour such as altruism, norm-dependency, or religious beliefs which usually correlate with high tax ethics and willingness to comply. Social norms represent patterns of behaviour similarly judged by others. Generally, if a taxpayer receives from the reference group the signal that non-compliance behaviour is acceptable; the level of compliance will decrease. Last but not least, societal norms represent cultural standards integrated in the relationship between taxpayers and authorities as well as in the tax legislation. At this level, compliance can be achieved by reducing the social distance between taxpayers and authorities as well as through cooperation and mutual trust. Porschke and Witte (2011), established that majority of taxpayers will always mention fairness as one of the most important issues that influence tax compliance. Where taxpayers perceive that there is fairness in taxation, they comply voluntarily, and the reverse is also true. Irrespectively of the aspects taxpayers assess (tax code, tax burden, tax rate, efficiency of government expenditures), a high perception of fairness yields to a high level of compliance.
2.4.2 Political Determinants of Tax Compliance

There are three political determinants of tax compliance (Rahman and Nathan, 2014). These are the complexity of tax law, the complexity of tax system, and the fiscal policy. Before taking the decision to comply, one of the first elements taxpayers are confronted with is the tax law. Its level of complexity can turn a well-intentioned taxpayer into an avoider or evader. The structure of tax system can also hinder taxpayers’ willingness to comply, if they perceive the system as being too bureaucratic, with a high tax burden, and a high number of taxes. In the same vein, an inefficient fiscal policy mirrored in squandering of public funds and low quality of public goods make taxpayers think twice before paying the entire share of their tax liabilities.

People’s understanding of tax law is an important factor which shapes their disposition to comply. As the law is intricate, taxpayers become reluctant in trying to understand the provisions contained by the tax law. They often find tax law a burden due to its byzantine wording and perceive it rather as a foreign language. Plenty of studies have shown that higher-educated people understand better the meaning of tax liabilities and the aim of governmental policies and, as a consequence, they comply more, for example, Schmolders (1960), Song and Yarbrough (1978), and Spicer and Lundstedt (1976).

The lack of tax law comprehension engenders distrust and non-compliance. Knowing that, different countries both developed and developing for example Australia, France, New Zealand, USA, Uganda, Kenya and Chile have undertaken long and complex endeavours to simplify the tax law, i.e., to rewrite the tax regulations into plain language by using logical structures.
Despite the huge number of attempts to simplify the relevant tax laws Rahman and Nathan (2014), found that little effect on the improvement of the tax law grasped by ordinary citizens, business owners, or even by tax authorities, and almost no impact on the increase of tax compliance. Some studies show that the complexity of tax law creates uncertainty in taxpayers ‘minds, thus raising tax compliance levels. Beck et al. (1991) report that compliance increases along with income uncertainty. Moreover, Snow and Warren (2005) conclude that compliance levels increase when taxpayers are uncertain about how many non-compliance acts an audit can detect. Ironically, tax law is difficult to understand and gives birth to uncertainty not only for ordinary citizens but also for tax authorities.

In 1959, Schmolders inquired different German politicians and finance representatives on their level of comprehension of fiscal policy issues. The results came much to the surprise of the researcher as respondents revealed a low level of knowledge and understanding of fiscal policy (Kirchler, 2007). Poor tax knowledge and the uncertainty of the tax law offer authorities improper conditions in deciding to which extent taxpayers’ behaviour is legal and where exactly is the boundary between right and wrong in the application of tax law provisions. By the same token, different studies support the idea that it is extremely difficult to delineate exactly a behaviour that is in line with “the letter of the law” for example Marshall et al. (1998) and Owens and Hamilton (2004).

2.4.3 Economic Determinants of Tax Compliance

According to the neoclassical economic theory which makes use of the Smithian concept of *homo economicus*, taxpayers are selfish rational utility maximizers who, following the optimal strategy, try to evade taxes as a means of obtaining the best outcome. Starting with
Becker’s seminal work (1968), evading taxes is no longer seen as a criminal activity per se but a rational utility maximizing strategy used by taxpayers when the benefits of the successful evasion value more than the costs of being audited, detected, and fined. Allingham and Sandmo (1972) and Srinivasan (1973) created separately a model of tax evasion, based on Becker’s theory, where the taxpayer is endowed with two strategies: to pay the tax according to the real income or to declare a smaller amount of income and consequently to pay less tax. Choosing between these two strategies depends on the probability of being audited. As rational maximizers conforming to the von Neumann-Morgenstern axioms, individuals are assumed to opt for the strategy that yields the highest expected utility under uncertainty conditions, therefore evade taxes if it pays. One can notice that if the taxpayer is not audited, the second strategy generates the higher profit, while in case of audit, detection, and fine, the first strategy would be preferred by the rational taxpayer. The classical economic model of tax evasion assumes there are four different determinants that shape taxpayers’ behaviour: audit probability, fines, tax rates, and income. According to the model, tax evasion decreases when audit probability and fines increase, because the expected utility of evasion mitigates as well. As for the other two parameters, their increase leads to ambiguous results concerning compliance. Even if the authors recognize the existence of other variables which might influence compliance (e.g., taxpayers’ reputation gained from compliance behaviour); their model focuses only on the four parameters previously mentioned.

Based on the results predicted by the model, one could state that compliance would be easily increased all over the world if governments simply imposed more severe fines or increased audit probability. Nevertheless, the majority of theoretical and empirical studies departed from this standard economic model have shown inconsistencies relative to the theoretical assumptions
of the model, i.e. compliance cannot be increased easily. The identified inconsistencies called for refinements of the model and inclusion of other variables. By making the fine proportional to the evaded tax rather than to the undeclared income, Yitzhaki (1974) solves the inconclusive findings of Allingham and Sandmo (1972) but reports a counterintuitive result: an increase in income tax must boost the declared income. Other researchers including, e.g., Clotfelter (1983), report a negative relationship between income tax rate and compliance. Gordon (1989) shows that, if taxpayers differ according to their honesty, an increase in the tax rate will abate compliance even for the most honest taxpayers. Refining the proposal from Yitzhaki (1974), Lin and Yang (2001) also predict a negative influence of tax rate on compliance provided the taxpayers are able to determine their desired level of compliance.

In a field experiment on 1724 American taxpayers notified about being audited after filing the tax returns, Slemrod et al. (2010) found a higher level of compliance among low and middle-income taxpayers and a higher propensity to avoid taxes in the high-income group. Alm et al. (1995) vary audit rates from 5% to 30% and 60% and report a significant increase in tax compliance. In the same vein, Trivedi et al. (2009) shift from an audit probability of 0% to 25% and observe higher tax compliance in the latter case. Other studies report that compliance diminishes in the first rounds after an audit and then increases again (Guala and Mittone, 2005). The phenomenon was coined “bomb-crater” effect and refers to the following situation: “a taxpayer who has recently been audited seems to believe that the likelihood of a subsequent audit is very remote; therefore, the risk of evasion appears to be low. After several periods, however, the assumed likelihood of audits increases again, and compliance increases” (Kirchler, 2007). Some studies report a negative relationship between tax rate and compliance behaviour. Anderhub et al. (2001) for example, showed that an increased tax rate discouraged
tax evasion. In a 25-round experiment, Alm et al. (1992) report that compliance level lessens when the tax rate is boosted from 10%, 30% to 50%. By the same token, Friedland et al. (1978) and Collins and Plumlee (1991) observe lower compliance at higher tax rates.

2.5 Empirical Literature

A number of studies both locally and internationally have been done on the role Information Technology plays in Tax compliance. For instance a study of South Korea and Turkey on User evaluation of tax filing web sites was done by Lee et al. (2008), to compare the design and the complexity of the web sites and the ease with taxpayers are able to file tax returns and queries on their tax status. While Turkey had a complex online system, to the contrary Turkish users did not find tax filing system difficult to use and that was attributable to the fact that they relied on accounting professionals to do their tax returns online. On the other hand, South Korean system was considered less complex but few taxpayers were using it as expected. Having in place an electronic tax filing system is one thing, but being able to be used by taxpayers is another thing. This has influence on the current study in a way that the tax website ease of usage must be considered before such a system is rolled out to taxpayers. Other factors to be considered should also be the capacity of the system and the efficiency (Lee et al., 2005).

Amitabh et al. (2009) did a study on the antecedents of paperless income tax filing by young professionals in India. The objective of this study was to study how young Indian professionals will adopt or behave towards paperless or online filing of tax returns with the aim of enhancing compliance. The regression analysis carried out found that the antecedents of young Indian professionals depended on the perceived ease of the tax system, personal innovativeness in information technology, relative advantage, performance of filing service, and compatibility. The
implication of the findings to the current study is that for any online system to succeed whether for small, medium or large taxpayers’ category there must be the ease of use, innovativeness and accessibility.

In Malaysia, Ling and Nawawi (2010) carried out a survey on Integrating ICT Skills and tax software in tax education. The respondents were the tax practitioners and the study aimed at establishing the necessary skills required by taxpayers to fully utilize a tax online system. The study found that three skills are needed by a taxpayer to interact well with technology based tax system namely, spread sheet software, word-processing software and e-mail. The findings of this study has got implications on the current study in that in analysing the effectiveness of electronic filing system, one must not ignore the mandatory skills that would be users of the system need to have. Failure to consider such skills may make the intention of the system not to be realized as confirmed by Maede (2002). He confirmed that despite the heavy investment that the Malaysian tax authority put in new online system, only 20% of the targeted taxpayers were able to use it after three years of implementation. This was mainly attributed to lack of necessary user skills like computer literacy; however, taxpayer’s behaviour also played a role.

In Kenya, especially in Kenya Revenue Authority, different studies have been done on the subject of technology and tax compliance with specific reference to tax filing. Muita (2010) and Makanga (2010) did a study on the adoption of technology as a strategic tool for enhancing tax compliance in Kenya. The case study was based on Large Taxpayers which included companies with a turn over Kshs. 750 million and above, or government ministries and corporations. The objective of the study was to evaluate the role Technology
would play in Kenya to enhance tax compliance among large taxpayers. The study found that in the fast changing business world, technology has become part and parcel of any business growth. Either KRA or Large Taxpayers must embrace modern technology to enhance efficiency in tax compliance. Muita (2010) in her MBA thesis has also done a related study on the factors that influence adoption and use of e-filing system among Large Taxpayers in Kenya. The study examined the skills required by the users of e-filing, the technology required and the tax authority’s preparedness in enhancing the adoption of tax compliance based technology. The study found that for e-filing to effectively take off in Kenya skills, infrastructure and a conducive business environment are needed.

2.6 Summary of Literature Review

The use of technology (e-filing) is compulsory for the tax administration activity as large sets of data must be processed. But the technology must not be considered the objective, quite the opposite it must be regarded as a means to gain efficiency. To achieve the excellence in the tax administration activity, organisations must focus on the customer/taxpayer. As a consequence, the most important concepts are “reducing the period of time between when the tax is generated and the moment it is paid”, “decreasing the number of the human errors by automating ordinary procedures”, “making possible to pay the tax any time and almost anywhere”, and “allowing any employee to help every customer at the office”.

Bearing these objectives in mind, it is easy to infer that technology in tax administration means integrated software with a one-stop-shop implementation; comprehensive work flow systems where every document or form is included in the information system; easy-to-use internet websites with online information and payment options; customer service network connected by
fast lines; mobility to allow service in remote areas and real-time process monitoring (Andarias, 2006). Technology has been looked at from different perspectives like the role, the requirements (including user skills), attitude of users towards the use of technology, simplicity and the taxpayer category. The studies have unanimously established that the uptake of technology in achieving tax compliance is a gradual process that need not be hurried.

In Kenya, the studies which have done have mainly focused on Large Taxpayers which are generally considered advanced in technology and understand the implications of noncompliance. Small taxpayers carry the burden of tax payment in Kenya, however no empirical studies have been done to establish the effect of electronic filing on compliance among small tax payers in Kenya. The current study should therefore, fill the gap in knowledge by focusing on small taxpayers who are the majority of taxpayers in Kenya numerically.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology that was used in the study. The chapter includes the research design, study population, sample design, data collection instrument and concludes with data collection procedures and data analysis techniques.

3.2 Research Design

The research problem was solved using descriptive study design. This design enabled an analysis of the relationship between technology and levels of tax compliance in terms of on-line filing of tax returns and on-line remittance of taxes due. According to Doyle (2004), a descriptive study research refers to a body of techniques for collecting data and obtaining responses from individuals to a set of prepared questions. Descriptive study technique with self-administered questionnaires as the survey instrument is considered appropriate for this study.

3.3 Study Population

The population of the study consisted of Small Taxpayers in East of Nairobi Tax District Kenya which currently is approximated to be 800,000 taxpayers (Domestic Taxes Report, 2013). Small taxpayers as opposed to medium and/or large taxpayers were suited for the study because of their peculiar characteristics. This category of taxpayers is characterised by rapid business expansion, unstructured management hierarchy and poor record keeping, hence adopting electronic filing may be a blessing in disguise to them.
3.4 Sample Design

Both stratified and random sampling methods were used in the study. Stratification was done for the taxpayers based on their sectors, i.e. (Transport, Manufacturing, Agriculture, Hospitality, Energy, Mining and Minerals) resulting in seven strata. A 0.02% of each stratum was then randomly picked for the study sample, resulting to about 160 respondents. Further analysis of the impact of technology on each stratum was then done based on tax returns filed, tax collected over the years and major challenges experienced with interaction with technology and taxation.

3.5 Data Collection

The study used both primary and secondary data. Primary data was obtained by use of structured questionnaire containing both open-ended and close-ended questions. The questionnaire was administered to the Finance Managers/Directors of the sampled taxpayers and in case of sole proprietorship businesses to the proprietor. Secondary data to support the growth of tax compliance behaviour in Kenya among small taxpayers together with the trend was obtained from revenue reports of KRA’s (Research & Corporate Affairs Department, 2013).

3.6 Data Validity and Reliability

Triangulation may include multiple methods of data collection and data analysis, but does not suggest a fix method for all the researches. Triangulation is typically a strategy (test) for improving the validity and reliability of research or evaluation of findings Mathison (1988). Patton (2001) advocates the use of triangulation by stating “triangulation strengthens a study by combining methods.” This can mean using several kinds of methods or data, including using both quantitative and qualitative approaches. In this study, multiple data collection and analysis
like use of structured questionnaire containing both open and close-ended questions, Correlation and regression analysis, F and T tests and partial F test to enhance data validity and reliability were used.

### 3.7 Data Analysis

Data analysis was done using Statistical Package for Social Scientists (SPSS 20) where the hypothesis of the study was tested. Regression analysis was used to test the effect of technology on tax compliance among the small taxpayers in Kenya. The explanatory variable within the study were: e-filling that will measured as 1 (Agree/Strongly agree) where available and done and 0 (Disagree/Strongly disagree) where non-existent; e-payment that was measured using 1 (Agree/Strongly agree) where done and 0 (Disagree/Strongly disagree) where not done; correct self-assessment will be measured using 1 (Agree/Strongly agree) to indicate its being done and 0 (Disagree/Strongly disagree) where not done. The above explanatory variables were used to fit in a linear regression model as show below.

\[
y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \epsilon
\]

Where

- \(Y\) => Dependent Variable (Compliance)
- \(x_1\) => Independent Variable (Online Tax Registration)
- \(x_2\) => Independent Variable (Online Tax Return Filing)
- \(x_3\) => Independent Variable (Online Tax Payments)
- \(\beta_0\) => Constant
- \(\beta_1, \beta_2, \beta_3\) => Regression Coefficients
- \(\epsilon\) => Error term
Compliance was measured based on a per cent, all sixteen fields under investigation were provided an equal weight.

\[
\text{Compliance} = \frac{\text{Number of correct study fields}}{\text{Total study fields}}
\]

To determine if any of the independent variables influenced behaviour or outcome of the dependent variable (compliance) an F test was carried out on the model assuming a 95% confidence interval. Correlation analysis was done in order to eliminate for multi-linearity.

Each of the regression coefficients was tested for significance using a t test and insignificant regression coefficient was dropped from the model and a new model generated based on remaining independent variables.
CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter provides a description of the results of data analyses in narrative and tabulated manners. First, demographic information for the respondents is reported such as gender, age, grade, and marital status along with organizational proportions of participants. Second, descriptive statistics, such as means, standard deviations, Skewness and kurtosis, followed by detailed analysis of the research questions. Finally, the chapter discusses the research objective. The study sought to establish the effect of electronic tax system on tax compliance among small taxpayers in East of Nairobi tax District. The focus of the study was on the following on: registration for electronic system, filing on electronic tax system, remitting taxes through the electronic tax system and handling through the electronic tax system.

4.2 Data Collection and Response Rate

In total, 160 questionnaires were distributed to the sampled respondents and 132 were received back. However, 4 responses were excluded by the researcher for administrative reasons (e.g., too much missing information and inconsistency). The final sample included in this study consisted of 128 responses representing a response rate of 80%. The researcher considered the response adequate since respondents from all the taxpayers’ strata as per the sample design responded. According to Mugenda and Mugenda (2003), a response rate of over 60% of the respondents is considered adequate but if unresponsive rate is high, the researcher is required to do a follow up study to check the factors behind the lack of response since it can be a relevant factor in the study. High response rates reduce the risk of bias in the responses.
4.3 Demographic Information

From this study, it was deduced that the respondents were aged between 20 and 59 years of age ($M = 35$ years, $SD = 5.38$). Male constituted 53.33% while female were 46.67%. This portrays a gender-balanced economy. The level of education of the respondents was as follows; 16.41% of the respondents were university undergraduates, 9.38% of the respondents were postgraduates, 25.78% were diploma holders, 35.16% had form four certificate while 13.28% certificate holders as presented in Table 4.2.1 below.

**Table 4.2.1 Profile of Respondents**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>68</th>
<th>53.13%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>60</td>
<td>46.88%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency (N)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 24</td>
<td>11</td>
<td>8.59%</td>
</tr>
<tr>
<td>25 – 30</td>
<td>26</td>
<td>20.31%</td>
</tr>
<tr>
<td>31 – 35</td>
<td>32</td>
<td>25.00%</td>
</tr>
<tr>
<td>36 – 40</td>
<td>24</td>
<td>18.75%</td>
</tr>
<tr>
<td>41 – 45</td>
<td>19</td>
<td>14.84%</td>
</tr>
<tr>
<td>46 and above</td>
<td>16</td>
<td>12.50%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency (N)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>17</td>
<td>13.28%</td>
</tr>
<tr>
<td>Form Four</td>
<td>45</td>
<td>35.16%</td>
</tr>
<tr>
<td>Diploma</td>
<td>33</td>
<td>25.78%</td>
</tr>
<tr>
<td>Degree</td>
<td>21</td>
<td>16.41%</td>
</tr>
<tr>
<td>Post Graduate</td>
<td>12</td>
<td>9.38%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sector of the Economy</th>
<th>Frequency (N)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport</td>
<td>19</td>
<td>14.84%</td>
</tr>
<tr>
<td>General Trading</td>
<td>36</td>
<td>28.13%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>21</td>
<td>16.41%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>17</td>
<td>13.28%</td>
</tr>
<tr>
<td>Hospitality</td>
<td>20</td>
<td>15.63%</td>
</tr>
<tr>
<td>Energy</td>
<td>9</td>
<td>7.03%</td>
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<tr>
<td>Others</td>
<td>6</td>
<td>4.69%</td>
</tr>
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<table>
<thead>
<tr>
<th>No. of Employees</th>
<th>Frequency (N)</th>
<th>Percent (%)</th>
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<tbody>
<tr>
<td>1 – 10</td>
<td>31</td>
<td>24.22%</td>
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<tr>
<td>11 – 25</td>
<td>36</td>
<td>28.13%</td>
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<tr>
<td>26 – 50</td>
<td>29</td>
<td>22.66%</td>
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<tr>
<td>51 – 100</td>
<td>24</td>
<td>18.75%</td>
</tr>
<tr>
<td>100 and above</td>
<td>8</td>
<td>6.25%</td>
</tr>
</tbody>
</table>
4.4 Descriptive results of the research variables

The study sought to establish the effect of electronic tax system on tax compliance among small taxpayers in East of Nairobi Tax District. Four main questions were framed and the same given to the respondents i.e. online tax registration, online tax filing of returns, online tax payments and tax compliance as a result of registration, filing and payments. Each question had several components tested in order to realize the objectives of the study.

In order to present the descriptive results of the variables of the study, an analysis of the Means, Standard Deviations, Skewness and Kurtosis was done.

Table 4.3 provides the number of responses, minimums, maximums, means, standard deviations, Skewness statistics and standard errors, and kurtosis statistics and standard errors for the variables of interest. Electronic Tax System had a mean of 2.81 (SD = 1.28). Tax Compliance had a mean of 4.04 (SD = 1.01). Since this study employs quantitative data analysis, two statistical values were checked to assess the normality of the distribution of the variables: Skewness and kurtosis.

Skewness is a measure of how responses are distributed, while kurtosis is a measure of how responses cluster around a central point for a standard distribution (Stern et al., 1977). A criterion from the literature is that a Skewness statistic bigger than 3.0 or a kurtosis statistic bigger than 8.0 would imply that the distribution is non-normal (Kline, 2005). The Skewness and kurtosis statistics for all variables in this study were within these acceptable ranges of normality as shown on Table 4.3 below.
<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Std. Error</th>
<th>Statistic</th>
<th>Std. Error</th>
<th>Statistic</th>
<th>Std. Error</th>
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<td></td>
</tr>
<tr>
<td>Gender</td>
<td>128</td>
<td>1</td>
<td>2</td>
<td>1.53</td>
<td>0.503</td>
<td>-0.137</td>
<td>-2.051</td>
<td>0.309</td>
<td></td>
<td>0.608</td>
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<td>Age Bracket</td>
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<td>1</td>
<td>6</td>
<td>2.77</td>
<td>1.511</td>
<td>0.229</td>
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<td>0.309</td>
<td></td>
<td>0.608</td>
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<tr>
<td>Education</td>
<td>128</td>
<td>1</td>
<td>4</td>
<td>3.93</td>
<td>0.989</td>
<td>-0.95</td>
<td>0.495</td>
<td>0.309</td>
<td></td>
<td>0.608</td>
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<td></td>
</tr>
<tr>
<td>Sector</td>
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<td>8</td>
<td>5.32</td>
<td>4.405</td>
<td>0.696</td>
<td>-0.911</td>
<td>0.309</td>
<td></td>
<td>0.608</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Employees</td>
<td>128</td>
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<td>5</td>
<td>1.97</td>
<td>1.288</td>
<td>0.851</td>
<td>-1.094</td>
<td>0.309</td>
<td></td>
<td>0.608</td>
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<td><strong>Average</strong></td>
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<td></td>
<td>3.104</td>
<td>1.7392</td>
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<tr>
<td><strong>Electronic Tax System Registration</strong></td>
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<tr>
<td>Having Internet Connectivity</td>
<td>128</td>
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<td>6</td>
<td>2.85</td>
<td>1.404</td>
<td>0.2</td>
<td>-1.283</td>
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<td>128</td>
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<td>-0.07</td>
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<tr>
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<td>Taxes Registered for online filing</td>
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<td>1</td>
<td>9</td>
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<td>1.011</td>
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<td>5</td>
<td>2.78</td>
<td>1.059</td>
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<td>Server downtime affects online payments</td>
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<td>0.415</td>
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<td>5</td>
<td>3.24</td>
<td>1.041</td>
<td>0.712</td>
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<td></td>
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<tr>
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<td>2.78</td>
<td>1.282</td>
<td>-0.401</td>
<td>-1.105</td>
<td>0.309</td>
<td></td>
<td>0.608</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online Tax Payments</td>
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<td>7</td>
<td>1.25</td>
<td>1.096</td>
<td>0.521</td>
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<td>0.309</td>
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<tr>
<td><strong>Average</strong></td>
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<td></td>
<td></td>
<td>2.383</td>
<td>1.204</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.5 Results of Online System Tax Registration

Under this question, respondents were asked to state whether, they have heard of KRA online system, adopted automation as a way of doing business, registered as online user and the taxes registered for. Each form of question asked is discussed separately where responses from different sectors are presented in forms of bar graphs indicating level of agreement/disagreement in terms of percentages (%) in the following sections.

4.5.1 Internet Connectivity

Respondents were asked to state whether their businesses had internet connectivity or not. As indicated in the bar graph below, majority of respondents did not have internet connectivity representing 67% of the respondents. Only 33% of the respondents agreed that they had internet connectivity in their businesses. Among the sectors of the economy, mining and minerals had no internet connectivity at all. It was followed by energy, agriculture and transport sectors with 89%, 82% and 79% respectively. On the other hand, manufacturing, hospitality and general trading sectors were leading with internet connectivity as: 67%, 60% and 56% respectively.
The findings above indicate that while internet connectivity is a key component of online tax system impacting compliance levels of taxpayers in East of Nairobi, as at now majority of such taxpayers seem not yet ready to embrace KRA’s online system.

4.5.2 Automation as way of Doing Business

Respondents were asked to state in addition to having internet connectivity, whether their companies had embraced automation as a way of doing business. This question was necessary because the fact that one has internet connectivity does not mean that automation is embraced as a way of doing business. The bar graph below shows that despite a number of respondents having internet connectivity, not all of them have embraced automation.

![Automation levels by sector](image)

In General, result indicates that on average, only 23% of respondents with internet connectivity have embraced automation as a way of doing business. Therefore, majority (77%) of respondents with internet connectivity are yet to embrace automation as a way of doing business.
4.5.3 Why not embraced automation

Respondents were asked to state the reasons why they have not embraced automation as a way of doing business, considering that with KRA online system, automation is a basic component for compliance. From the figure below, (30%) of the respondents explained that the reason why they have not embraced automation is because the business is considered small. This was followed by 23% of respondents who said that automation is expensive.

![Reasons against automation](image)

22% of the respondents feared that embracing automation will expose them to KRA audits, while 16% cited lack of skills and knowledge pertaining to automation as the reason for not embracing automation. Uniquely, 9% of respondents stated other reasons like, the business has always been done like that, no need as it will not lead to increase in profits etc.

4.6 Result of Online Tax Filing of Returns

Respondents were asked to state whether they have been filing tax returns through KRA online, the type of taxes they have been filing and state their level of agreements as to how online filing affects their tax compliance. Both likert-scale type questions and Yes-No questions were used to answer this research question.
4.6.1 Have you been filing tax returns online

Respondents were required to answer either yes or no as to whether they have been filing tax returns online or not.

As shown in the graph above most respondents do not file their tax returns using online. On average 78% of respondents do not file online returns. Only 22% have been filing returns online. In terms of sectors, mining and minerals has never filed online at 100%, followed by energy at 95%, general trading at 82%, transport 79%, hospitality 77% and manufacturing at 46%. On the other hand, manufacturing recorded highest filing rate at 54% followed by hospitality at 33% with mining and minerals reporting 0%.

4.6.2 Taxes Registered for Online

Respondents were asked to state the taxes they have registered for on iTax. As shown in the graph below, 78% of online users from East of Nairobi are registered for PAYE, 51% registered for VAT, 34% registered for Turn Over Tax, while 15% registered for Corporate Tax. Only 5% individual taxpayers from East of Nairobi are registered for Income Tax.
The above findings indicate that a lot needs to be done to bring on board the rest of taxpayers to online system.

### 4.6.3 Filing of Taxes Levels

Respondents were asked to state their degree of agreements that they file various taxes registered for online and by due dates, 50% of respondents agreed that they do file both VAT and PAYE online and by the set due dates. While another 50% were not sure whether they file VAT by due dates only 40% disagreed that they don’t file corporation tax online, with none strongly disagreeing. It can therefore, be concluded that despite a small number having embraced online system, the same small number has seriously embraced online filing. However, those not yet sure should be targeted and brought on board.
4.7 Result of Online system and Compliance Perception

As shown in the chart below, respondents were asked to state whether online system has helped improve their compliance levels. They were to state level of agreement with three questions: whether the system is expensive, improves compliance and saves time.

On the first question, as to whether it is an expensive system, 50% confirmed yes (17% strongly agreed and 33% agreed), only 33% were not sure with another 17% arguing to the contrary. Perhaps those were not sure have never embraced online system and are not using it so could not take a stand on it.
On the question as to whether online system improves tax compliance levels, majority (75%) strongly agreed and 25% agreed, meaning online system directly affects compliance of taxpayers in East of Nairobi. Finally as to whether online system saves time and money, 90% supported the idea and explained that that is realized only once one is used to the system, the remaining 10% was shared between those who disagreed and those who were not sure.

4.8 Results of Online Tax System and Tax Remittances

Another measure of tax compliance based on the online tax system by KRA was online payments of tax returns. This variable was measured using likert-scale comprising of five questions. The questions tested respondents’ level of agreement with regards to the online tax payment system and how they perceived its effect on their general compliance levels. For instance, the variable measured compliance in terms of the reliability, efficiency and availability, and ease of use of the online system.

4.8.1 Online system has ease Tax Payments

Respondents were to state whether by adopting online system, they will experience efficiency in remitting the tax to KRA. From the findings as presented in the chart below, 45% agreed (24% strongly agreed and 21% agreed), 30% were not sure while only 25% disagreed with the question. This scenario could be explained by several complaints levelled against payment gateway of the online system as found by Eva (2010).
4.8.3 Paying Taxes online is more accurate

As shown in the chart below, respondents were asked to state their levels of agreement with the fact that online system makes tax remittances accurate.

As shown, 69% agreed that online system is more accurate as regards tax remittances (i.e. 42% strongly agreed, 27% agreed). On the other hand 19% disagreed (i.e 14% disagreed, 5% strongly
disagreed) while only 12% were not sure. Indicating that by majority of respondents, the system if embraced and used makes remittances more accurate.

4.8.4 Adopting online payments updates Ledger Real Time

Majority of respondents agreed that transactions done using online system as opposed to manual system gets ledger to be updated in real time, this was supported by 62% of the respondents (36% strongly agreed and 28% agreed), while 12% were not sure, the rest 11% and 13% respectively disagreed and strongly disagreed.

4.8.5 Server downtime makes online payments a nightmare

Majority of respondents blamed frequent server downtime as the failure of online system. A total of 59% blamed the downtime of the server with 36% strongly agreeing while 23% agreed.
On the other hand, a total of 32% did not experience any server downtime while only 9% were not sure whether server downtime in any way affects online system.

4.8.6 Accessing Online on due dates is hectic

As shown in the chart below, 53% of respondents either agreed or strongly agreed that they experience challenges accessing online on due dates. Even though 21% were not sure, another 26% respectively disagreed. It can be concluded therefore, that accessibility should be improved, especially on due dates.
4.8.7 Online System and Tax Compliance

Tax compliance was a product of online system. The study sought to establish the effect of online system and tax compliance among small taxpayers in East of Nairobi tax district. In order to measure compliance and how it is affected by the online system, three basic components of compliance were investigated: online tax registration, online filing and online tax payments.

The findings from the three components therefore, could help in verifying the relationship between online system and compliance levels among small taxpayers from East of Nairobi district. Respondents were asked to state their level of agreement with each of the components of compliance and state whether online system has help improve their compliance with tax.

4.9 Results of Online Registration and Compliance

Among respondents who had registered for online tax system, they were asked to state whether such registration had had a positive relationship with their compliance levels. The result is as presented. On average 57% of the respondents agreed that online system positively impacted on compliance while 37% disagreed. Sector wise, general trading led the pack with 79% followed by hospitality at 75%, energy at
73%, manufacturing at 61%, and transport at 59% and agriculture at 49% in support of the statement.

On the other hand, 100% of mining and minerals did not have any opinion as to whether online registration had any impact on compliance. This could be due to the fact that as seen earlier none in the sector had embraced the system.

4.9.1 Online tax filing and compliance

Majority of respondents agreed that online had a direct relationship with tax compliance.
Just like registration, online filing positively affects tax compliance as shown in the chart above. General trading, hospitality, energy and manufacturing sectors all agreed that online filing has improved their compliance levels at the rate of 79%, 75%, 73% and 61% respectively. Only mining and mineral sector responded on the negative. On average those who were in support was 57%, meaning online system positively affects compliance of taxpayers.

4.9.2 Online Tax Payments and Compliance

Respondents were again asked to rate their level of tax compliance as regards online system and from the results presented in the chart below an average of 61% agreed that online system improves compliance with tax remittances. This agrees with the findings of Eva (2010) who did a similar study but with Large Taxpayers.
4.10 Correlation analysis

Correlation analysis and regression analysis were both done to establish the relationship and strength of such relationships among the variables in the study. The one consistency of the subscales was neither agree nor disagree: Cronbach’s alphas results were as follows, for tax compliance \( \cdot = .86 \), for online registration \( \cdot = .79 \), for online filing \( \cdot = .82 \), and for online payments \( \cdot = .91 \). All these findings agreed with Cronbach and Meehl (1955) who found that cronbach of .70 and above are good measures of internal consistency and reliability.
4.11 Regression analysis

Linear regression was done in order to determine the explanatory power of independent variables (online system in the variance of dependent variable (tax compliance)).

4.11.1 Model Summary

Table 4.11.1a Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Estimate</th>
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<tr>
<td>1</td>
<td>.895&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.801</td>
<td>.796</td>
<td>.19592</td>
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</tbody>
</table>

Adjusted R squared is the coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in the above, the value of R squared was 0.801, an indication that there was a variation of 80% on tax compliance due to change in online registration, filing and payment at 95 confidence interval. R is the correlation coefficient which shows the relationship between study variables. From the finding shown in the table above, there was strong positive relationship between the study variables as shown by 0.895.

4.11.2 ANOVA

Table 4.11.2 ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig</th>
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<td>Regression</td>
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<td>0.361</td>
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<tr>
<td>Residual</td>
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<td>179</td>
<td>0.129</td>
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</tr>
<tr>
<td>Total</td>
<td>23.793</td>
<td>181</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From the ANOVA statistics in table above, the processed data which is the population Parameters had a significant level of 5% which showed that the data was ideal for making conclusion on the population parameters as the value of significance (P-Value) was less than 5%. It also indicates that the model was statistically significant and that inline payment, registration and filling were significantly influencing tax compliance.

4.11.3 Model Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
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<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
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<td>1</td>
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<td>.680</td>
<td>.1367</td>
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<td>(Constant)</td>
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<tr>
<td>Online Registration</td>
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<td>.392</td>
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<td>.161</td>
<td>.557</td>
<td>.267</td>
<td>.289</td>
</tr>
<tr>
<td>Online Payments</td>
<td>.086</td>
<td>.344</td>
<td>.194</td>
<td>.250</td>
</tr>
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</table>

\[Y = 3.663 + 0.051X^1 + 0.161X^2 + 0.086X^3\]

From the above regression equation, it was revealed that holding online tax registration, filing and payment to a constant zero, tax compliance would stand at 3.663. A unit increase in online tax registration would lead to increase in tax compliance among small tax payers in east of Nairobi by factor of 0.051 and a unit increase in tax filing would lead to an increase in tax compliance by factors of 0.161 while a unit increase of online tax payment would result to increase in tax compliance by factor of 0.086.
This shows that there was a positive association between online registration, online filling and online payment. The study found that values for all the variables significantly influenced commercial tax compliance. The studies done by Karingi and Wanjala (2005) came up with similar results and found that, a positive correlation will exist between online systems and tax compliance if parameters are properly in place.
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter presents the summary of the findings of the study, makes conclusions and present the recommendations for further research in the subject area.

5.2 Summary of Findings
This study aimed at establishing the effect of online system and compliance among small taxpayers in East of Nairobi tax District. There were three research questions answered by this study: how does online system affects compliance with regard to registration, filing and payments of tax returns. Taxpayers were categorised into various sectors of the economy for ease of analysis i.e. agriculture, energy, hospitality, transport, general trading and mines and mining.

The first question was concerned with establishing whether online system makes more taxpayers to comply with tax requirements as far as registration is concerned. Generally, it was found that taxpayers in all sectors except mines and mining agreed that online system makes recruitment of taxpayers easy and hence compliance is achieved. This supported the findings of Eva (2010) who in her Masters project sought to find out factors that influence the adoption of online system among large taxpayers in Kenya. One of the reasons stated was ease in registration.

The second area of investigation was concerned with filing of tax returns. While from the results analysis presented above, majority of taxpayers registered as online users as opposed to the number that was filing online. The latter nevertheless registered a positive outcome. Therefore,
the study also confirmed that online system enhances compliance as far as filing of tax returns is concerned, with hospitality sector in East of Nairobi Tax District scoring the highest among the sectors analysed. Finally, the study sought to establish the effect of online system on compliance with regards to making tax payments. While a number of taxpayers agreed that with online system payments are more accurate and their tax ledgers get updated in real time, majority however, had reservation with accessibility especially on due dates.

Since this study employs quantitative data analysis, two statistical values were checked to assess the normality of the distribution of the variables: Skewness and kurtosis. The Skewness and kurtosis statistics for all variables in this study were within these acceptable ranges of normality.

Linear regression was done in order to determine the explanatory power of independent variables (online system in the variance of dependent variable (tax compliance)). The value of coefficient of determination (R squared) was 0.801, an indication that there was a variation of 80% on tax compliance due to change in online registration, filing and payment at 95 confidence interval. R is the correlation coefficient which shows the relationship between study variables. From the finding, there was strong positive relationship between the study variables as shown by 0.895.

From the ANOVA statistics, the processed data which is the population Parameters had a significant level of 5% which showed that the data was ideal for making conclusion on the population parameters as the value of significance (P-Value) was less than 5%. It also indicated that the model was statistically significant and that inline payment, registration and filling were significantly influencing tax compliance.

Lastly the model coefficient showed that there was a positive association between online registration (X1), online filling (X2) and online payment (X3). The study found that values for all
the variables significantly influenced commercial tax compliance. The studies done by Karingi and Wanjala (2005) came up with similar results and found that, a positive correlation will exist between online systems and tax compliance if parameters are properly in place.

5.3 Conclusion

In conclusion, it was established that only 33% of the respondents agreed that they had internet connectivity in their businesses. Among the sectors of the economy, mining and minerals had no internet connectivity at all. It was followed by energy, agriculture and transport sectors with 89%, 82% and 79% respectively. On the other hand, manufacturing, hospitality and general trading sectors were leading with internet connectivity as: 67%, 60% and 56% respectively.

The study managed to test the objectives of the study and answers the research questions positively. The concern as to whether online system enhances compliance among taxpayers in East of Nairobi tax District has been confirmed. All the three research questions presented in the summary above have confirmed that there is a positive correlation between online system and tax compliance among taxpayers under study.

5.4 Recommendations for policy and Practice

Based on the findings and the analysis of the research done, it is recommended that more training and or marketing of the online system should be done by KRA to ensure that taxpayers who embrace the system increase. Internet is key for effective implementation and administration of online tax system, despite this fact only 33% of the respondents had internet connection. The government should therefore improve connectivity to enhance compliance among small taxpayers. The more taxpayers are brought on board to use the system, the more efficiency will be achieved in terms of tax administration and more taxes paid to the government. More emphasis
should be put on recruiting taxpayers in the mining and mines sector who have consistently shown slow uptake of online system throughout the study. Majority of respondents blamed frequent server downtime as the failure of online system. A total of 59% blamed the downtime of the server especially around due dates for filing and payments of various taxes. KRA should therefore improve accessibility, especially on due dates.

5.5 Limitations of the Study

The researcher experienced some limitations while carrying out this study. First the population of the study was so big (800,000 taxpayers) while the sample size used was only 160. Therefore, if proper measures are not taken, the results obtained in a way may not reflect the accurate position on the ground since tax matters are personal and sometimes generalizing them may not yield an objective conclusion. In addition, online system affects all taxpayers whether small, medium or large, therefore, more objective studies should only be done to all categories of taxpayers as opposed to small ones and more so in one location or tax district. Finally, the study was also limited with both inadequacy of time and resources. Despite the limitations stated, however, care was taken to ensure that the results presented were as accurate as possible.

5.6 Suggestions for Further Research

Based on the findings, conclusion, recommendations and the limitations of the study, further research could be suggested to cover the following areas in order to corroborate the findings of this study and expand the knowledge in this area. First, further studies should be done on small taxpayers in other tax districts either considered to be more advanced or less advanced that East of Nairobi Tax District like Kisumu, Moyale, Kilifi in order to have a holistic conclusion on the effect of online system on tax compliance in Kenya. Similarly, a study should be done among medium taxpayers as well as individual taxpayers.
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APPENDICES

Appendix I: Letter of Transmittal

Dear Respondent

My name is David Wasao, a student at University of Nairobi pursuing Masters of Science in Finance.

In partial fulfilment of the requirements, I am carrying out a research on “The Effect of Electronic Filing in enhancing Tax Compliance among Small Taxpayers in East of Nairobi Tax District” to solicit your views as a taxpayer. 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. We therefore assure you that no source will be identified.

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 e.g. Hardware  □
   Manufacturing  □
   Agriculture  □
   Hospitality  □
   Energy  □
   Mining & Minerals  □
   Others (please specify)……………………………
5. Number of Employees ________

- 1 – 10
- 11 – 25
- 26 – 45
- 46 – 100
- 100 & Above

SECTION B: ONLINE TAX REGISTRATION

6. Does your Business have Internet connectivity?

Yes ☐ No ☐

7. Has your company embraced automation as a way of doing business?

Yes ☐ No ☐

8. If No in the 7 above, kindly state why

- Expensive ☐
- Business small so no need ☐
- Lack of no-how ☐
- Others (please specify)………………………………

9. Have you heard about KRA Online service portal (iTax)

Yes ☐ No ☐

10. If Yes in 10 above, have you registered as an online user with KRA?

Yes ☐ No ☐
11. If No in both 10 and 11 above, kindly select which statement best explains why

<table>
<thead>
<tr>
<th>Reason</th>
<th>Kindly Tick (√)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has never been Trained on iTax</td>
<td></td>
</tr>
<tr>
<td>KRA Server ever down</td>
<td></td>
</tr>
<tr>
<td>Company’s Directors have never initiated it</td>
<td></td>
</tr>
<tr>
<td>Not yet a priority for this business</td>
<td></td>
</tr>
<tr>
<td>Required computer skills which are lacking</td>
<td></td>
</tr>
<tr>
<td>Online system will be too costly for the small business</td>
<td></td>
</tr>
</tbody>
</table>

SECTION C: iTAX AND FILING OF TAX RETURNS

12. Have you been filing your tax returns online?

   Yes ☐ No ☐

13. If yes in 12 above, please tick against the taxes you/your company are/is currently registered for with KRA

<table>
<thead>
<tr>
<th>Service(s)</th>
<th>Kindly Tick (√)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover Tax (TOT)</td>
<td></td>
</tr>
<tr>
<td>Pay As You Earn (PAYE)</td>
<td></td>
</tr>
<tr>
<td>Value Added Tax (VAT)</td>
<td></td>
</tr>
<tr>
<td>Withholding Taxes</td>
<td></td>
</tr>
<tr>
<td>Income Tax Company (Corporate Tax)</td>
<td></td>
</tr>
<tr>
<td>Income Tax Individual</td>
<td></td>
</tr>
</tbody>
</table>
14. Please state your level of agreement or disagreement with the following statements. The scale ranges from **Strongly Agree (1), Agree (2), Not Sure (3), Disagree (4) and Strongly Disagree (5)**

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>We file VAT 3 return on-line by due date</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>We file Corporate Tax Return on line by due date</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>We file PAYE Return on-line by due date</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>It is less expensive to do manual filing of tax returns than on-line filing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>On-line filing of returns has improved our compliance levels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>On-line filing saves on money and time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION D: iTAX AND TAX PAYMENTS**

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

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>KRA online has ease tax remittances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Paying tax online is more accurate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Adopting online payments updates our ledger real time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Server downtime makes online payments a nightmare</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Accessing online payments during due dates is very hectic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
16. Which of the following challenges do you ever experience with on-line filing services

Kindly tick where applicable

1. KRA server is always down
2. No connectivity
3. On-line filing is too slow
4. It is too costly for the company
5. Our staff are not well trained on how to use it
6. Management support for on-line filing is lacking
7. Other reasons, kindly state

…………………………………………………………………………………
…………………………………………………………………………………
…………………………………………………………………………………

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