

RELATIONSHIP BETWEEN ONLINE TAX FILING SYSTEM AND TAX COMPLIANCE
LEVEL OF SMALL SCALE BUSINESSES IN KENYA

BY

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DECLARATION

I the undersigned declare that this research project is my original work and has not been presented for a degree award in any other University.

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APPROVAL

This research Project has been presented for examination with my approval as the University supervisor.

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DEDICATION

This project is sincerely dedicated to my loving wife Betty and our Children Javan, Emmanuela, and Victoria for allowing me to spend most of their timeout 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.

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ABSTRACT

The objective of this study was to establish the relationship between online taxes filing system on tax compliance level of small scale businesses in Kisumu Central Sub – County in Kenya. The study concentrated on small scale businesses so as to find out why they were compliant yet amongst other reasons they had social amenities like internet network availability, proximity to KRA Western regional office that give advisory services in case of problem with regards to filing and compliance. The objectives of the study was answered using three research questions which revolved around tax declaration, tax reporting and tax payment 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 correlational study design. Data was collected using structured questionnaires from 53 sampled respondents which were picked using sampling and analyzed using inferential statistics by use of correlation and multiple linear regression analyses. 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. From the regression analysis, it was revealed that holding tax declaration, tax reporting and tax payment up to a constant zero, tax compliance would stand at 0.589. A unit increase in online tax declaration would lead to an increase in tax compliance among the small scale business tax payers in Kisumu Central Sub County by a factor of 0.029 and a unit increase in online tax reporting would lead to an increase in tax compliance among the small scale business tax payers in Kisumu Central Sub County by a factor of 0.034 while a unit increase in online tax payment would lead to an increase in tax compliance among the small scale business tax payers in Kisumu Central Sub County by a factor of 0.044. Though compliance would differ from one sector of the population to another. The study recommends that a further study should be conducted to identify and investigate other factors that affect tax compliance levels among small scale businesses in Kisumu Central Sub County.

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LIST OF ABBREVIATIONS AND ACRONYMS

B2B -	Business to Business
CDS -	Customer Services Department
EFTPS -	Electronic Federal Tax payment system
GDP-	Gross Domestic Product
FFI -	Foreign financial Institute
FINCEN -	Financial cronies' enforcement network
IMF-	International Monetary Fund
I&E-	Investigation and Enforcement
ITIN-	Individual taxpayer's identification number
ITMS -	Information Technology Management Systems
KRA-	Kenya Revenue Authority
KAM-	Kenya Association of Manufacturers
LTO-	Large Taxpayers Office
OECD -	Organisation of Economic and Cooperation Development
OLS-	Ordinary Least Square
PAYE-	Pay As You Earn
SSB -	Small Scale Businesses
TA-	Traffic Act
TAT-	Tax Amnesty Team
UK-	United Kingdom
UNDP-	United Nations Development Program
USA-	United States of America
VAT-	Value Added Tax
WB-	World Bank
W-2 -	Income tax Declaration Form

OPERATIONAL DEFINITION OF TERMS

Compliance:	Refers to a situation whereby taxpayers willingly fully abide by the law, rules and regulations requiring them to declare and pay taxes liable to them to tax authorities.
Certificate of Tax Compliance:	Refers to a document issued by the revenue authority stating that all tax requirements of relevant statutes have been complied with by the stated taxpayer.
Compliance costs:	These are costs over and above the actual payment of tax and over and above any distortion costs inherent in the nature of tax incurred by taxpayers in meeting the tax requirements.
Corporate tax:	Is a direct tax on incomes made by corporate bodies as provided by the Income Tax Act Chapter 470.
E-commerce:	Refers any form of business transaction in which parties interact electronically rather than by physical exchanges or direct contact.
Impact -	Is to have an immediate and strong effect on operation of something.
Income Tax -	A tax charged on income earned by a person whether resident or non-resident as defined under the Income Tax Act Chapter 470.
Sales tax -	Sales tax is a form of excise levied when a commodity is sold to its final consumer.
Taxpayer –	All income earning entities like individuals, partnerships and companies.
Revenues -	Refers to the gross proceeds received from taxes, fees, and other levies.

Small Scale Business -	Is an enterprise that is generally privately owned, operated either as sole proprietorship, partnership or Small Corporation and does not have a high volume of sales
Tax-	Is a financial charge or levy imposed on an individual or a legal entity by a state.
Tax Modernization-	Refers to the creation, amendment, or repealing of numerous tax-related statutes and review of procedures and methods of work performance.
Tax reform-	Tax reform is enacted measures to achieve larger goals of an accountable and transparent government through improved revenue collection and tax policies.
Tax evasion -	Entails taxpayers deliberately misrepresenting or concealing the true state of their affairs to the tax authorities to reduce their tax liability
Tax avoidance -	Is the legal exploitation of the tax regime to reduce the amount of tax that is payable by means that are within the law.
Value Added Tax -	Is a consumption tax levied on designated local supply of goods and services and on imports in accordance with the provisions of the VAT Act, Chapter 476.

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CHAPTER ONE

INTRODUCTION

This chapter provides the background of the study and the setting required to put the research problem into proper context. Sub – sections in this chapter include; Background of the study; Statement of the problem; Research objectives; Justification of the study; Scope of the study and the Conceptual Framework

1.1. Background of the Study

Government authorities in the world usually levy taxes with the aim of harnessing revenue to fund their public operations, distribute wealth, and control certain activities by the use of tax provisions. Unlike developed countries, raising revenue to finance government spending is the legitimate purpose of taxation in most of the developing countries (Jeans, 1999). However, most of these developing countries face challenges in urgently raising adequate tax revenues to finance the ever increasing government expenditures given the prevailing economic challenges coupled with influence of globalization and HIV/AIDS.

Consequently, the Kenyan government through the Kenya Revenue Authority has implemented reforms to address the aspect of tax on e-commerce through, for instance, enforcement of rules, or policies to guide tax administration. Kenya's tax system like any Sub Saharan African countries is affected by the advent of e-commerce (Roodman&Qureshi,2006). This is likely to lead to tax compliance from all business sectors including those that have embraced e-commerce. Moyi and Ronge (2006)established that a tax system of e-commerce may lead to higher compliance and administrative costs for the firms that comply hence inequity in taxation.

The rapid growth in technology in Kenya allows taxpayers to take on the traditional role of a service worker in the provision of a service. The importance of e-commerce has grown due to advances in information technology (IT) that has created many opportunities to leverage self-service technology for large gains in efficiency and convenience (Capergemini, 2006).Compliance is vital in tax revenue collection in that without full compliance from taxpayers there will be low tax revenues. As a result of the low compliance level, the Kenyan government conducts tax reforms to improve the level of compliance among taxpayers.

Kenya Revenue Authority was established with the task of ensuring efficient and effective tax administration, tax compliance, and to raise more revenue for the government. However, the environment in which KRA operate continues to evolve and present new challenges (Moyi & Ronge, 2006). One of the environmental factors which have continued to affect KRA's operations is the change in technology specifically the increase in the number of the e-commerce businesses in the country(KRA, 2009).The number of firms adapting to new technology of e-commerce in Kenya has continuously and significantly grown in the last ten years.

This implies that the higher the revenue, the more likely that the government will put in place developmental plans for the enhancement of the living standard of the people. Wenzel (2002) argued that societal norms have a strong influence on tax compliance. Polinsky and Sharell (2000) emphasized the aspect of social norms as a general alternative to law enforcement in channeling individual behavior. Modern approach to tax compliance has benefited from contributions from different disciplines. A range of factors influence taxpayer's behavior. For instance, sociologists have identified a number of variables that influence taxpayer's behavior namely; age, gender, race and culture.

Carrying out audits on physical goods sold online is posing a challenge because of an increasingly paper-less environment (Desai, 2008). Selling intangible goods and services online presents a bigger problem, since a service delivered may not be traced easily, such as music sold online (Eriksen, 2005). Taxation of e-commerce would lead to increase in the tax base, and reduce unfair competition for non-e-commerce businesses dealing in similar products (Farrell, 2007). Between 1995 and 2014, tax revenue constituted 95% of total government revenue (including grants). Relatively, the importance of non-tax revenue is much less than the role of taxation given that it's share over the same period was 5%. Foreign grants play a minimal role as they have averaged only 4.5%. First, taxation is used to raise sufficient revenue to fund national development projects. Second, it is used to mobilize revenue and boost on economic activities (Karingo & Wanjala, 2005).

However, there has been low uptake, at about 1%of the tax collected from the online transaction as compared to other business sectors (KRA, 2014/15).No study has looked at the aspect of E-

commerce and Taxpayers compliance in Kenya. Consequently scholars have not extensively carried out any study on E-commerce and Tax Declaration, E-Commerce and Tax Reporting, E-Commerce and Tax Payment. Most research on tax compliance has focused on the Western World and some Asian countries. Moreover, e-commerce in Kenya is still in its infancy and therefore taxation in unregulated and 'gray' industry presents many challenges to the tax authority. Therefore, this study seeks to bridge the knowledge gap by investigating the implications of E-Commerce business strategy on Tax Compliance in Kenya.

1.2 Statement of the Problem

Serious concern in many developing countries is either low or non-compliance of tax returns. This has necessitated the intervention by KRA in coming up with measures and mechanisms of bringing as many taxpayers on board as possible in order to have a broader tax base. However, the tax revenue collection from the online transactions had remained consistently low at 1% of the total revenue collection by KRA in the same fiscal periods. There were limits when it comes to the enforcement of compliance using traditional policies by a government. For example, according to a research carried out by the Kenya Revenue Authority on Small Scale Businesses, it was established that there was too low tax filling from the Information, Communications and Technology (ICT) sector in Kenya thus making compliance a real challenge. This indicated that the compliance of taxpayers who were filling their returns online was still low. Hence a mixed method study that investigated the relationship between online tax system filling and tax compliance in Kenya could remedy the situation of a narrow tax base and provide a simpler way of tax filling.

1.3. Objectives of the Study

The main objective of the study was to investigate the relationship between online tax system and tax compliance levels in Kenya.

1.3.1 Specific Objectives

Specifically, the study sought to:

- i. Establish the relationship between tax declaration and tax compliance levels in Kisumu Central Sub-County.

- ii. Examine the relationship between tax reporting and tax compliance levels in Kisumu Central Sub-County.
- iii. Determine the relationship between tax payment and tax compliance levels in Kisumu Sub-County.

1.4. Research Hypotheses

The research hypotheses addressed by the study were:

- i. H_{O1} tax declaration had no relationship with tax compliance levels in Kisumu Central Sub-County
- ii. H_{O2} tax reporting had no relationship with tax compliance levels in Kisumu Central Sub-County
- iii. H_{O3} tax payment had no relationship with tax compliance levels in Kisumu Sub-County

1.5. Justification of the Study

The study would provide information to the government and policy makers to address policy issues related of online tax system, tax compliance, and the implications in tax structure in Kenya. Since online tax system was still a new concept in Kenya, perhaps the findings of the study would provide better understanding on the relationship between online tax system and tax compliance levels. The study would help the government and the taxation authority to formulate realistic policies to address challenges posed by e-commerce, provide feedback to the government, KRA and other regulatory agencies involved in issues of taxation.

The results of the study would provide additional knowledge required by clients, financiers, managers, and other stakeholders in the management of tax compliance. Exploring the relationship between these variables would contribute to the body of knowledge in this area of study by serving as a useful resource material to managers and scholars both in Kenya and other developing countries. The researcher hoped that the study would form a basis for further research on Tax compliance.

1.6. Scope of the Study

The study focused on Small Scale Businesses located in the Kisumu Central Sub-county. The study was conducted between June 2017 and September 2017. The study was limited to the

sample size of 65 chosen from enterprises operating in Kisumu Central Sub-County which was a sizeable proportion of the entire population of Small Scale Businesses in Kisumu County. Kisumu being the third largest city in Kenya with high revenue collection figures as of the 2015/2016 financial year, it therefore gave justification why this study focused only on Kisumu and not the whole country.

1.8. Conceptual Framework

This conceptual framework in this study was used to illustrate the relationship between Online Tax System and Tax compliance levels.

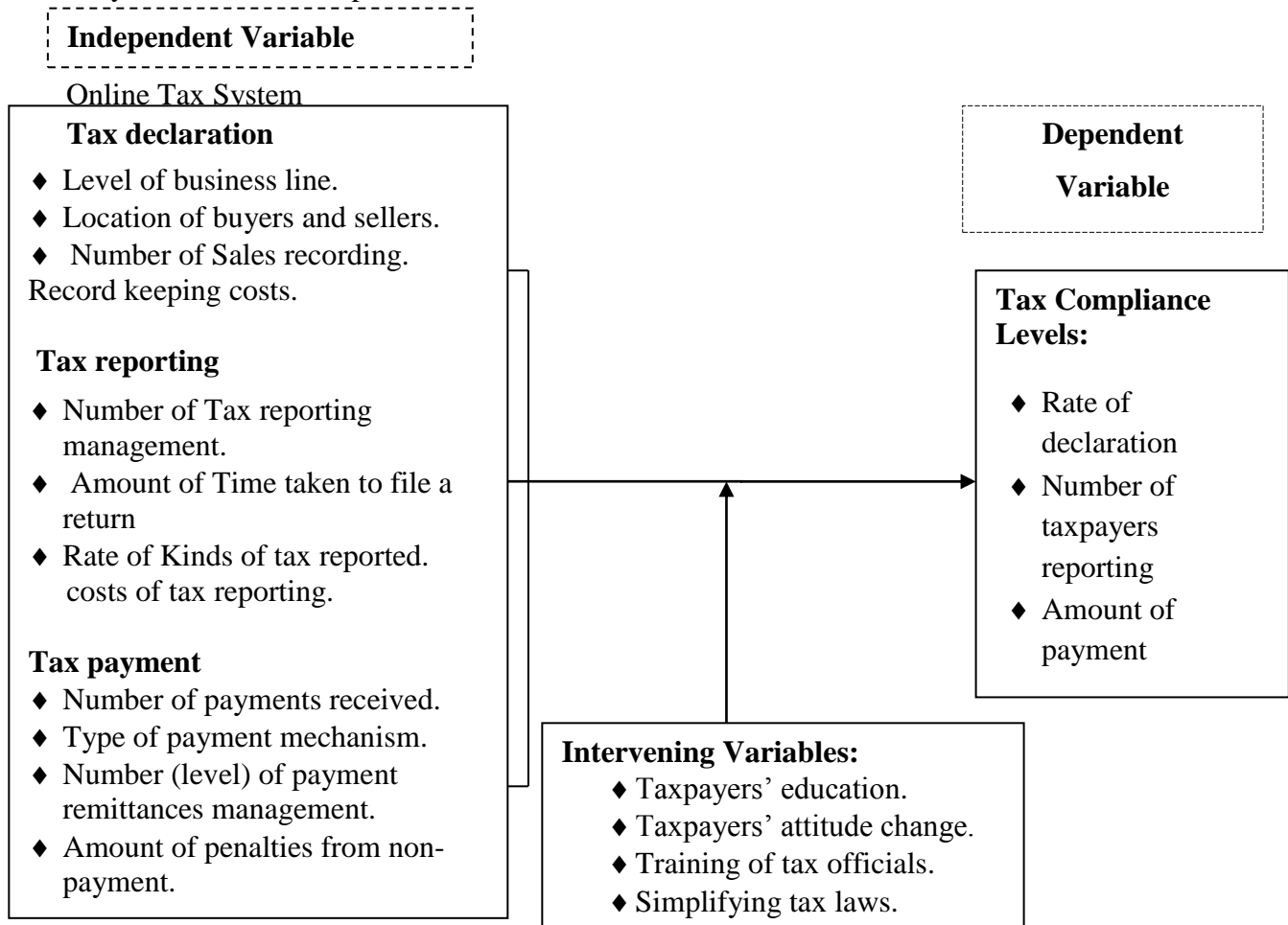


Figure 1.1. Relationship between online tax system and tax compliance levels

Source: Adapted from Lutfi Hassen Ali (2015)

Tax declaration by taxpayers was the way the taxes were declared by the online trading companies which affected their tax compliance in the Kisumu tax area. The parameters of

concern included business line, location of buyers and sellers, sales recording, and record keeping costs. These parameters affected the compliance of taxpayers in Kisumu as a tax area. Tax reporting by taxpayers was the means used by the businesses to report their taxes in regard to online business compliance in Kisumu.

The parameters under considerations were tax reporting management, time taken to file a return, kinds of tax reported and costs of tax reporting. These factors were used to measure the level of compliance among the taxpayers. Tax payment by taxpayers was the way online business transaction needed to disclose, report and pay their tax liability to the tax authority and hence those factors involved looked at whether the businesses paid their taxes due with accuracy. The factors which were tested examined whether the tax payers were making payments, payment mechanism, payment remittances management, and penalties from non-payment. These factors were necessary in understanding the impact of online services on compliance of taxpayers in Kisumu.

The study tested some parameters which established the challenges of compliance to online businesses in Kisumu and provided the best means for handling these challenges related to tax compliance. The parameters tested were taxpayer education, taxpayer's attitude, untrained tax officials, and complicated tax laws. Those factors if properly implemented could improve the level of compliance of taxpayers.

CHAPTER TWO

LITERATURE REVIEW

This chapter reviewed literature under the following thematic concerns, the concept of Tax compliance, Online Tax System and Tax compliance, E-commerce and Tax reporting-commerce and Tax payments, Critical review of issues and gaps to be filled, theoretical framework and conceptual framework.

2.1 Theoretical Framework

The study was anchored on three theories namely; Theory of Economic Growth, Motivation Theory, and Theory of Crime.

2.1.1 Theories of Economic Growth

Growth theory provides a theoretical vantage point to observe and interpret e-commerce development in the global economy. Growth theory is generally associated with models, mechanisms, explanations and predictive frameworks that characterize what drives a country's economic growth. The most fundamental proposition of growth theory is that there is continuous exogenous technological progress. The related advances take the form of new goods, new markets, and new processes to sustain a positive growth rate of output per capita in the long run.

This proposition in technology-led economic growth matches the context of digital economy growth. Internet technologies create the basis for continual advances with respect to new goods, new markets and new business models in the digital economy, which provide the basis for e-commerce development. On the other hand, it also widens the gap of e-commerce development among countries. This theory highlighted and supported the perspective that the increasing gap in cross-national e-commerce development highlights the importance of understanding what factors drive growth.

2.1.2. Intrinsic Motivation Theory

Other sciences like sociology and psychology have stressed the importance of behavior based on moral and ethical considerations. In economic analysis, internalized values are taken as exogenously given and not influenced by prices or regulations (Becker, 1976 and Hirshleifer,

1985). However, a view by economists such as Hirschman (1965) and Sen (1977) took the relationship between external and internal motivation into account. Frey and Floppa (1996) demonstrates that intrinsic versus extrinsic motivation are also relevant for explaining compliance behavior. He looks at tax compliance as a particular kind of intrinsic motivation. It is an attempt to introduce a psychological effect into economics without giving up the rational choice framework. His approach includes a crowding out effect of intrinsic motivation in the analysis of tax compliance.

Increasing monitoring and penalties for noncompliance, individual will notice that extrinsic motivation has increased, which on the other hand crowds out intrinsic motivation to comply with taxes. Thus, the net effect of a stricter tax policy is unclear. If intrinsic motivation is not recognized, taxpayers get the feeling that they can as well be opportunistic. This theory puts into account the relevance of policy instruments in supporting or damaging the intrinsic motivation. Intrinsic motivation depends on the application of policy instruments. Frey and Floppa (1996) claimed that tax compliance is not expected to be crowded out if the honest taxpayers perceive the stricter policy to be directed against dishonest taxpayers. Regulations which prevent free riding by others and establish fairness and equity help preserve tax compliance.

2.1.3. Theory of Crime

The deterrence doctrine can be traced back to the classical works of Jeremy Bentham and Murphy (2008). Their classical utilization theory of crime is that people are rational actors who behave in a manner that will maximize their expected utility. Becker (1968) argued that authorities needed to and appropriately balances between detection of non-compliers and sanctions to the point where non-compliance becomes irrational. In the early 1970s, Allingham and Sandmo (1972) extended Becker's work on the economics of crime to the taxation context. They examined taxpayer's decision to evade taxes when they were filling out their tax returns and examined the relationship between penalty rate for tax evasion at the time, the probability of detection, and degree of tax evasion engaged in. Their findings are what grounds the study along this particular framework that there was a relationship between these variables; with a higher penalty rate and probability of detection deterring individuals from evading their taxes.

In the 1980s, therefore, many scholars began to question the value of deterrence alone in regulating behavior. They began to focus their attention on researching on compliance rather than deterrence and realized the importance of persuasion and cooperation as a regulatory tool for gaining compliance. In fact, research has shown that the use of threat and legal coercion, particularly when perceived as illegitimate, can produce negative behavior; these actions are more likely to result in further non-compliance, Murphy and Harris (2007), creative compliance (McBarnet, 2003), criminal behavior or opposition (Fehr & Rokenbach 2003). Hence there is need to come up with quantifiable data about compliance with persuasion taking the lead role to bring the tax payers into the tax fold.

2.2 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 websites was done by Lee et al.(2008), to compare the design and the complexity of the websites and the ease with tax payers 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 tax payers. Other factors to be considered should also be the capacity of the system and the efficiency (Lee et al., 2005).

Amitabhetal.(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 tax payers' category there must be the ease of use, innovativeness and accessibility.

In Malaysia, Lingand 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 tax payers 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, spreadsheet 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 tax payers 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). Makanga (2010) did a study on the adoption of technology as a strategic tool for enhancing tax compliance in Kenya. The case study was based on Large Taxpayers which included companies with a turnover Kshs.750million 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 Tax payers 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 fore-filing to effectively take off in Kenya skills, infrastructure and a conducive business environment are needed.

2.2.1 The Concept of Tax Compliance

Musgrave (1959) underscored the economic justification for the public sector and the consequent requirement for taxation as a stabilization endeavor. The definition of tax compliance is simple. However, the basic concept of “tax-gap” can only be understood in terms of policy purposes. Therefore, successful tax administration requires taxpayer’s cooperation in the operation of a tax rather than be forced (Guilders, 2004).

According to Roth and Witte (1989), compliance with reporting requirement means that the taxpayer files all required tax returns within the stipulated terms. However, there could be possibilities of the taxpayer making an honest mistake or intentional omissions, or evasions altogether (Kobetsky, 2006). In theory, tax evasion is the willful act of noncompliance. However, failure to comply with tax reporting may be caused by mistakes such as, misinformation, misunderstanding, or negligence.

Yet, if noncompliance is proven legally to be a deliberate decision to reduce tax liability, it constitutes tax evasion (Shavino, 2008). These differences in motivation, plus the fact that the law does not have a narrow definition for tax compliance, have made lawyers and other professionals to disagree on the majority of the ambiguous cases. Taxation is used for many other purposes than raising revenue. As an instrument of economic and social policy, its purpose is often to influence behavior. Any changes in behavior would constitute tax avoidance, but it would be in the spirit as well as letter of the tax law. Kelman (1965) on tax compliance work adapted by Vogel (1974) illustrated how people comply for different reasons.

Compliance, identification, and internalization are Kelman’s tripartite approach of addressing taxpayers. Even though the tax system has continuously changed, in pursuit of the objectives of the Tax Modernization Programmer that came into force in 1995, the challenges that confront the tax authorities today are not much different from the pre-reform challenges. Tax evasion remains high, with a tax gap of about 35% and 33.1% in 2002/1 and 2003/2 respectively (KIPPRA,

2003). The tax code is still complex and cumbersome (KIPPRA, 2003). According to Kimuyu, Wagacha, and Abagi (2008) upheld that consumption is the preferred tax base.

2.2.2 Online Tax System and Tax Declaration

Tax declaration forms are generally prepared using forms prescribed by the IRS or other applicable taxing authority. According to Karingi and Wanjala (2005) e-commerce is a major concern for international agencies and tax authorities worldwide. E-commerce means a shift from largely physical commercial environments to knowledge based electronic commercial environments (Alm, Jackson, & McKee, 1992). Tumami and Matsuka (2006) observed that Swedish companies have relatively well developed e-commerce strategies comparing to other countries. Glee (2014) argued that tax return provides information so that the taxation authority can check on the taxpayer's calculation.

However, Ray (2011) posits that information return is a declaration by some person, such as a third party, providing economic information about one or more potential taxpayers. The study further reveals that information returns are reports used to transmit information about income, receipt or other matters that may affect tax liabilities for example form W-2. McGregor (2013) disagreed and asserted that persons required to file federal income tax are identified by 26 U.S.C 6012 and that US citizens and residents are required by law to file federal income tax return and pay remaining income taxes if applicable.

Cheng-Tsung (2010) study on An empirical on-line tax filling acceptance model; Integrating TAM and TPS using integrated theory of planning behavior (TPB) and technology The study sampled 422 online taxpayers in Taiwan and questionnaires based empirical study was used to collect data. Empirical results showed that attitude was the primary factor affecting on-line tax filling but attitude, social norm and TPB could be successfully integrated to explain online tax filling behavior and correlations were found between TAM factors and TPB factors, however they did not tackle the aspect of E-commerce on Taxpayers declaration.

2.2.3 Online Tax System and Tax Reporting.

Tax affects three broad categories of e-commerce transactions. These are: supplies of physical goods, ordered over the internet, digitized goods and services from business to private customers. Of these, the online ordering of physical goods is given to pose no difficulties for current tax system(s). Though, currently the vast majority of e-commerce falls into the first two categories, the third category, though being small in volume, presents the greatest challenge to the effective administration of tax. Services and digitized products delivered on-line across borders are given to present the greatest challenge.

According to Mutambi (2004), from a taxation perspective, it is important that a distinction is drawn between “offline-businesses” and “online-businesses”. Mutambi (2004) explained that offline transactions are also called indirect electronic commerce, whereby the internet is only used as a communication tool (marketing, advertising and certain information is provided through the internet), but delivery of goods is done physically. Furthermore, online business is also referred to direct electronic commerce. This is because the Internet is used to fulfill the contractual obligation electronically, for instance to deliver ordered software, music or videos (Namusonge, 2005).

Determining the functional equivalence of online services is not easy. Furthermore, it is not clear whether the digital ‘book’ (or text on the screen) is really a service, or commodity. It is clear that proper definitions need to be established as regards to such issues (Namusonge, 2005). According to Neshamba (2004), international transactions in goods involve no serious problems of definition. If the goods leave the country they are imported and there is movement of tangible items. The only feasible question is at what moment in time the transaction is deemed to take place.

With services it is more difficult as there is no clear principle that can be applied consistently. Pure online transactions would be the real challenge for national tax authorities, because existing VAT rules do not cover or are not practicable approaches for the taxation of such transactions (Mutambi,2004). While offline transactions are widely matched by the existing legal framework of taxation including administration procedures, several specific problems with regard to online

transactions will arise (Namusonge, 2005). According to Baldry (2006), the spread of new information technologies and closer global double taxation (or double non-taxation) arising from interaction of different VAT systems around the world and the intangible nature of certain products.

For example, exports in a country such as Kenya are zero rated, and usually taxed in the importing country. Tax avoidance in intangible products is possible since an online purchaser in Kenya could purport to be outside, hence, not be charged VAT (Baldry, 2006). As far as intangible products are concerned, imports into the country may also go tax-free since online buyers simply purchase online, and may not declare their imports using the traditional import entry. Hence, tax is evaded in this case. Tax authorities may not consider it cost effective to enforce tax on such a purchase, especially if it is of a low monetary value - the principle in taxation (Fjeldstad & Rakner, 2003).

An issue, however, arises whereby too many such purchases go un-accounted for and un-taxed, and also, on relatively bigger deals, on which tax is evaded, for example, when buying expensive software and music online (Baldry, 2006). With the advent of e-commerce and international online trade, the distinction between many goods and services has become blurred; hence various challenges arise with regard to their tax treatment. Krensel(2014) explained that the marketing, advertising and certain information is provided through the internet. However, the delivery is not through the Internet, it is done offline by using traditional way such as the post or other delivery services or other forms of transportation. The crucial criteria for offline business are that the Internet is used as a communication tool.

The Internet is used instead of telephone, fax or letter for reporting. From a tax point of view the offline business is just a new form of ordering and reporting systems. Citrin (2013) explained that the green paper addresses specific problems regarding online transactions and their opinion was that currently it is not necessary to specifically address the VAT taxation of pure online transactions. Creswell (2013) builds on the fact that New Zealand Income tax compliance and reporting is designed to help gather analyze and interpret tax data. Kary (2013) argued that CCH

Integrator helps your business manage its corporate tax function better by focusing on reducing effort as well as offers arrange of benefits to drive efficiency and value from tax function.

Andrew (2013) observed that one of the most prevalent problems of companies was the inability to obtain usable data for tax reporting. Jose (2012) affirmed that the reporting of taxable payments and withholding of federal or state income taxes will increase the social security numbers or Individual taxpayers identification number (ITIN) for non-residential aliens as required by federal law. This will then lead to the discussion of which type of non-salary income are taxable and which tax forms are used to report that income to the federal government and individual. Andrew (2013) illustrated that managing tax reporting obligation efficiently has become complex and daunting. This also applies to financial institution that is required to provide tax reporting information for their own clients who have tax obligations in other jurisdiction.

Matthew (2014) confirmed that tax regularization is common for individuals to discover that they have failed to comply. The clients have to frequently evaluate their current and past tax reporting obligations, advising them on their regularization options and implementing the chosen option. Falkile (2011) found that there are a number of significant correlations between tax compliance and tax morale. The study recommended that there is a need to provide tax payers services particularly under supervision or be jointly examined with a senior tax official so that the discretionary powers be exercised by the tax official are not abused. However, the study did not tackle the aspect of E-commerce on Taxpayers reporting.

Mutinda (2013) established that most of the organizations had proper tax reporting management in their organizations in east of Nairobi tax station of KRA. The study established that the impact of the electronic commerce on tax payment from the taxpayers in the East of Nairobi tax station of KRA. From the study data, it was established that most of the respondents' organization had elaborate receiving payments system. Klun (2002) measured efficiency and effectiveness in public sector with special emphasis on the tax administration.

According to UNIDO (2004), the challenges posed by electronic commerce for taxation have been well documented. Like direct taxes, the administration of indirect taxes presupposes that tax authorities are able to identify transactions when they take place, identify the parties involved in the transaction and their physical location, and, if necessary, follow a 'paper trail' in order to audit these transactions - all of which are conditions that e-commerce calls into question. Sandmo (2005) focused on macroeconomic aspects and emergent issues like legal, regulation, and taxation of e-commerce in developing countries, through international organizations such as United Nations Conference on Trade and Development (UNCTAD), United Nations Development Program (UNDP), Development Gateway of World Bank Group and the World Trade Organization (WTO). Organizations help governments of developing countries by raising awareness about ecommerce, providing policy, consultancy on technology transfer and know-how and infrastructural support (Sandmo, 2005).

Mureithi and Moyi (2003) observed that developing countries still need to do a lot to embrace e-commerce. Some of the limitations faced by the same include obsolete business models of the traditional industrial age, low rates of internet access, lack of basic automation in place, poor management skill, lack of e-commerce integration and an inefficient supply chain. Most developing countries have not yet faced major concerns about how the growth of ecommerce might affect tax revenue collection, but eventually they will need to confront this issue as e-commerce volume rises. Most developing countries rely heavily on import duties to raise revenue. E-commerce would mean increased online imports, and therefore, developing countries ought to play an active role in WTO negotiations on e-commerce treatment.

According to Karingi and Wanjala (2005), e-commerce is a major concern. Burke (2014) concluded that the proponents of a tax free internet argue that internet access taxes and free result in rate hikes making access more expensive for the consumer and thus restricting growth. Tora (2013) observed that ecommerce business owners are required to issue official receipt to customers, give acknowledge receipt for amount received from payment gateway and pay the commission of payment gateways net of withholding tax. Persons who conduct business through online transactions and its permutations have the obligation to issue registered invoice or receipt

either manually or electronically for every sale, barter exchange or lease of goods and properties as well as for every sale, barter or exchange of service.

Smith (2014) noted that invoice or receipt shall conform to the information requirements prescribed under existing revenue issuance and shall be prepared at least in duplicate, the original to be given to the buyer and the duplicate to be returned by the seller as part of the latter accounting records. Basu (2011) argued that exempting taxation of e-commerce is tantamount to allowing the richer members of the community who have access to internet pay less on consumption taxes than the poor ones who do not have access. Basu (2011) further argued that reform in ecommerce and payment should be made on the basis of deliberate societal process that considers the revenue needs, equity, efficiency and effectiveness. However, Watako(2012) observed that ecommerce is also characterized by remote selling and evolving business models such as online auction, reverse auctions, virtual communities, info-mediaries, aggregator and brokers.

More so, many manufacturers are being transferred into retailers, many conventional intermediaries such as wholesalers and distributors are disappearing or being replaced by new-web based intermediaries. Watako (2012) concluded that by asserting that the advent of ecommerce has facilitated increase in real-time and paperless transactions. This enhances the momentum towards tax compliance reengineering and automated tax solutions for transactional taxes. Like Krensel (2014) it will also increase the pressure on taxing authorities to simplify the substances and procedural tax rules to make an automated system more workable and less costly.

A further complication arises when different international jurisdiction assign different tax treatment to the same revenue flow from the purchase of a digital product, giving rise to the possibility of double taxation. Andreas(2014) observes that electronic commerce transactions bear the danger that information regarding such transactions cannot easily be controlled by the tax authorized in order to determine whether all taxes were paid or not. Hagerman (2013) asserted that small independent retailers activities online put them at an unfair advantage compared to large competitors who can afford to charge lower prices due to these breaks. This means that you are responsible for that task, and you must remit taxes to the government

quarterly. It concludes that to pay your estimated quarterly taxes you can do one of two (Blair, 2013).

Hubbard(2013) noted that in the absence of a tax treaty, royalty income is generally subject to a withholding tax in the country of source. The income from the sale of goods and the provision of service is generally only subject source taxation where the seller or provider has a permanent establishment in the source county. It can often be difficult to distinguish whether a particular ecommerce payment for example, a payment made for electronically searching a computer database and downloading a document form for it is made for sale or lease of goods, for the provision of a service or as a royalty. Tauhokohoko (2013) writing on ecommerce and online trading observes that if you sell goods through online auction or sales sites, your tax obligation are exactly the same as for buying and selling goods in a shop.

Ojung'a (2005) investigated e-commerce services in commercial banks in Kenya. His study gave various outputs and some of them included bank to bank e-commerce service utilization, bank to customer electronic payments methods and extent of usage of electronic payment methods. The e-commerce services by commercial banks in Kenya has been influenced by the need to increase customer base, expand geographical reach, meet customer demands and keep pace with technological changes. The impact of the use of technology has led to improved customer service, increased revenue, reduction of operation and cost and increased market share.

Moll (2005) raised numerous questions which include; how should transaction records be kept and where? What is the appropriate record keeping standard and how detailed should this be? How should the constraints under various privacy and personal data laws be balanced with the need to ensure tax compliance? Is it feasible or appropriate to require an e-merchant to obtain a business (or consumption tax) registration in every place in which sales are made or services provided? How should parity treatment be ensured between new e-merchants and old-style catalogue houses that export goods from a remote location? These are some of the many questions to be considered.

Moll (2005) identified an effective tax system for international e-commerce in electronic goods and services include obtaining access to encrypted data, developing a response to the advent of electronic money (e-cash), and ensuring an efficient mechanism for collecting tax, especially from non-resident taxpayers. The challenge for tax authorities is how to determine the precise value of the different components of a single production process, and to identify the specific jurisdiction in which each 'value-addition' takes place. For example, in the case of companies that develops software products, where there may be simultaneous collaboration on a single product among programmers in several different jurisdictions. This challenges the notion that it is possible to attribute specific 'value-addition' to a particular taxing jurisdiction, particularly if the software product is exchanged back and forth among programmers (Maskell & Malmberg, 2002).

2.2.4 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 anytime 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 tax payer 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 been done have mainly focused on Large Tax payers which are generally considered advanced in technology and understand the implications of noncompliance. Small tax payers 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

2.3. Critical Review of Issues and Gaps Identified

Most of the past studies dwelt more on developed economies while ignoring developing countries like Kenya. Some skewness exists between the developed and developing countries when assessing the impact of e-commerce on tax compliance (Moll,2005).John and Lineth(2006)failed to recommend policies that can be implemented to handle challenges from this e-commerce. Tax compliance levels and tax declaration have not been exhausted extensively. Matsuka(2006) modeled an analysis of the effect of electronic filling on individual Income Tax compliance, using pad tax return preparation and self-preparation in individual Income tax compliance. Gladys (2013) addressed Income tax declaration and however none of this study was able to address the aspect of E-commerce and Tax declaration.

Commerce and tax compliance has not been fully addressed either, authors like Andrew (2012) did a study on Tax compliance and reporting, Jose observed on tax compliance reporting and withholding on non-salary payment. Adenoran (2011) looked at analysis of tax morale and tax compliance using cross sectional survey with questionnaire, and multiple regressions to analyze data. Klun (2002) used a comparative method; however none addressed the aspect of E-commerce and Tax compliance specifically. Tackling E-commerce and Tax Payment have been addressed with scholars like Sandmo (2005), who focused on micro aspects and emergent issues like legal, regulation and taxation of e-commerce.

Kelly (2013) addressed the online shoppers, Burke (2014) tackled tax or not to tax e-commerce. Tora (2013) addressed tax guideline for e-commerce, Watako (2012) observed information and Technology however none of this study looked at the aspect of online tax system and Tax compliance levels. Consequently, no study has ever been done covering Kisumu Central Sub-County on the relationship between online tax system and tax compliance levels of small scale businesses. This study will provide recommendation on how to handle challenges from e-commerce in Kenya. This kind of information is vital to KRA and the Kenyan government who want to improve tax compliance in Kenya and increase tax revenue collection to finance government public expenditure and also provide fair competition among businesses in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter presented substantial methods of selecting methodological base for the study. Specifically the following were addressed; research design, target population, sample size and sampling techniques, research instruments, reliability and validity of instruments, data collection procedures, data analysis techniques and expected output.

3.1 Research Design

The study utilized a correlation design of all the Small scale businesses in Kisumu Central Sub-County. The study majorly aimed at providing detailed data on the subject under study for the entire population under investigation. A correlation gave a description of some pertinent characteristics of the population as well as allow for inferences of cause and effect. A correlation study design thus, enabled the researcher to collect in depth data on the population studied and focused on giving specific and relevant recommendations.

3.2 Study Area

The study area will be Kisumu Central Sub-county which is a Sub County in a port City in Kisumu County, Kenya. Kisumu's geographical location is on the South and East Hemisphere. It has a latitude of 1.0 and longitude of 38.0

Source: [GPScoordinates.net/Kenya/Kisumu](https://gpscoordinates.net/Kenya/Kisumu)

3.3 Target Population

A total of 265 SSBs were targeted for the study and sample drawn from the same. Since the accuracy of the sample depended mostly on the sampling frame, the researcher ensured a high degree of correlation between the sampling frame and the sample population. The sample size was an important feature of the study in which the goal was to make inferences about the population from a sample.

3.4 Sampling Design

For the study, every fifth firm from each of the stratum key sectors of Agriculture, manufacturing, Transport, Tourism, and Telecommunications was picked to form the sample

population. The study adopted stratified sampling technique where firms were sampled in groups of five in every key sector. Every fifth firm in every cluster was selected and information gathered on the same firms. The study, therefore, consisted of 265SSBs which formed the sample frame. This sampling method was deemed necessary in order to reduce the average cost of the questionnaire and to give more accurate results owing to the kind of research carried out.

3.4.1 Sampling Procedure

Purposive sampling was used to select the respondents to the questionnaires. A total of 53 Business Owners, one from each of the business ventures was selected purposely to provide adequate responses on the relationship between online tax system and tax compliance levels of small scale businesses. The managers were preferred because they were professionally qualified to provide correct responses to the questionnaire.

The formula used to arrive at the sample was as follows:

$$N/K^{\text{th}};$$

Where; N= total number of Small Scale Businesses in any given sector

K^{th} item = every fifth firm selected in succession from N to form the sample

Therefore; the sample size used for this study is illustrated in Table 3.1 below.

3.4.2 Sample Frame

The sample frame adopted for the study was as summarized in Table 3.1.

Table 3.1: Sampling Frame

Sector	Population (N)	K th Item (Every 5 th item of N)
General Trading e.g. Hardware	90	18
Dress making & Boutique	50	10
Telecommunications	60	12
Transport	65	13
Total	265	53

Source: Research Data, (2017)

3.5 Data Collection Procedure

The researcher obtained research permission from KRA Kisumu County. The researcher also sought permission from National Research Council for Science, Technology and Innovation (NARCOSTI) and Maseno University. The researcher ensured that only questions directly related to the study were administered, avoiding vague questions and keeping the language simple. The questionnaires were then administered to the respondents accordingly.

3.6 Data Collection Instruments

Primary data was collected using questionnaires distributed to those targeted in the study. The questionnaires consisted of both closed and open-ended questions covering all the issues relating to the relationship between online tax system and tax compliance levels in Kisumu Central Sub-county. The researcher personally administered the questionnaires to the respondents, one from each of the sampled sectors, purposefully selected and asked to fill the questionnaires. Secondary data was gathered from library materials, business journals and reports, media publications and various internet search engines covering the relationship between online tax system and tax compliance levels of small scale businesses.

3.6.1 Validity of Research Instrument

Validity is the degree to which an instrument measures what it is supposed to measure (Kothari, 2004). Therefore, the term refers to the extent to which an instrument asks the right questions in terms of accuracy. The content validity of the research instrument for this study was determined

through piloting, where the responses of the subjects were checked against the research objectives. For a research instrument to be considered valid, the content selected and included in the questionnaire has to be relevant to the variable investigated. The researcher performed the pilot test with a randomly selected sample. Content validity of the instrument was also tested using a research expert's opinion; the research supervisor. The research expert independently assessed the validity of the items in the questionnaire in relation to research objectives.

For Construct Validity, individual questions were developed based on the study objectives so as to reveal whether wording of items used to measure a concept were related to that concept or one of its dimension. The purpose of this check was to ensure that each measure adequately assessed the construct it purported to assess.

For face validity, the questions were subjected to checks by the experts(supervisor and others) for clarity, word choice, time frame and response set to ensure that the instruments are carefully defined, with no language barriers and good to administer.

For content validity, this was measured using content validity index (CVI) which is given by;

$$\text{CVI} = \frac{\text{Number of items declared valid}}{\text{Total number of items in the questionnaire}}$$

Based on the results, 46 out of 50 items were established to be valid with CVI of 0.92 which is higher than the popular cut-off point of 0.6 according to David and Thomas (2006). Hence the items in the questionnaires were considered valid and could measure the study variables accordingly.

3.6.2 Reliability of Research Instrument

Reliability of an instrument is the measure of the degree to which a research instrument yields consistent results or data after repeated trials (Cooper, 2003). To test the reliability of the questionnaire as a research instrument, a test-retest technique was employed in which questionnaires were administered to a group of Small scale businesses with similar characteristics as the actual sample size which were not included in the final study. The test was

repeated after two weeks in order to establish the extent to which the questionnaire elicited the same responses every time it was administered.

3.7 Data Analysis and Presentation

Completed questionnaires were edited for completeness and consistency. The data collected was analyzed using descriptive statistics, correlations, and multiple linear regression analyses that assisted in answering the research questions as well as explained the nature and strength of associations between the dependent and independent variables. While descriptive statistics were used to meaningfully describe measurement using statistics, the output was presented in form of tables and figures; Multivariate regression analysis resulted in a prediction equation that described the relationship between the dependent variables and independent variables.

The analysis attempted to answer research questions and explained the nature and strength of associations between the dependent and independent variables. The following was the multiple regression model used for data analysis;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Y = Tax Compliance

α = determines the level of the fitted line

β = slope of the line

X_1 = Tax Declaration

X_2 = Tax Reporting

X_3 = Tax Payment

X_4 = Interventions

e = a random error term

The findings were presented in form of tables which present numerical data in columns and rows in chapter four. For the variables whose calculated p-value will be less than 0.05 the null hypothesis that correspond to it will be accepted, otherwise rejected.

3.7.1 Diagnostic Tests

A correlation and a multiple regression analyses were carried out to test the presence of multicollinearity in the data. This helped to show any serial correlations. A multiple regression analysis was also carried out. ANOVA and F-test showed the fitness of the model used in the study. The coefficients showed how each of the variables significantly related with each other. The results of significance were interpreted at 5% level of significance. Both P-values and t-tests were interpreted. To test for normality, skewness and Kurtosis were used to test for normality while collinearity was tested using Multicollinearity Diagnostic.

3.7 Ethical Considerations

The study sought the consent and permission of respondents through the relevant authorities. The researcher ensured that only questions that were directly related to the study were administered. Vague questions were avoided, and the language was kept simple. Lastly, no inducements were given to any individual in order to solicit information. The research assistants were also given proper orientation of the ethics of the research.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents the study findings analysed by using descriptive and inferential statistics.

RESULTS

The study used correlation and simple linear analyses to analyze the data. A multiple linear regression model was also used for this investigation putting into consideration three independent variables hypothesized to have tangible effects on the tax compliance. The model was made up percentage changes in tax compliance as the dependent variable while online tax declaration, online tax reporting and online tax payment were the independent variables.

4.1 Descriptive Statistics

4.2 Data Presentation

4.3 Response Rate and the Rate of Return

The rate of response is indicated on table 4.11 below.

Table 4.1: Return Rate

Questionnaires distributed	Returned Questionnaires	Return rate
53	50	95.2%

Source: Research Data, 2017

The study targeted a total of 53 respondents. However, only 50 respondents responded and returned their questionnaires contributing to 95.2% response rate. The researcher made use of frequency tables, graphs and charts to present data.

Table 4.1 below shows the extent to which the e-commerce business tax payers utilize the online filing service offered by the Kenya Revenue Authority. It is clear from the table that the majority of the small tax payers use the system to a great extent (50%). Further, a significant portion of the sample which accounts to 35%, file their returns online with only 15 % filing tax returns manually.

Table 4.2: Extent to which Tax Payers use Online Filing System

No. of tax payers	Frequencies	Percentages
Very great extent	19	35%
Great extent	27	50%
Moderate extent	7	15%
TOTAL	53	100%

Source: Research Data, (2017)

Table 4.2 below shows the extent to which small tax payers remit taxes online. It indicates that, out of all the sixty tax payers who have adopted the online tax system, 26% use the online tax remittance system moderately in making tax remittances. 42% of the e-commerce tax payers indicated that they pay their taxes online to a great extent while 32% of respondents rely on online tax remittance to a very great extent.

Table 4.3: Extent to which Tax Payers use Online Tax Remittance System

No. of tax payers	Frequencies	Percentages
Very great extent	19	36%
Great extent	18	34%
Moderate extent	16	30%
TOTAL	53	100%

Source: Research Data, (2017)

4.2 Duration of being in Operation

In this study, the researcher tried to identify whether the respondents had been in operation for a longer period or not. The question in the taxpayers' questionnaire was stated as: For how long have you been operating? Of the total respondents 10.34% of the taxpayers had been in their current work stations for less than two years as indicated in table 4.4 below.

Table 4.4 Period of Operation

Period	Frequency	Percentage	Cumulative
Less than 2 years	3	10.34	10.34
2 to 4 years	5	12.64	22.98
4 to 6 years	24	34.49	57.47
6 to 8 years	14	27.59	85.04
More than 8 years	7	14.94	100

Source: Research Data, 2017

Table 4.4 further showed that those who were in their current stations for a period between 2 and 4 years accounted for 22.98% and those who had been operating for 4 and 6 years were 34.49 % while 27.59% of the respondents were in their current stations for a duration between 6 and 8 years and 8 years and above respectively. For those who had been in operation for a period of more than 8 years were 14.94%.

4.3 Electronic Tax Declaration

The small scale business operators in Kisumu Central Sub-County were categorized into partnership, sole proprietorship, and limited companies. The analysis from the sample size of 53 is as follows:

Table 4.5: Type of Business

Type of business	Frequency	Percentage %	Cumulative
Partnership	10	25	24.14
Sole proprietorship	20	33.3	47.13
Limited company	23	41.7	75.86
Total	53	100.00	

Source: Research Data, 2017

Table 4.5 above depicts the findings of type of business the small scale business operators in Kisumu had been operating. The results reveal that majority of the type of business conducted in Kisumu central business is that of limited company, followed by partnership and other business with 24.14% each. Sole proprietorship was the least mentioned by 22.99%. Other types of business mentioned by the respondents include self-help groups, youth groups, private schools and non-governmental organizations. Thus the respondents are competent to answer the questions addressed by this study.

4.3.2 Main Business Line

The study sought to find out the main business line of the small scale business in Kisumu central sub-county. The options given in the questionnaire were transport, general trading, dressmaking & boutique, beauty & cosmetics, telecommunications and others. The findings from the study are depicted in table 4.6 below.

Table 4.6: Main Business Line

Statement	Frequency	Percent	Cumulative
Transport	9	13.79	13.79
General trading	7	8.05	21.83
Dressmaking & boutique	5	5.74	27.58
Beauty & cosmetics	6	6.90	34.48
Telecommunications	24	50.57	85.05
Others	2	14.95	100
Total	53	100	

Source: Research Data, 2017

From table 4.6 and figure 4.1 it is clear that majority of the respondents indicated that their main business line is telecommunications (50.57%). Transport indicated by 13.79% of the total respondents. Beauty and cosmetics was mentioned by 6.90%.

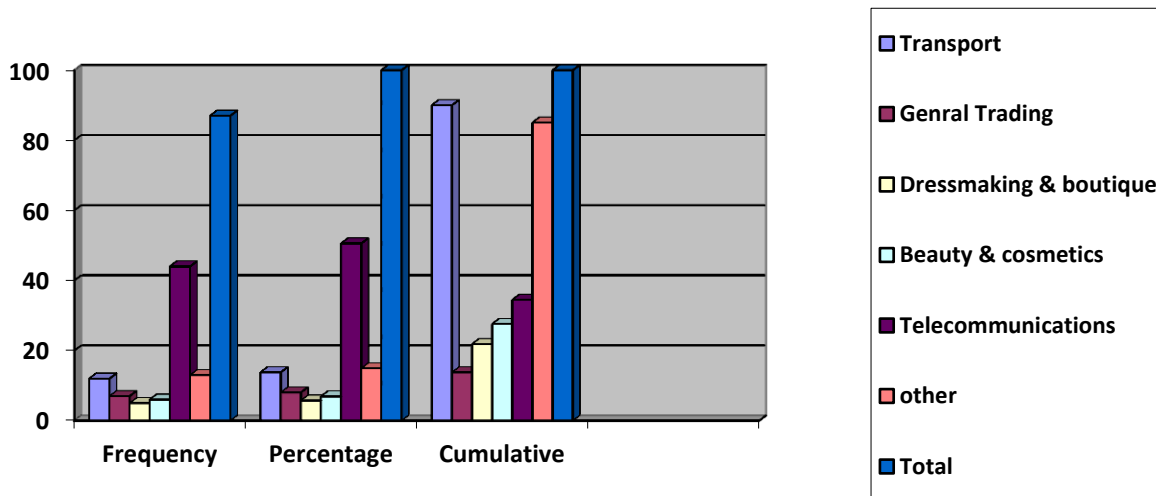


Figure 4.1 Main Business Line

Source: Research Data, 2017

8.05% of the respondents said that they were on general trading while 5.74% indicated that their main business line was dressmaking and boutique. Other main business lines were mentioned by only 14.95%.

4.3.3 Number of employees

The study sought to find out the number of employees of targeted small scale business. The results from the findings are displayed in table 4.7 below

Table 4.7: Number of employees

Number of employees	Frequency	percentage	Cumulative
1-5	19	31.6	52.87
6-10	15	20	66.66
11-15	12	15	77.00
15 & above	7	11.7	85.05
Total	53	100%	

Source: Research Data, 2017

4.4 Electronic Tax Reporting

The study sought to find out how transactions are maintained by small scale businesses in Kisumu central sub-county. The findings are shown in table 4.8 below.

Table 4.8: Transaction Records Maintained by Small scale businesses

Statement	Frequency	percent	Cumulative
We record our sales records online	19	48.27	48.28
Our sales records are maintained as backup by the web hosting company	13	24.14	72.42
We only keep manual records alone	10	12.64	85.06
We keep digital records for short periods	8	10.34	95.40
Other (we keep manual and digital records)	3	4.60	100
Total	53	100	

Source: Research Data, 2017

On the transaction records maintained by organization, majority of the respondents (48.27%) indicated that they record their records online. This implies that some small scale business operators in Kisumu central business district have embraced online transactions as a way of doing business.

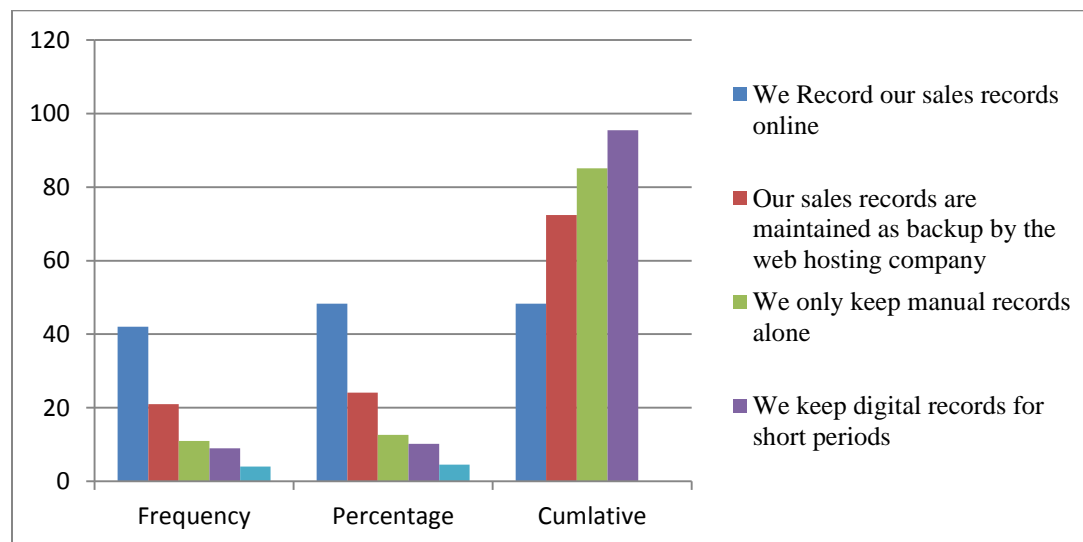


Figure 4.2 Transaction Records Maintained by Organization

Source: Research Data, 2017

24.14% of the respondents mentioned that their sales records are maintained as backup by the web hosting company. Other transaction records maintained by organization as mentioned by the respondents include: We only keep manual records alone 12.64%. We keep digital records for short periods at 10.34%, and we keep manual and digital recorded was mentioned by 4.60% of the respondents. Thus it can be concluded that, despite the fact the government and the KRA are putting more efforts to ensure that all transactions are done online, there are still other offices who keep their records manually.

4.5 Tax Reporting Management of Online Transactions

Tax reporting management of online transactions in e-business operators in Kisumu central business district was sought in this study. The findings are displayed in table 4.21 below.

Table 4.9: Tax Reporting Management of Online Transactions

Statement	Frequency	Percent	Cumulative
There is clear policies of dealing with the tax reporting	24	40	39.08
Employees in the department usually attend tax seminars	10	18.3	63.22
Employees in the department have never attended tax seminars	7	13.3	83.91
Tax reporting is usually monitored by top managers	10	18.3	96.55
Other	2	5	100
Total	53	100	

Source: Research Data, 2017

From the table above, it is clear that majority of the small scale business operators in Kisumu central business district have clear policies of dealing with the tax reporting (34.08%). This implies that there is proper tax reporting and management. Employees in the department usually attend tax seminars organized by KRA was another statement which was indicated by 24.14%. This implies that seminars are organized by KRA to enable e-business operators gain knowledge

on online transactions. On the contrary 20.69% of the respondents indicated employees in the departments have never attended seminars. This implies that seminars are not mandatory for the KRA officials.12.64% of the respondents indicated that Tax reporting is usually monitored by top managers.

4.6 Record Keeping

The study sought to find out how records are kept in the small scale businesses in Kisumu Central Sub-County. The results are shown in table 4.10 below

Table 4.10: Record Keeping

Statement	Frequency	Percentage
There is no proper book keeping for the transaction	11	20%
There are proper books kept	21	40%
Records are kept online which are not accessible	8	15%
Any other (records are manually kept)	5	10
Any other(Records are kept online)	8	15%
Total	53	100%

Source: Research Data, 2017

The results regarding how records are kept in the KRA offices in Kisumu central business district are further depicted in figure 4.3below.

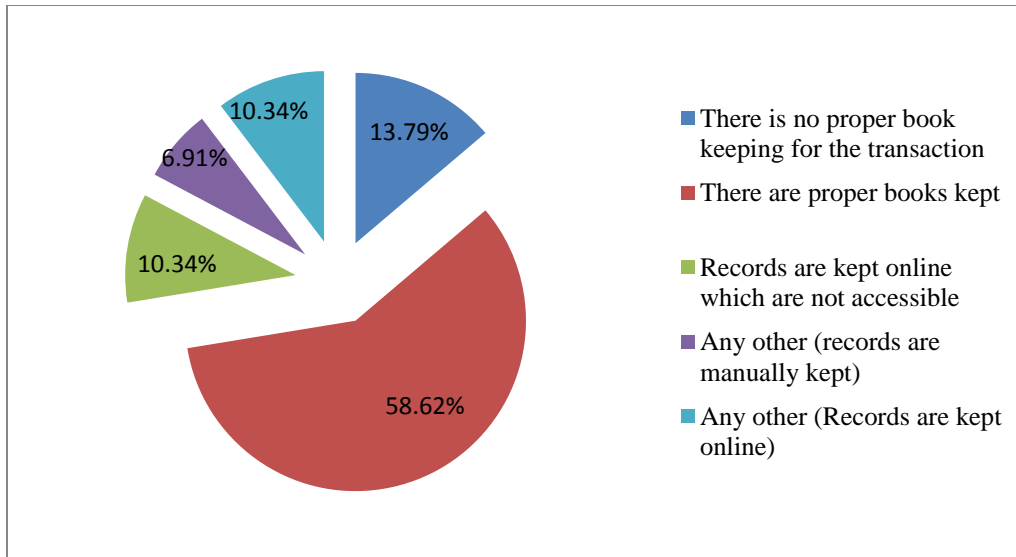


Figure 4.3 Record keeping

Source: Research Data, 2017

The study revealed that majority of the employees (58.62%) keeps proper records. This was followed by 13.79% who stated that there is no proper book keeping for the transaction. This might be attributed to lack of auditing of books for the transactions. Despite the government efforts to eradicate keeping of records manually, still some offices in Kisumu central sub-county businesses have this habit of keeping manual records as was mentioned by 6.91% of the respondents. 10.34% each said their records are kept online and are not accessible at all.

4.7 Tax Returns

The research sought to determine whether tax returns are done with or without payments and the findings are as shown in table 4.11 below:

Table 4.11: Respondents Response on Tax Returns

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
We file our returns without payments	15.7%	29.7%	2.7%	31.3%	20.6%
We file our returns with payments	15.7%	37.9%	4.1%	23.4%	18.7%
We have never had any tax to pay	5.3%	8.5%	17.2%	38.9%	30.1%

Source: Research Data, 2017

Table 4.11 above presents respondents’ opinion on the tax returns. Majority of the respondents 31.3% disagreed while 20.6% strongly disagreed that they file tax returns without payments.

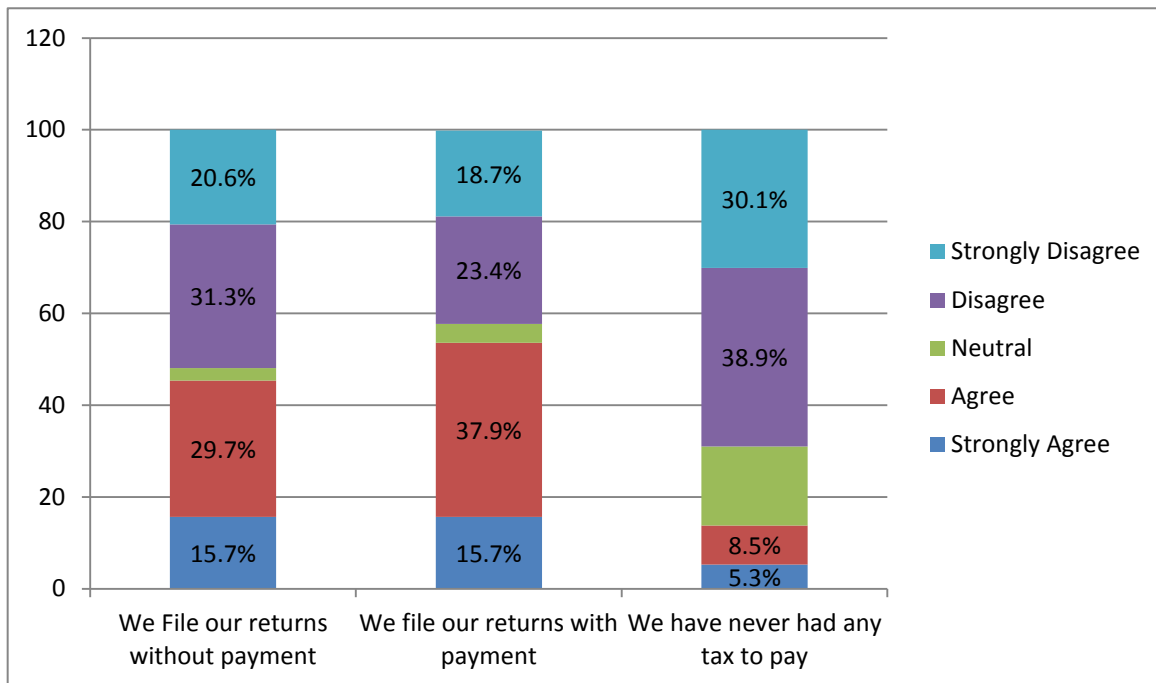


Figure 4.4 Respondents Response on Tax Returns

Source: Research Data, 2017

On the contrary 29.7 % agreed and 15.7 % strongly agreed while 2.7 % were not sure. As regards returns with payments, majority of the respondents 37.9% agreed that they file returns with payments, 15.7% strongly agreed while 23.4% disagreed and 18.7% strongly disagreed. For those offices which had no tax to pay 5.3% strongly agreed, 8.5% agreed while 17.2% were not sure. On the contrary 38.9% agreed and 30.1% strongly agreed.

Inferential Statistics

4.8 Implications of Electronic Tax Declaration on Tax Compliance

One of the objectives of this study was to establish the role of electronic tax declaration on tax compliance. The electronic tax declaration is measured by the percentage increase in the number of e-commerce registered tax payers over a period of five years while the tax compliance is measured as percentage change in tax compliance over the same period. In Table 4.12 below, 58.4% (R squared = 0.584) of variations in the dependent variable (tax compliance) can be explained by changes in tax registration (the independent variable). The correlation coefficient (R=0.804) indicated a strong positive correlation between these two variables. On the basis of correlation analysis, this result implies that electronic tax declaration causes tax compliance among e-commerce tax payers in Kisumu Central Sub-County.

Table 4.12: Model Summary

Model	R	R	Adjusted R	Std. Error of the Estimate
1	.804(a)	.646	.584	.0239

a Predictors: (Constant), electronic tax declaration

Source: Survey Data 2017

Analysis of variance (Table 4.12) for this model revealed that the relationship that exists between electronic tax declaration and the tax compliance in Kisumu Central Sub-County is statistically significant ($p=0.002<0.05$) and thus this model can be considered a sufficient tool

to explain the tax compliance trend. The hypothesis that there is no implication of electronic tax declaration on tax compliance is there rejected at 5% level of significance.

Table 4.13: Analysis of Variance

Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	.026	1	.026	13.000	.002(a)
	Residual	.116	58	.002		
	Total	.142	59			

a Predictors: (Constant), electronic tax declaration

b. Dependent Variable: Tax Compliance

Source: Survey Data 2017

From the model coefficients (Table 4.14), the regression equation was obtained:

$$Y = 0.253 + 0.239X_1$$

The constant of 0.253 represents a collection of factors which have not been explained by the model used in this study. Therefore, results imply that there were other factors that contribute significantly to tax compliance. From table 4.14 below, it was revealed that holding electronic tax declaration constant; the tax compliance would be 0.253. Similarly, a unit increase in electronic tax declaration would result to 0.239 increases in tax compliance.

Further, the linear coefficient ($\beta=0.239$) between electronic tax declaration and tax compliance indicated by what linear proportion the independent variable determined the tax compliance values. In that case therefore, tax compliance trend observed is caused by some hidden factors and electronic tax declaration. The study also found that the p-value ($p=0.035<0.05$) was less than 0.05 an indication that the predictor variables was statistically significant in influencing tax compliance among e-commerce business tax payers in Kisumu Central Sub-County.

Table 4.14: Coefficients

Model		Unstandardized Coefficients	Standardized Coefficients	T	Sig.	
1	B		Std. Error	β		
	(Constant)	.253	.134		7.528	.05
	e-tax declaration	.239	.184	3.655	.033	.035

a. Dependent Variable: Tax Compliance

Source: Survey Data 2017

Examine the Role of Electronic Tax Reporting on Tax Compliance

In this section the researcher wanted to find out the extent to which tax compliance is affected by electronic tax reporting. Results (Table 4.14) showed that it was possible on the basis of electronic tax reporting to explain 81.6% ($R^2=0.816$) of the tax compliance trend observed. The simple correlation coefficient ($R=0.903$) revealed a very strong positive relationship between the independent and dependent variables.

Table 4.15: Model Summary

Model	R	R	Adjusted R	Std. Error Of the Estimate
1	.903(a)	.816	.755	.04402

a Predictors: (Constant), Electronic Tax Reporting

Source: Survey Data 2017

The ANOVA (Table 4.15) gives the findings for the significance test of this model. According to the analysis, the model significantly assesses the role of electronic tax reporting on tax compliance. The significance ($p = 0.024 < 0.05$) means that the electronic tax reporting significantly positively affects tax compliance. Therefore, the hypothesis that there was no

significant role of electronic tax reporting on tax compliance was rejected at 5 % level of significance.

Table 4.16: Analysis of Variance

Model		Unstandardized Coefficients	Df	Mean square	F	Sig.
1	Regression	.26	1	.26	13.000	.024(a)
	Residual	1.184	58	.02	7.528	.05
	Total	1.444	59			

a. Predictors: (Constant), electronic tax reporting

b. Dependent Variable: Tax compliance

Source: Survey Data 2017

The regression equation for estimating tax compliance based on the electronic tax reporting can be expressed as;

$$Y = 0.445 + 0.034x_2$$

Table 4.17: Coefficients

Model		Unstandardized Coefficients	Standardized Coefficients	T	Sig.
1		B	Std. Error	B	
	(Constant)	.445	.320		4.520
	e-tax reporting	.034	.009	.903	3.649

a. Dependent Variable: Tax Compliance

Source: Survey Data 2017

Results further indicated that both the constant and the electronic tax reporting significantly contribute to the value of tax compliance observed. This means that besides electronic tax reporting, there are other factors that have significant effect on tax

compliance among e-commerce business tax payers in Kisumu County. If electronic tax reporting was to be held constant, tax compliance would be at 0.445 (the value of the constant in table 4.17 above). Similarly, increasing electronic tax reporting by one unit, the tax compliance would increase by 0.034. All the p values are less than 0.05 indicating significant effects of the constant on the electronic tax reporting on tax compliance.

Determine the Role of Electronic Tax Payment on Tax Compliance

The model summary (Table 4.18) showed that the electronic tax payment explains 86.9% ($R^2=0.869$) of the tax compliance observed in Kisumu Central Sub-County. Further, there existed a very strong positive correlation ($R=0.932$) between the two. Significance test under the analysis of variance (Table 4.10) affirms that the effect of electronic tax payment on tax compliance was statistically significant ($p=0.025<0.05$) at 5% level of significance. The hypothesis that there was no significant role of electronic tax payment on tax compliance was rejected.

Table 4.18: Model Summary

Model	R	R	Adjusted R	Std. Error of the Estimate
1	.932(a)	.869	.825	.03722

a Predictors: (Constant), Electronic Tax Payment

Source: Survey Data 2017

Table 4.19: Analysis of Variance

Model		Unstandardized Coefficients	Df	Mean square	F	Sig.
1	Regression	.370	1	.37	19.474	.025(a)
	Residual	1.13	58	.019	7.528	.05
	Total	1.500	59			

a. Predictors: (Constant), electronic tax payment

b. Dependent Variable: Tax compliance

Source: Survey Data 2017

The linear regression coefficients (Table 4.19) indicated that electronic tax payment has a positive linear effect on the values of tax compliance observed in Kisumu Central Sub-County ($\beta = 0.044$). This effect was statistically significant while that of the constant was also significant. Using these coefficients, the linear regression model;

$$Y = .259 + 0.044(\text{electronic tax payment})$$

The standardized coefficient ($R = 0.932$) was the Pearson correlation coefficient that defines the nature of linear relationship between variables. In this case, electronic tax payment had a positive linear relationship with the tax compliance.

Table 4.20: Coefficients

Model		Unstandardized Coefficients	Standardized Coefficients	T	Sig.	
1		B	Std. Error	B		
	(Constant)	.259	.349		3.039	.046
	e-tax payment	.044	.010	.932	4.452	.021

a. Dependent Variable: Tax Compliance

Source: Survey Data 2017

Relationship of Online Tax Filing System and Tax Compliance in Kisumu Central Sub-County

This section was designed to investigate the combined effect of the variables analyzed as single items in this study. The relationship was considered as an aggregation of the effects resulting from electronic tax declaration, electronic tax reporting, and electronic tax payment. A multiple linear regression model used to assess the combined effect of these variables gave results ($R = 0.805$) and ($R^2 = 0.648$). The finding $R=0.805$ indicated a high perfect positive correlation of the tax compliance and the independent variables. Additionally, the three variables under investigation provide information sufficient to account for 64.8%% of the tax compliance trends observed in Kisumu Central Sub-County (Table 4.21). This model is statistically significant at 5% significance level. Table 22 provides the significance of this model as $P=0.025<0.05$. Accordingly, the variables included in this model provide sufficient information to significantly explain the behavior of the tax compliance trends.

Table 4.21: Model Summary

Model	R	R ²	Adjusted R	Std. Error of the Estimate
1	.805(a)	.648	.602	.01696

a Predictors: (Constant), Electronic Tax Declaration, Electronic Tax Reporting, Electronic Tax Payment

Source: Survey Data 2017

Table 4.22 Analysis of Variance

Model		Unstandardized Coefficients	Df	Mean square	F	Sig.
1	Regression	.631	2	.316	21.067	.025(a)
	Residual	.864	58	.015		
	Total	1.495	60			

a. Predictors: (Constant), electronic tax declaration, electronic tax reporting, electronic tax payment

b. Dependent Variable: Tax Compliance

Source: Survey Data 2017

Table 5.3 presented the coefficients of the variables in the multiple linear regression function.

$$Y = 0.589 + 0.029x_1 + 0.034x_2 + 0.044x_3$$

The function includes the three variables. All the variables contribute significantly to the tax remittance trend observed for the e-commerce business tax payers in Kisumu Central Sub-County (Table 5.3).

Table 4.21: Coefficients

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.	
1	B	Std. Error	B		
(Constant)	.589	.296		1.991	.296
e-tax declaration	.029	.018	1.296	2.390	.0252
e-tax reporting	.034	.007	.717	3.656	.0170
e-tax payment	.044	.022	1.624	3.498	.0177

a. Dependent Variable: Tax Compliance

$$Y = 0.589 + 0.029X_1 + 0.034X_2 + 0.044X_3$$

Source: Survey Data 2017

4.9 Summary

The main objective of the study was to investigate whether the electronic tax declaration, electronic tax reporting, and electronic tax payment affect the tax compliance in Kisumu Central Sub-County. The findings revealed that the three metrics of tax declaration, tax reporting, and tax payment significantly and positively affect the tax compliance among small

scale business tax payers in Kisumu Central Sub-County. Partial correlation analysis showed that individually, each of these independent variables had strong positive correlation with the tax compliance, the dependent variable. In addition, a multiple linear regression and correlation analysis revealed a strong linear relationship small scale business and tax compliance. This implies that the combined effect of the three independent variables on tax compliance is positive and significant.

From the above regression, it was revealed that holding tax declaration, tax reporting and tax payment up to a constant zero, tax compliance would stand at 0.589. A unit increase in online tax declaration would lead to an increase in tax compliance among the small scale business tax payers in Kisumu Central Sub County by a factor of 0.029 and a unit increase in online tax reporting would lead to an increase in tax compliance among the small scale business tax payers in Kisumu Central Sub County by a factor of 0.034 while a unit increase in online tax payment would lead to an increase in tax compliance among the small scale business tax payers in Kisumu Central Sub County by a factor of 0.044.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a summary of findings, conclusions and recommendations, policy implications and areas for further studies.

5.1 Summary

The main objective of the study was to investigate whether the electronic tax declaration, electronic tax reporting, and electronic tax payment affect the tax compliance in Kisumu Central Sub-county County. The findings revealed that the three metrics of tax declaration, reporting, and payment significantly positively affect the tax compliance among e- small scale business tax payers in Kisumu Central Sub-county. Partial correlation analysis showed that individually, each of these independent variables had strong positive correlation with the tax compliance, the dependent variable. In addition, a multiple linear regression and correlation analysis revealed a strong linear relationship between small scale businesses and tax compliance. This implies that the combined effect of the three independent variables on tax compliance is positive and significant.

5.2 Conclusions

The following four conclusions were derived from the findings of the study: First, based on the finding that the Pearson's correlation coefficient between electronic tax declaration and tax compliance was significant and positive, thus, the study concluded that electronic tax declaration had statistically positive significant effect on tax compliance. The implication, therefore, is that electronic tax declaration significantly improved tax compliance. Secondly, tax compliance among small scale business tax payers in Kisumu Central Sub-County was significantly and positively affected by electronic tax reporting. Thus, the study concluded that increase in adoption of electronic tax reporting increased tax compliance and the reverse were also true.

Thirdly, there existed a statistically significant positive effect of the electronic tax payment on the tax compliance among small scale business tax payers in Kisumu Central Sub-County. Therefore, the more the small scale business tax payers remit tax online, the higher the tax

compliance. Accordingly, there were other underlying factors not investigated under this study that contributed to the tax compliance among small scale business tax payers in Kisumu Central Sub-County.

5.3 Recommendations

5.3.1 Policy Recommendations

The Kenya Revenue Authority should use effective measures to mobilize and motivate small scale business tax payers to register online for turnover tax, value added tax among other taxes in order to increase tax compliance.

5.3.2 Recommendations for further research

A further study should be conducted to identify and investigate other factors that affect tax compliance among small tax payers in Kisumu County.

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APPENDICES

APPENDIX A – QUESTIONNAIRE FOR SMALL SCALE BUSINESSES

Questionnaire Serial No.....

Dear respondent,

This research is for academic purpose. It will determine the relationship between online tax system and tax compliance levels of small scale businesses in Kisumu Central Sub-county. I kindly request you to provide answers to these questions as honestly and precisely as possible.

Declaration: The nature of my study is academic, and I assure you of utmost confidentiality since the information you provide will only be published as anonymous statistical data and no personal information is requested. A mail return envelope is attached too, to enable you to return the filled questionnaire. Please tick [] where appropriate or fill in the required information on the spaces provided.

NB: Please note that you may give your answers to any of the questions on a separate piece of paper in case the space provided is not enough.

SECTION A: BUSINESS DATA

1. Kindly Tick against Business Area as listed below or specify where necessary

- | | |
|-------------------------------|--------------------------|
| Transport | <input type="checkbox"/> |
| General trading e.g. Hardware | <input type="checkbox"/> |
| Dress-making and Boutique | <input type="checkbox"/> |
| Beauty and Cosmetics | <input type="checkbox"/> |
| Telecommunications | <input type="checkbox"/> |
| Others (please specify)..... | |

2. Number of Employees _____

- | | | | |
|---------|--------------------------|------------|--------------------------|
| 1 – 5 | <input type="checkbox"/> | 6 – 10 | <input type="checkbox"/> |
| 11 – 15 | <input type="checkbox"/> | 15 & Above | <input type="checkbox"/> |

3. What is your business approximate turnover annually?

4. What was your approximate business capital outlay?

SECTION B: ONLINETAX REGISTRATION

5. Does your Business have Internet connectivity?

- Yes No

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

- Yes No

7. If Yes in 6 above, have you registered as an online user with KRA on the iTax platform?

- Yes No

8. If No in both 6 and 7above, kindly select which statement best explains why

Reason	Kindly Tick(√)
Has never been Trained on iTax	
KRA Server ever down	
Required computer skills which are lacking	
Online system will be too costly for the small business	

SECTION C:iTAX AND FILINGOFTAX RETURNS

9. Have you been filling your tax returns with KRA?

Yes No

10. Have you been filing your tax returns online?

Yes No

SECTION E:iTAX AND CHALLENGES

11. Which of the following challenges do you ever experience with on-line filing services?

Kindly tick where applicable

- a. KRA server is always down
- b. No connectivity
- c. On-line filing is too slow
- d. It is too costly for the company
- e. Our staff are not well trained on how to use it
- f. Management support forum-line filing is lacking
- g. Other reasons, kindly state

.....

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

APPENDIX B: -WORK PLAN

	WEEK										
	1	2	3	4	5	6	7	8	9	10	
ACTIVITY	Pilot testing										
	Instrument Validation										
	Data Collection										
	Processing of Data										
	Analysis & Interpretation of Data										
	Report writing										
	Report Submission										
	Week one start after Project defense										