

**EFFECT OF ITAX SYSTEM ON VALUE ADDED TAX COMPLIANCE OF  
SMALL AND MEDIUM ENTERPRISES IN ELDORET TOWN, KENYA**

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**DECLARATION****DECLARATION BY THE CANDIDATE**

I, the undersigned, declare that this thesis is my original work and that it has not been presented in any other university or institution for academic credit.

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## **DEDICATION**

I dedicate this thesis to my beloved parents who have always been a pillar in my life in terms of prayers, financial support and encouragement through the entire period of the study. To my siblings for their moral support and prayers.

## ABSTRACT

Tax authorities are turning to e-government led solutions like integrated tax administration systems to interact with taxpaying public in tax collection, administration and compliance settings. It is on the basis of this purview that this research was born. Its main objective was to determine the effect of iTAX system on value added tax compliance of small and medium enterprises in Eldoret town. The specific objectives were, to establish the effect of online tax filing on value added tax compliance of small and medium enterprises in Eldoret town and to determine the effect of tax remittance on value added tax compliance of small and medium enterprises in Eldoret town, to find out the effect of compliance cost on value added tax compliance of small and medium enterprises in Eldoret town, to determine the effect of online tax registration on value added tax compliance of small and medium enterprises in Eldoret town. The development of literature was guided by the Ability to Pay Theory and technology acceptance model (TAM) theory. An explanatory research design was adopted and the target population was 2670 Small and Medium Enterprise taxpayers in Eldoret Town, North Rift Region. The sample size was 347 Small and Medium Enterprise tax payers. Stratified and simple random sampling technique was used to identify the respondents. Construct validity was tested using factor analysis and reliability using cronbachs' alpha technique. The data was analyzed using SPSS version 20 software using descriptive statistics and inferential statistics. The study will be of great benefit to Kenya revenue authority in policy formulation on how to custom design the iTAX system for ease of use and also to theoretical development and literature review on iTAX system and value added tax compliance. The results were, online tax filing had ( $\beta = .165$ ,  $p = .000$ ,  $< .05$ ), tax remittance had ( $\beta = .189$ ,  $p = .000$ ,  $< .05$ ), compliance costs had ( $\beta = .055$ ,  $p = .033$ ,  $< .05$ ), online tax registration ( $\beta = .333$ ,  $p = .041$ ,  $< .05$ ). The study concluded that online tax filing, tax remittance, compliance costs and online tax registration have a significant effect on tax compliance. The study recommends that small and medium enterprises should keep detailed records of all input tax and output tax to facilitate the completion of VAT returns.

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## ACRONYMS & ABBREVIATIONS

- DTD:** – Domestic Taxes Department
- EFTPS:** - Electronic Federal Tax Payment System
- ICT:** - Information Communication Technology
- IRBM:-** Inland Revenue Board Malaysia
- IRS:** - Internal Revenue Service
- ITA:-** Internal tax authority
- ITAX:** - Integrated Tax Administration System
- ITMS:** - Integrated Tax Management System
- KMO:** - Kaiser-Meyer-Olkin
- MSA:** - Measure of Sampling Adequacy
- OTFPS:** - Online Tax Filling and Payment System
- PEOU:-** Perceived ease of use
- PIN:** - Personal Identification Number
- PU:-** Perceived usefulness
- SPSS:** - Statistical Package for the Social Sciences
- SMEs:** - Small and medium enterprises
- TAM:-** Technology acceptance model
- TCC:** - Tax Compliance Certificate
- TIN:** - Tax Identification Number
- TRA:-** Tanzanian Revenue Authority
- URA:-** Uganda Revenue Authority
- US:** - United States
- VAT:** - Value added tax
- ZIMRA:** - Zimbabwe Revenue Authority

## OPERATIONAL DEFINITION OF TERMS

<b>Compliance costs</b>	It refers to the costs that are incurred in the process of filing returns.
<b>ITax system</b>	It is a system that allows for online tax registration, tax filing and tax payments
<b>Online tax filing</b>	Is a process where taxes are paid by use of an online platform and not manually.
<b>SMEs</b>	It refers to business entities registered for value added tax which have an annual turnover of less than Kshs.50 million.
<b>Tax Remittance</b>	Is relates to payment of taxes due.
<b>Value added tax compliance</b>	It relates to the VAT returns filed, whether it was filed on time, if the correct amounts of VAT are remitted to the Kenya revenue authority and whether the correct returns are declared.

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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Tax compliance is a concept given priority by all jurisdictions for purposes of raising enough revenue to meet the financial requirements of any Country. Itax system was introduced to ease tax compliance procedures (Ramayah, 2013). It is also a concept born to address the many challenges taxpayers face while in the process of honouring their tax obligations. Itax is an online platform whereby the taxpayer is able to access through internet all the services offered by a financial authority such as the registration for a personal identification number, filing of returns and application for compliance certificate (Wasao, 2014). Different jurisdictions are under an increasing pressure to improve revenue collection to desired levels.

Amitabh (2008) argues that in order to address the challenge faced in improving revenue collection, tax authorities around the globe have opted for iTax system to interact with taxpaying public in tax collection, administration and compliance settings. According to Dowe (2008) 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. Muita (2011) found that the use of iTax system was first tested in the United States, where the Internal Revenue Service began offering tax return e-filing for tax refunds only which has now grown to the level that currently approximately one out of every five individual taxpayers is now filing returns electronically.

Mandola (2013) postulated that the advancement in information and communication technology that the world continues to experience makes tax collection and administration a challenge for many tax revenue authorities. The researcher argued that tax authorities have to maintain a modernized and responsive tax administration system so as to facilitate faster collection of taxes. An iTax system integrates the processes of registration, tax preparation, tax filing and tax payment. Thus taxpayers are able to avoid the hassles of visiting the tax office and making long queues, because the returns are filed at their convenience. An iTax system enables taxpayers to submit their tax returns electronically to the tax authorities thus helping to prevent many mistakes which might occur by taxpayers filing manual (Ramayah, 2013).

An Online tax system speeds up tax assessment and service delivery in the Philippines as the waiting period for a taxpayer for information on his individual account was reduced from about four hours to only three minutes. It also makes a country's tax administration more effective, leading to significant increases of tax revenue collection as noted in the Philippines that there was an increase in real property tax of more than 80% after the introduction of iTax system in the province (Lucante et al., 2011). In 2015 Zimbabwe Revenue Authority introduced electronic tax administration system and despite the prevailing economic challenges, in the following financial year, Zimbabwe Revenue Authority experienced an increased tax base, compliance rate and serious enforcement by the revenue officers (Bonyongwe, 2016). In Tanzania there was increased collection of taxes from US\$25 per month in 2006 to US\$300 per month in 2017(Lucante et al., 2011).

According to Atika (2012), iTax system forms part of the revenue collection reforms by Kenya Revenue Authority whose main motive is enhancing tax collections and tax efficiency. The main object of the introduction of iTax system is to spearhead tax compliance. Tax compliance is the full payment of all taxes due (Braithwaite, 2009). Failure to remit taxes is always a major concern in all tax administration and if taxes are not remitted at all, it will result into a serious problem to the state revenue (Faa, 2008). According to the KRA Sixth Corporate Plan, Kenya Revenue Authority has a centralized Information Communication Technology department that provides support services in terms of electronic systems to the entire organization all these to try and achieve its goals for achieving increased revenue collection and facilitating voluntary compliance by tax payers.

Despite all these efforts, a few challenges still exist even though there is increased revenue collection in the country. According to the KRA Sixth Corporate plan, the revenue collections have increased from 1 trillion in 2013/2014 when the iTax system was launched to 1.21 trillion in financial year 2015/2016. However, Wasao (2014) argues that economic and finance experts claim that the increase may not be necessarily because of the introduction of the iTax system but other factors. Kenya is ranked among low compliance countries with the hard task of ensuring efficient and effective tax administration in order to ensure tax compliance, hence raising more revenue (IMF, 2015). This research was therefore motivated by the above background to conduct a study on the effect of the iTax system on value added tax compliance of small and medium enterprises in Eldoret town, Kenya.

## **1.2 Statement of the Problem**

Despite the increasing need to increase revenue collection and enforcement so as to provide public services, developing countries still face the challenges of low value added tax compliance and tax administration (ACCA, 2012). Value added tax compliance rates among Micro, Small and Medium sized establishment in Kenya are low at 47% (Malonza, 2014). This necessitated a study to find out the effect iTax system has on value added tax compliance and provide necessary recommendations to address any shortfalls in the system. If the low value added tax compliance rate is not addressed then the Country's public debt will continue to increase hence unsustainable development. Empirically, few studies exist on value added tax compliance among Small and Medium Enterprises, more so the effect of compliance costs on their value added tax compliance levels. Wasao (2014) researched on the effect of online tax system on tax compliance among small tax payers in Nairobi town. The researcher found that online system does affect tax compliance level. The researcher did not incorporate compliance costs which the current study sought to fill this gap in knowledge by investigating the effect of iTax system on value added tax compliance of small and medium enterprises in Eldoret town, Kenya.

## **1.3 Objective of the study**

The study was guided by both general objectives and specific objectives.

### **1.3.1 General objective**

The main objective of the study was to determine the effect of iTax system on value added tax compliance of small and medium enterprises in Eldoret town, Kenya.



### **1.3.2 Specific objectives of the study**

- i. To examine the effect of online tax filing on value added tax compliance of small and medium enterprises in Eldoret town, Kenya.
- ii. To assess the effect of tax remittance on value added tax compliance of small and medium enterprises in Eldoret town, Kenya.
- iii. To find out the effect of compliance cost on value added tax compliance of small and medium enterprises in Eldoret town, Kenya.
- iv. To determine the effect of online tax registration on value added tax compliance of small and medium enterprises in Eldoret town, Kenya.

### **1.4 Research Hypotheses**

This study was guided by the following research hypotheses

H<sub>0</sub>1: Online tax filling has no significant effect on value added tax compliance of small and medium enterprises in Eldoret town, Kenya.

H<sub>0</sub>2: Tax remittance has no significant effect on value added tax compliance of small and medium enterprises in Eldoret town, Kenya.

H<sub>0</sub>3: Compliance cost has no significant effect on value added tax compliance of small and medium enterprises in Eldoret town, Kenya.

H<sub>0</sub>4: Online tax registration has no significant effect on value added tax compliance of small and medium enterprises in Eldoret town, Kenya.

### **1.5 Significance of the Study**

The findings of this study will be of great help in policy formulation. It will assist policymakers such as Kenya revenue authority on how they can modernize the iTAX system so as to seal loopholes of tax evasion. It will also help Kenya revenue authority to custom design the iTAX system for ease of use by all value added small and medium enterprises. The research will contribute to the existing body of knowledge by providing insights on literature review and theoretical development and may form the basis for further research in the area of technology and value added tax compliance in Kenya.

### **1.6 Scope of the study**

The study focused on the effect of iTax system on value added tax compliance of small and medium enterprises in Eldoret central business district, Kenya. The study targeted 2670 Value Added Tax payers in Eldoret town, Northern Region domestic tax department. The indicators of iTax system were online tax filling, online tax remittance, compliance cost and online tax registration on value added tax compliance of small and medium enterprises in Eldoret, Kenya. 347 taxpayers registered under VAT act in Eldoret Town, north rift region were sampled out. The study was carried between July and August 2019.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents a snip preview of the theoretical frame work, review of literature on variables, empirical review, conceptual framework, critique of existing literature and knowledge gap.

#### **2.2 Theoretical Frame Work**

The following theories were written by various scholars on the employing of electronic tax systems in the world.

##### **2.2.1 The Technology Acceptance Model (TAM) Theory**

According to this theory developed by Davis and Venkatesh (1989) “when users are presented with a new technology; its perceived usefulness (PU) and perceived ease-of-use (PEOU) will influence their decisions on how and when they will use it.” PU refers to the degree to which a person believes that using a particular system would enhance his or her job performance while PEOU is the degree to which a person perceives a particular system would be free from effort. Therefore, user acceptance has been viewed as the pivotal factor in determining the success or failure of any information system project (Mogeni, 2012). This theory postulates that because new technologies such as personal computers are complex and an element of uncertainty exists in the minds of decision makers with respect to the successful adoption of them, people form attitudes and intentions toward trying to learn to use the new technology prior to initiating efforts directed at using them Bagozzi (2007).

According to Bagozzi (2007) attitudes towards usage and intentions to use may be ill-formed or lacking in conviction or else may occur only after preliminary strivings to learn to use the technology evolve. Thus, actual usage may not be a direct or immediate consequence of such attitudes and intentions. Brychan (2010) found out that Tornatzky and Klein developed the diffusion of innovation theory which relates to the perceived ease of use. They analyzed the adoption, finding that compatibility, relative advantage and complexity had the most significant relationships with adoption across a broad range of innovation types. Benbasat and Barki (2007) suggested that TAM "has diverted researchers' attention away from other important research issues and has created an illusion of progress in knowledge accumulation. Furthermore, the independent attempts by several researchers to expand TAM in order to adapt it to the constantly changing IT environments have led to a state of theoretical chaos and confusion.

### **2.2.2 Ability to Pay Theory**

This theory was developed by Smith and Pigou (1903) and postulates that 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.

However, according to Okiro (2015), some economists are not unanimous as to what should be the exact measure of a person's ability or faculty 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) (Smith and Pigou, 1903). The most popular and commonly accepted principle of equity or justice in taxation is that citizens of a country should pay taxes to the government in accordance with their ability to pay (Bacoum & Limerick, 2013). According to the ability to pay theory, taxpayer's fiscal burden should reflect his/her capacity to contribute to public spending (Grassi, 2015).

Income is usually considered to be the best measure for such capacity. According to Okiro (2015) when income is chosen as individuals' ability to pay indicator, personal and family circumstances of the taxpayer should be considered to reduce that net amount, since they constitute a limiting factor for the capacity of contributing to public expenditures. Some economists argued that property ownership is a very good basis of measuring one's ability to pay taxes.

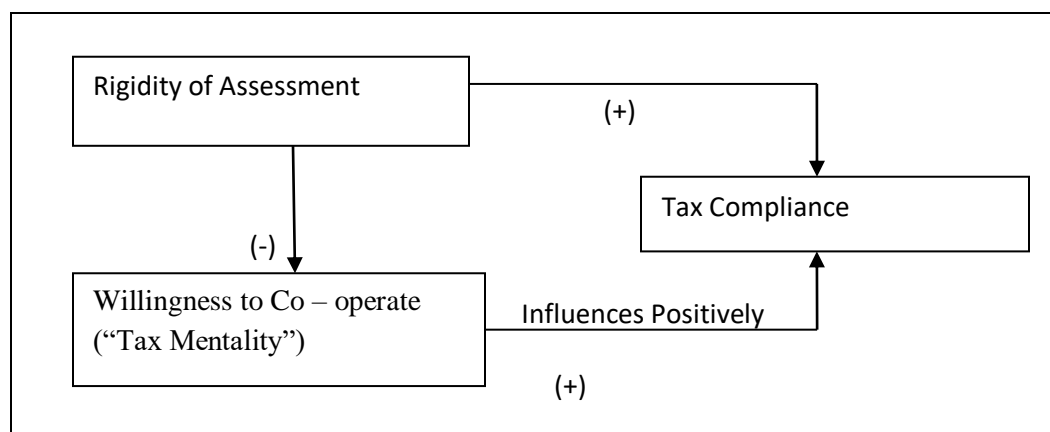
However, this idea is rightly rejected on the ground that if a person earns a large income but does not buy any property, he will then avoid taxation. Meanwhile, another person earning income who buys property will be subjected to paying taxes. Taxation on the basis of expenditure: other economists proposed that people should be judged on ability to pay taxes based on the expenditure they incur (Bacoumand & Limerick, 2013). The sad implication will be a person spending more on a large family than a counterpart with a small family will be paying large amount of taxes. Tax on basis of income earned: Most

economists argued that income should be the best basis of measuring one's ability to pay taxes.

This explains why the modern tax systems of the countries of the world use income as a measure of the ability to pay taxes (Wasao, 2014). This theory is relevant to this study as it helps explain tax compliance strategies among insurance companies as taxpayers

The above two theories were supported by the Strumpel's Model of Tax Compliance. The model was developed by Strumpel in 1969. This Model is based on two main elements, rigidity of assessment, and willingness to cooperate. Rigidity of assessment describes the level of confrontation between the tax authority and taxpayers, and is measured by the amount of tax and the level of fines, the assessment process and the level of "red tape" involved in engaging with the tax authority. This element captures aspects of tax enforcement that reflect a deterrence model of social control (Kinsey, 1992). The other element, willingness to cooperate, reflects individuals' attitudes and perceptions of the tax system.

Whilst Strumpel's Model assumes that willingness to cooperate is positively related to tax compliance behaviour, rigidity of assessment on the other hand is assumed to have two competing effects. The first is a direct positive effect on tax compliance, which as stated previously is influenced by the tax rate, the amount of fines and other economic variables. In contrast, the second effect exerts a negative influence through the intervening variable of willingness to cooperate, which involves the engagement process with the tax authority and other noneconomic variables. The model is presented in figure 2.1:



**Figure 2.1: Strumpel's Model of Tax Compliance (1969) (Reproduced from Hessing et al. (1988))**

This model is suitable for this study because the concept of tax mentality reflects an individual's willingness to co-operate with the tax authority (Strumpel's, 1969). Lewis (1979) attempts to develop measures of tax mentality led to the conclusion that tax mentality was based on individual's self-interest. Lewis (1982) further contends that attitudes are linked to behaviour, and that a positive attitude will result in increased compliance.

## **2.3 Empirical Review**

### **2.3.1 Effect of Online Tax Filing on Tax Compliance**

Online 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 (Wasao, 2014). Other scholars and researchers have looked on the relationship between electronic filing and other factors in taxation including efficiency, revenue collection, work load reduction and

tax compliance. For instance, Kuznetsova (2010) basing his study on the Diffusion of Innovations theory, Bass Diffusion Model and Service Process Analysis he discovered that the diffusion of e-return is dependent on such variables as perceived attributes of e-return system, interpersonal communication channels, performance of related services, and extent of Tax Administration's promotion efforts. E-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.

Azm and Kamarulzaman (2009) noted that tax e-filing is one of the e-government services that have been adopted by many developed countries today where the public has to discharge their responsibility to the government via online tax filing. Wamathu (2013) found that there has been timely filing of returns since inception of iTax system, there has been a reduction in audit period due to introduction of iTax system, respondents were quite knowledgeable, system failure when login were less, iTax system was user manual friendly, iTax system was reliable and that iTax system was user friendly. She recommended that there is need for the Kenya Revenue Authority to invest on technology in order to reduce the system failure as the study revealed that system failure affects system logins. System failure discourages use of technology.

Muita (2010) 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 better business environment are needed.



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.

Lubua (2014) showed how e-transparent services address the challenge of voluntary tax compliance by SMEs in the republic of Tanzania. The study observed the following factors to influence voluntary compliance: Awareness of tax laws, business experience, the integrity of employees, low frequency of visitation by tax officers and training needs. Recommendations read that the revenue authority must use relevant ICT tools to positively promote these factors; as the result, the position of taxpayers to voluntarily file their tax returns online will be enhanced.

According to the latest World Bank's 2015 Paying Taxes Survey revealed that the most common feature of tax reforms globally was the introduction of, or enhancement of electronic tax filing system. Such changes were implemented in 18 countries including Costa Rica, Cyprus, Mozambique, Spain, Vietnam, Serbia, and Zambia, amongst others. Businesses in these countries now file returns electronically thus spending less time on compliance. The system also increased transparency and limited the opportunity for corruption and bribery (World Bank, 2015).

### **2.3.2 Effect of Online Tax Remittance on Tax Compliance**

An online tax remittance is a platform provided to facilitate taxpayers paying their taxes electronically via the tax Authority website (Anuar, 2010). In Malaysia, e-bayaran an

online tax system was introduced by Inland Revenue Board Malaysia (IRBM) in 2007 to provide payment channel for taxpayers to pay their income taxes online. According to Anuar (2010) e-bayaran was meant to facilitate taxpayers to fulfill their tax obligation hassle free thus encouraging tax compliance and accordingly increase the tax collection amount. This electronic service was to provide simpler and faster taxation services and greater tax administrative efficiency. The acceptance rate of *e-Bayaransystem* in 2007 was at 9.08% which is still relatively low as compared to the payments made through two other banks.

According to Hung, Chang and Yu (2006) low acceptance rate is the dilemma that needs to be faced by any organizations that have invested millions of money in information systems. They found out that for example, Taiwanese government reported that the online tax filling and payment system acceptance rate was at 15.05% in 2003 and 21.06% in 2004 while in United States the acceptance rate was at 20.11% in 2003 and 22.16% in 2004. Low usage of *e-Bayaransystem* indicates that some taxpayers are not accepting the system (Anuar, 2010).

Ayodeji (2014) did a study on the impact of electronic tax systems on Tax Administration in Nigeria. The researcher found that through adoption of electronic tax systems technologies, tax administration was effective and concluded that online tax systems play an important role in the increase of internally generated revenue in Nigeria by ensuring tax compliance thereby boosting productivity and economic activities in the country. The study did not incorporate compliance costs as one of the explanatory variables which the current study seeks to incorporate.

Lerche, Kiefer, Seelmann and Lucante (2011) elucidate the benefits of a computerized integrated system. The benefits are better tax compliance and lower compliance cost, reduced administrative and collection costs, decreased need for personnel, time savings for tax payers, transparency in assessment, collection, and related processes. An Online tax system speeds up tax assessment and service delivery in the Philippines as the waiting period for a taxpayer for information on his individual account was reduced from about four hours to only three minutes. It also makes a country's tax administration more effective, leading to significant increases of tax revenue collection as noted in Tanzania where there was increased collection of taxes from 25 US dollars per month in 1996 to 300 US dollars per month in 2007 while in the Philippines/Province La Union: increase in real property tax of more than 80% after the introduction of iTax system in the province (Lerche et al., 2011).

Harold (2011) argues that computer-generated returns, transmitted electronically, generally are easier to process than paper returns; since the information on the forms doesn't have to be keyed in, number by number, by IRS staff into the Service's computers hence there is less chance of errors. With online tax payment system, taxpayers can complete forms and provide needed payment details online instead of sending them by mail or taking them to a tax office (Nasr, 2015). Ezomike (2016) revealed that tax authorities are using electronic systems to make tax processes easier, more accessible and more reliable for taxpayers. The latest World Bank's 2015 Paying Taxes Survey revealed that taxpayers are able to file tax returns electronically in about 45% of the countries that were surveyed. In 83% of the surveyed countries, taxpayers were able to complete at least one aspect of their tax compliance process electronically. In 2014, more than 24 countries

instituted reforms that made it easier or less costly for firms to file returns and pay taxes online (World Bank, 2015).

Folger (2014) found out that Electronic Federal Tax Payment System (EFTPS) provided by U.S. Department of the Treasury allows taxpayers to make tax payments either by telephone or online. The system is accessible every day of the week, 24 hours a day. It can be utilized by corporations or individuals seeking to make payments on personal income taxes. He revealed that taxpayers using EFTPS taxpayers enjoyed convenience, allowing easy making of payments around personal schedules and avoid having to make such payments in person or through the mail.

Efunboade (2014) argues that online tax payments enhance performance in revenue administrations by reducing human error and processing times, providing readily accessible data for tax officers, promoting voluntary compliance thereby minimizing tax evasion and facilitating better decision making by tax authorities. After the launch of online tax systems by South Africa Revenue Service, taxpayers are now able to electronically returns, make payments and enquire about their tax status online, while monitoring their accounts in real-time (Amuyunzu, 2013).

### **2.3.3 Effect of Compliance Cost on Tax Compliance**

Coolidge (2010) argued that compliance cost is expenditure of time or money in conforming to government requirement such as legislation or regulation. For example, people or organizations registered for value added tax have the extra burden of having to keep detailed records of all input tax and output tax to facilitate the completion of VAT

returns. Ojeka (2012) argued that high compliance costs can result in tax avoidance, tax fraud and inhibit investment by way of diminishing competitiveness of the country in terms of taxation attractiveness. This has placed more pressure upon small enterprises in developing countries (Kenya inclusive) to operate outside official reporting system (Kayaga, 2007). This ultimately reduced tax compliance levels in given taxpayers.

Hijattulah and Pope (2008) argue that there are several possible ways to interpret compliance costs. Firstly, compliance costs can be divided into three parts: time spent, cash expenses and psychological costs. The total time spent contains employee costs (in-house staff) and external costs (fees paid to outside accountants and other advisors). Hours by internal staff can be converted in expenses by means of an average hour rate. Taxation knowledge is necessary to increase public awareness especially in areas concerning taxation laws, the role of tax in national development, and especially to explain how and where the money collected is spent by the government (Mod, 2010) hence reducing the possibility of tax evasion. The psychological costs refer to the effects upon a taxpayer having to deal with tax affairs, for example mental stress. However, these costs are difficult to measure. Therefore, they are disregarded in most investigations. These compliance costs include costs that are incurred by a company, but are beyond the control of its management (Pope et al., 2008).

Coolidge (2010) further noted that compliance costs normally include all costs associated with obeying the law, including planning and administration, in addition to the direct time and money spent filing paperwork. Pope et al. (2008) further noted that another distinction can be made between internal and external costs. Internal costs are generated by the accounting and administration department of the company. Internal staff will

prepare all information and documents for the fiscal authorities and consult external advisors when necessary. External costs are generated by the services from lawyers, accountants and other advisors. These external costs are much easier to identify and to quantify. Internal costs are more difficult to quantify since it involves subjective estimations of the time spent on different tax activities. Some studies have revealed that in most companies the internal compliance costs are substantially more important than the external.

Olweny and Omondi (2011) investigated the effect of determinants of tax compliance on the firms listed at the Nairobi Securities Exchange, Kenya. The study focused on the effects of the determinants and compliance level at the NSE. It used monthly time series data for five years, a period from January 2008 to December 2013. They found that tax compliance cost, perceived opportunity for tax evasion etc. affect tax compliance level among firms. The study did not focus on the effect of online tax registration on value added tax compliance which the current study seeks to incorporate.

Coolidge (2010) found that businesses especially small enterprises often face heavy costs in the process of preparing, filing, and paying taxes in addition to the burden of tax payments. These compliance costs, added to fines, penalties, and the risks of inspections and demands for bribes, often deter business creation and growth in developing and transition countries. A tax compliance cost survey can provide useful information for the design of reforms to reduce compliance costs and risks for small businesses.

This note highlights key findings of tax compliance cost surveys conducted in South Africa, the Republic of Yemen, Ukraine and Peru that measured the burdens on business.

These surveys helped fine-tune the design of reforms to lower costs for businesses and improve their competitiveness. According to Mogeni (2012) complicated tax systems make it difficult and expensive for some taxpayers to comply with policies and procedures owing to the costs associated with record keeping and the need for specialized information to comply with complex tax laws. Finally, the general introduction of the VAT regime in almost all countries has raised interest in identifying and quantifying the impact of the new system on tax compliance costs (Evans, 2003).

Tax complexity and tax simplification are important topics of the debate about an efficient and cost-saving tax system (Marcuss, 2013). From a taxpayer perspective, complex rules result in tax compliance burdens, which reduce the economic resources of businesses and individual taxpayers without increasing the fiscal budget of the government. Furthermore, empirical evidence suggests that compliance burdens may negatively affect entrepreneurship and impair the overall compliance within a tax system (Alm, 2010). Taking into account the high complexity of tax regulations, it is no surprise that corresponding cost estimates are substantial. This is especially the case for small businesses with low information capacities and limited internal resources. The compliance burden of the smallest firm size category of Australian businesses is about 9 percent of sales revenue (Evans, Tran-Nam & Lignier, 2014).

#### **2.3.4 Effect of Online Taxpayer Registration on Tax Compliance**

Moyi and Ronge (2010) posits that online tax registration allows tax authorities to provide taxpayers with a uniform Tax Identification Number which will apply regardless of whether a tax payer is registering for Personal Tax, Corporate Tax or Value Added Tax. Simplify the tax code: Since income tax and value added tax rates are punitive and

lack in-built mechanisms that would enhance self-assessment, there is need to simplify tax laws, forms and procedures developing systems that can enhance access to third-party sources of information.

Kariuki (2013) notes that an electronic tax system enhances performance in revenue administration by providing electronic registration module, where taxpayers are able register to obtain taxpayer identification number online. Moyi and Ronge (2010) found that KRA still lacks adequate and frequently updated information systems on registered taxpayers and computerization of taxpayer records is still incomplete. They proposed that there is need to develop systems that can access third party sources of information, such as withholdings, bank transactions, foreign exchange transactions, transactions in securities and large transactions (involving real estate, cars, tax-deductible transactions, customs payments).

Musgrave (2013) notes that a registration module should be used to register companies and individuals based on unique identification numbers in developing countries. The registration module must be the first module in operation and taxpayer registration is the first process that should become operational. As explained, the gathering of data should be limited as much as possible and the update and verification of information must be possible from any module in the system. Multiple registrations are caused by negligence or by intent (Kariuki, 2013). In Tanzania, only 2% were registered as taxpayers under a taxpayer identification number in 2005. However, the number of actual and active income taxpayers is estimated at little over 300,000 in 2008 after the launch of online tax registration (Lucante et al., 2012).



According to KRA (2015) the iTax system started on a good note in as far as increasing tax compliance is concerned. There were 1.6 million users of the system with 200,000 signing up in May 2015. Online tax registration provides a firm foundation to probe non-compliant taxpayers through audit and exact penalties. However, as various empirical studies show, higher audit probabilities and fines do not unambiguously raise tax compliance (Kirchler, 2008). In fact, they sometimes undermine it. According to Seelkopf, Genschel and Brockmann (2015) in 2007, the United States Internal Revenue Service (IRS) introduced additional penalties for US citizens submitting incomplete tax returns ostensibly because the number of wrongful returns had been very high in the previous year. While understandable, the approach was unsuccessful. Allegedly, it resulted in a 22 % increase in tax fraud the following year (Brockmann et al., 2015).

Musgrave (2013) revealed that some taxes are related to thresholds or tax brackets, creating an incentive to minimize taxes by splitting some big businesses into several smaller units. Many tax authorities request that for motor vehicle registration the holder is registered under a PIN. This increases the number of registered persons tremendously and endangers the data quality, because the person concerned might register only with the intent of completing the motor vehicle registration and might register for another business separately with different data.

Mutua (2012) noted that negligence on taxpayer registration will create a lot of obstacles for accurate, usable data. The composition of names, consisting of first, middle and last name causes erroneous entries; missing birth dates make it difficult to differentiate between taxpayers with the same name. The goal of iTax system is the registration of all taxpayers in the national database and the issuing of a national PIN for everybody. In

2013 the Kenya Revenue Authority did a study to continue on the path towards financial administration excellence through surpassing set financial targets at least cost (KRA, 2013).

According to Waweru (2013) online tax registration enables taxpayer internet based PIN registration, returns filing and payment registration to allow for tax payments and status inquiries with real-time monitoring of accounts. Kun (2008) notes that for a long time, government services have been regarded as synonymous with bureaucracy in both developing and industrialized countries. ICT use has led to high level organizational growth (Suluo, 2013). In Tanzania for example, according to the TRA (2010), after the introduction of electronic tax systems with the most central being the Integrated Tax Administration System (ITAX) and Taxpayer Identification System (TIN), there are no more rooms full of clerks posting entries by hand in large ledger books as it used to be; instead there is a widespread use of computers to administer tax.

### **2.3.5 Tax compliance**

Ssetuba (2012) opines that tax compliance is the ability to pay taxes on time and timely reporting of the correct tax information. Other definitions of tax compliance concentrate on the accuracy of the information contained in the tax returns and the cost of making the tax returns. Auyat (2013) defines tax compliance as the supply of accurate and timely lodgment of income tax return together with the required payments whenever due. There are two types of tax compliance; voluntary and involuntary tax compliance (Mandola, 2013). The voluntary tax compliance requires no state enforcement for the taxpayers to comply with the tax requirements in contrast to the involuntary tax compliance (Hussein, 2010). Tax compliance is concerned on the timely and accurate submission of tax

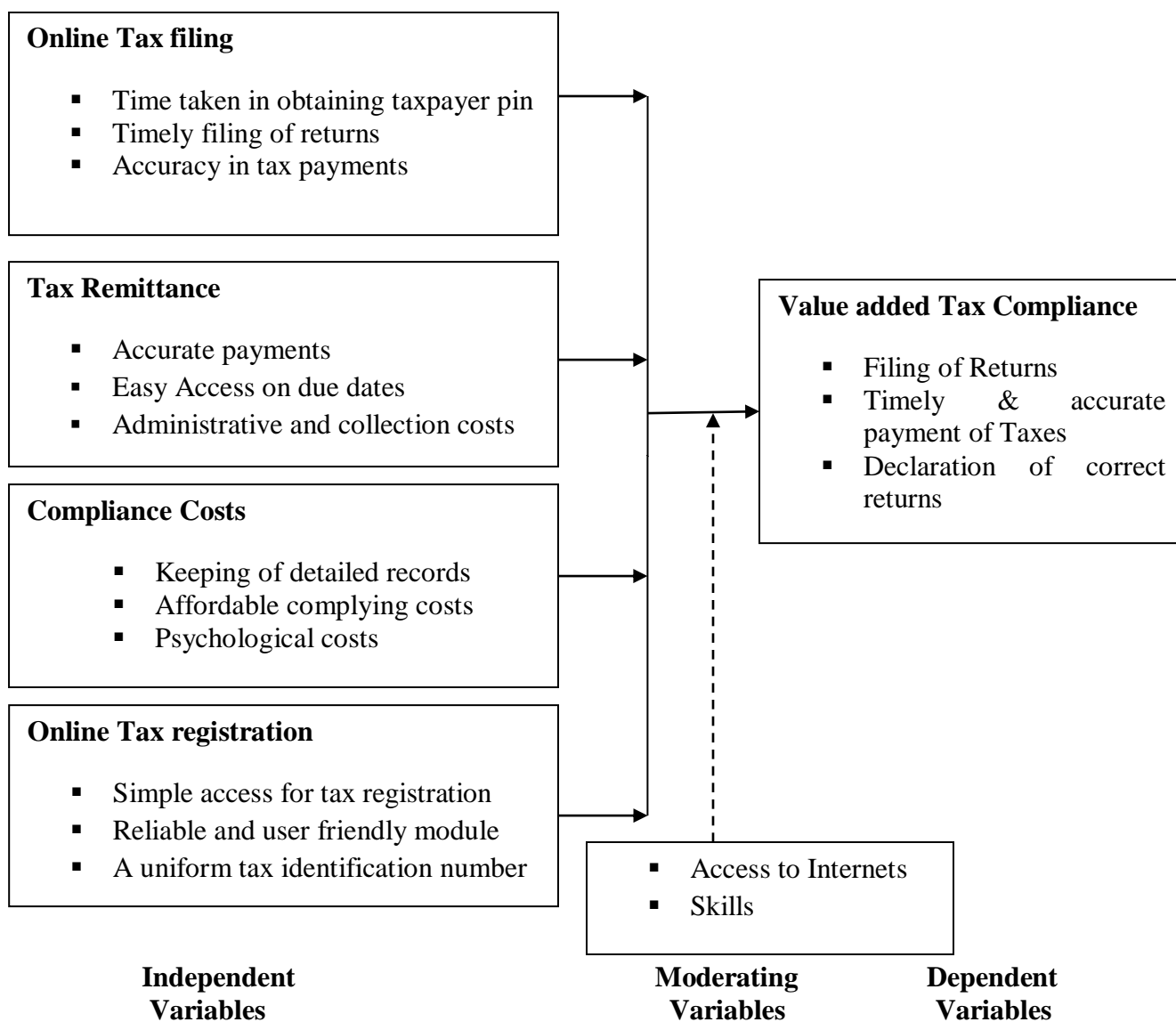
remittance information to the revenue authority. The online filing system has a direct impact on the tax compliance levels (Nakiwala, 2010). The online filing of the tax returns ensures that there is lack of inconsistencies, missing information and unintentional errors (Mandola, 2013). The online system ensures that the taxpayer has filled all the required mandatory fields before allowing him to proceed to the next level. This has the effect of ensuring that the revenue authority receives relatively high quality data compared to the manual returns of the data (Nakiwala, 2010).

Insurance Companies are faced with numerous challenges in the context of taxation. Odongo (2014) found tax compliance levels among the SMEs in Uganda to be very low. There are several factors that led to low tax compliance levels in Uganda including poor book keeping, low sales turn over, and frequent ownership changes of SMEs (Nakiwala, 2010). Other challenges include large proportion of SMEs who are ignorant of taxation processes and computations, and lack of comprehensive sensitization programs by the Uganda Revenue Authority (URA) (Odongo, 2014).

There are challenges associated with the tax compliance levels among the SMEs in Kenya due to the nature of the firms (Simiyu, 2013). The turnover tax in Kenya introduced through the Finance Act of 2007 specifically targets the SMEs especially those with less than 5 million annual gross incomes (Osebe, 2013). Some of the challenges facing the taxation of the SMEs in Kenya include the fact that small businesses are normally owned by the owners who are also in charge of the accounting book (Muhangi, 2012). There is thus less incentive to comply with tax requirements.

## 2.4 Conceptual Framework

The conceptual framework gives the relationship between independent and dependent variables of the study (Jabareen, 2008). The independent variables identified were online tax filing, tax remittance, compliance costs and online tax registration while tax compliance of SMEs in Eldoret town was the dependent variable. It was hypothesized that independent variable influenced the dependent variable.



**Figure 2.1 Conceptual Framework**  
**Source: Author, 2019**

The moderating variables considered in the study were access to internet and skills. Moderating variables are included in the study because they affect the relationship between the independent variable and a dependent variable i.e. iTAX system and value added tax compliance.

## **2.5 Critical Review**

Malonza (2014) revealed that use of iTax system led to enhanced compliance by medium corporate taxpayers in Kenya in a population of 1507 taxpayers using a sample of 75 medium taxpayers in Kenya. He found out that levels of tax compliance were very high but this was a result of ineffective research done on a small sample in a country of population of 40 Million people. Mahmud et al. (2010) explains that perceived ease of use and perceived usefulness, trust of the government, image, compatibility and service quality to be significant predictors of citizens' intention to use e-filing system. However, given all the above factors they did not reveal whether taxpayers' levels of e-filing increased as a result.

Makanga (2010) did a study on how technology such as iTax system would enhance tax compliance among large taxpayers with a turnover of kshs. 750 million and above, or government ministries and corporations. Regression analysis showed a strong positive relationship between technology and tax compliance. Clearly, the study focused on large taxpayers' category but not small taxpayers who form a huge chunk of taxpayers in Kenya.

Nawawi (2010) found out that necessary skills are required to fully a tax online system such as iTax system. However, the study never mentioned other important factors

imperative to usage of tax online system such as IT skills training to staff introduced by Revenue bodies like Kenya Revenue Authority lately (KRA, 2015). Amitabh (2009) revealed that for any online system to succeed whether Small, Medium or Large taxpayers' category there must be ease of use, innovativeness and accessibility. The study did not investigate how iTax system would influence on tax compliance on Small taxpayers if ease of use and accessibility are made available.

Wasao (2014) found out that an online tax system do affect tax compliance level among Small taxpayers in East of Nairobi as far as registration, filing and payments were concerned. However, he did not mention the category of Small taxpayers but only stated that further research needs to be done on Mines and mineral sector. Muturi (2015) revealed that an online tax system impacts on tax compliance levels in the study conducted by the researcher on the effects of the online tax system on tax compliance among Small taxpayers in Meru County. But he did not study explain comprehensively how given compliance costs; pertinent in research of tax compliance, would impact on value added tax compliance levels.

## **2.6 Knowledge Gap**

A multiple linear regression and correlation analysis revealed a strong linear relationship between online tax system and tax compliance on the study done by Muturi (2015) on Small taxpayers in Meru County. The research hypothesis only revolved around online tax registration, online tax filing and online tax remittances. This study hopes to add value to existing literature by providing empirical evidence on how an additional variable; compliance cost influenced value added tax compliance among Small Medium enterprises in Eldoret town.

On a related study on how registration, filing and payments affect tax compliance levels Wasao (2014) revealed that an increase in each of the above variables led to an increase in tax compliance levels on small taxpayers in East of Nairobi Tax District. Basically, there exists a research gap in studies combining the important variables pertinent to Small taxpayers complying with taxation. This study incorporated tax compliance costs to the other independent variables mentioned in the conceptual framework by providing empirical evidence on its effect on value added tax compliance among Small and Medium enterprises in Eldoret town.

Ojha, et al. (2009) found out that enhancing tax compliance depended on perceived ease of use of online tax system, personal innovativeness in information technology and performing of filing service. Clearly, this research focused on how tax filing influences compliance among young professionals. As defined above, tax compliance in wholesome includes compliance costs, online tax registration, online tax filing and online tax remittances. This study hopes to add value to existing literature by providing empirical evidence on how other important variables; compliance cost, online tax registration and online tax remittances influenced value added tax compliance of Small and Medium Enterprises in Eldoret town.

Gwaro (2016) found out that online tax filing had a greater influence on tax compliance of Small and Medium Enterprises in Nakuru District. The study recommends further research on other factors affecting tax compliance levels. Clearly a research gap exists which this current study therefore hopes to add value to the existing literature by providing empirical evidence on how iTax system influences tax compliance among

small taxpayers as far as online tax filing, compliance cost, online tax registration and online tax payments are concerned within Eldoret.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter discusses the research design to be used in conducting this research justifying by citing various authorities in the study. It indicated the population that was studied justifying whilst clearly showing its source before identifying an ideal sampling technique for the study. The chapter also included data collection instruments, data collection procedures, validity and reliability, data analysis and ethical considerations.

#### **3.2 Research Design**

Kothari (2010) opines that study design is a plan for collecting and utilizing data so that desired information can be obtained with sufficient precision or so that a hypothesis can be tested properly. This research used an explanatory research design for it allows for explanations of the nature of relationship to be sought between iTax system and value added tax compliance. Explanatory research is characterized by research hypotheses that specify the nature and direction of the relationships between or among variables being studied. The information collected from the responses was statistically presented in this type of research method for the easy interpretation of the report users.

#### **3.3 Target Population**

A study is basically contingent on a target population from which the dependable and trustworthy response for a particular study is received. The population of the study consisted of Small Taxpayers registered under Value Added Tax (VAT) in Eldoret Town domestic tax department which stands at 2670 taxpayers (KRA, 2018). 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 characterized by rapid business expansion, unstructured management hierarchy and poor record keeping, hence adopting iTax system may be a blessing in disguise to them.

**Table 3.1: Target Population**

S/No	Stratum	Population Size	Percentage
1.	Retail Trade	837	32%
2.	Wholesale Trade	144	5%
3.	Service Industry	1555	58%
4.	Production/Manufacturing Industry	134	5%
<b>Total</b>		<b>2670</b>	<b>100</b>

**Source: Ministry of Social Services, Eldoret County Office (2019)**

### 3.4 Sample size and Sampling Technique

The sample size for this research was obtained using the Yamane's (1967) formula for finite population:

$$n = N / (1 + N(e)^2) = 2670 / (1 + 2670(0.05)^2) = 347$$

The formula that was used to allocate the stratum samples is as follows;

$$n_h = n (N_h/N)$$

Where;

h = stratum number

$n_h$  = Sample size in stratum h.

$N_h$  = Population size in stratum h, where h= 1,2,3,4

N= Total Population size

n= Total sample size

The Sampling size is shown in Table 3.2.

**Table 3.2: Sampling size**

S/No	Stratum	Sample size	Percentage
1.	Retail Trade	109	32%
2.	Wholesale Trade	19	5%
3.	Service Industry	202	58%
4.	Production/Manufacturing Industry	17	5%
<b>TOTAL</b>		<b>347</b>	<b>100</b>

The stratas considered in the study are; retail trade, wholesale trade, service and the manufacturing industries. The choice of these sectors was due to the following observations made by (R.O.K., 2009). The actual enterprises for data collection was arrived at by using stratified random sampling from each stratum. The respondents were then selected from each stratum using simple random sampling technique.

### **3.5 Data Collection and Instruments**

The study used primary data which was collected using structured questionnaires. The researcher used questionnaires to collect data from the small and medium taxpayers based in Eldoret town. A questionnaire is a research tool that acquires data from a large sample (Kombo, 2007). The questionnaire is the most suitable research tool as it permits the researcher to gather information from a large sample with varied backgrounds; the findings continue to be highly confidential, save time and as they are offered in paper format there are fewer occasions for bias. The questionnaire has a demographic section A

that sought to ask on gender, age, level of education and level of experience. It then has section B, C, D and E on online tax filing, tax remittance, compliance cost and online tax registration respectively. The researcher personally visited the value added tax small taxpayers with the questions at their premises and administered the questionnaires which had a section for consent. The respondents answering questions in the questionnaire had been given a minimum of one day and a maximum of three days to respond to all the questions.

### **3.6 Validity and Reliability**

This section covers the validity and reliability of the research instruments.

#### **3.6.1 Validity**

To establish validity of the instruments, a pilot test was done on 34 of the VAT taxpayers at Kisumu Town. Saunders, Thornhill and Lewis (2009) posit that the purpose of the pilot survey is to refine the instruments so that the respondents do not have a problem in answering the questions and also provide for easy recording and analysis of data. Connelly (2008) argues that a pilot study sample should be 10% of the sample projected for the larger parent study. In this study the pilot study sample size was 10% of 347 registered value added tax payers within Eldoret. The results from the pilot test were not included in the final analysis. Consequently, their feedback was used to revise the instruments. This study adopted both content validity and construct validity.

Content validity addresses how well the items developed to operationalize a construct provide an adequate and representative sample of all the items that might measure the construct of interest (Mbwesa, 2006). Because there is no statistical test to determine

whether a measure adequately covers a content area or adequately represents a construct, content validity depended on the judgment of experts in the field, in this case my supervisors. Construct Validity is the experimental demonstration that a test is measuring the construct it claims to be measuring (Mbwesa, 2006). Factor analysis was performed to assess construct validity. If all the individual loadings are above the minimum of 0.5 recommended by Hair et al. (2007), then the instrument is good to be used.

### **3.6.2 Reliability**

Reliability is concerned with the extent to which a research instrument yields the same results (Mugenda & Mugenda, 2003). This study adopted internal consistency reliability since it is the most commonly used measure of reliability in applied settings. It also requires only one sample of data to estimate the internal consistency reliability (Kothari, 2004). This measure of reliability is described most often using Cronbach's alpha. It measures how consistently participants respond to one set of items. Sreevidya and Sunitha (2011) recommends that a Cronbach' alpha co-efficient of above or equal to 0.70 is sufficient for most cases to test reliability. This facilitated the removal of ambiguities, confusion and improve wording at the early stage and ensure that questions measures what it purports to measure.

### **3.7 Data Analysis**

This study used both descriptive and inferential statistics. Descriptive statistics provides the means and standard deviations of the scores relating to each of the variables used in the factor analysis. Inferential statistics, mainly Pearson correlation and Regression was used. The statistical package for social sciences (SPSS) software version (20) aided in data analysis. Pearson product moment correlation was used to assess whether there is a

significant association between tax compliance as the dependent variable as proxied by filing of returns, timely and accurate payment of taxes and declaration of correct returns and iTax system as proxied by (online tax filing, tax remittance, compliance cost and online tax registration) as the independent variable. Multiple linear Regression model was used to identify significant predictors of value added tax compliance indicators.  $P < 0.05$  was considered significant. The P values in the regression coefficient table were used to either accept or reject the null hypothesis; if it is more than 5% level of significance then the hypothesis was rejected, but if it is less than 5% level of significance the hypothesis was accepted. The regression model was as follows:

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

Where:

$y$  = value added tax compliance.

$\alpha$  = The value of Y when X is equal to zero. This is also called the “Y Intercept”.

$\beta$  = The change in Y for each 1 increment change in X. ( $X_1, X_2, X_3, X_4$ ) = an X score on independent variable for which the study is trying to predict a value of Y.

$e$  = Residual or error terms (represent by  $e$ ).

$X_1$  = Online tax filing

$X_2$  = Tax remittance

$X_3$  = Compliance cost

$X_4$  = Online tax registration

$e$  = error term,  $\alpha$  = intercept,  $\beta_1, \beta_2, \beta_3, \beta_4$  = coefficients of  $x_1, x_2, x_3, x_4$  respectively.

Several multiple regression assumptions were considered in this study. They include normality of residuals, auto correlation of residuals, linearity of residuals, multicollinearity and homoscedasticity. Linearity of residuals was tested using significance of deviations from linearity as captured on the ANOVA output table. If the significance of deviations from linearity is greater than 0.05, then linearity assumption is met (Lind, Marchal, & Wathen, 2012). In regards to normality of residuals, it implies that residuals are normally distributed. Kolmogorov – smirnov and Shapiro - wilk test was conducted. The former is suitable for large samples while the latter for small samples. A p - value greater than 0.05 means that the residuals are normally distributed (Lind, Marchal & Wathen, 2012).

No auto correlation among residuals refers to when successive residuals have no pattern and are not highly correlated. Long runs of negative or positive residuals should not exist (Saunders, Lewis, & Thornhill, 2009). The non-linearity auto correlation of residuals was tested using the Durbin-Watson's d tests (Kothari, 2004). The values of “d” lies between 0 and 4. If the value of “d” is equal to 2 then it means that there is no autocorrelation. The rule of thumb is that values of “d” should be less than less than 1.5 and not more than 2.5. If the value obeys the rule of thumb of  $1.5 < d < 2.5$  then it means that there is no auto-correlation in the data (Saunders et al., 2009).

Multicollinearity means absence of linear relationship among some or all the independent variables (Field, 2002). This assumption was verified using tolerance and variance inflation factor (VIF). Tolerance of 0.1 and variance inflation factor of greater than 10 was an indicator of serious Multicollinearity problems. Tolerance close to 1.0 indicates

that there is little Multicollinearity and tolerance close to zero means that Multicollinearity may be a threat (Williams, 2015).

Homoscedasticity assumption refers to when the variation in the residuals is similar for both small and large values of the predicted value of the dependent variable (Kothari, 2004). The assumption was tested using the scatter plot. The method for examining this assumption was statistical software scatter plots of residuals with independent variables whereby the plots that the researcher was interested in was at the top left and bottom left. The top left is the chart of residuals versus fitted values, while in the bottom left is standardized residuals of Y axis. When homoscedasticity assumption is met, the relationship being examined is the same for the entire range of dependent variable. Residuals were expected to form a pattern of less cloud of dots in a standardized scatter plot (Garson, 2012). Homoscedasticity assumption is met if the residuals do not fan out in a triangular fashion.

### **3.8 Ethical Considerations**

All ethical issues of research were upheld. According to Mugenda and Mugenda (2003) Respondents were informed the purpose of the study and their consent sought prior to their participation. The respondents appended their signatures on the questionnaire as a sign of acceptance to participate in the study. Adequate measures were taken to protect the confidentiality of respondents. The identities of the respondents was protected by using numbers. In addition, the researcher sought authorization letter from University of Eldoret to collect data for analysis. Further, research permit was sought from the National Commission for Science, Technology & Innovation. Upon receipt of the research permit



from NACOSTI the researcher proceeded with the data collection exercise. Ethics were upheld in the design and analysis of the data.

## CHAPTER FOUR

### RESULTS

#### 4.1 Response Rate

The study focused on Taxpayers registered under Value Added Tax in Eldoret Town domestic tax department. The study examined a total of 347 respondents, where 347 questionnaires were issued. Of the 347, 333 questionnaires were returned of which 39 were incomplete. This narrowed down to 294 completed questionnaires indicating a response rate of 84.7% as summarized in the table 4.1:

**Table 4.1: Response rate**

Questionnaire issued	Questionnaire returned	Incomplete Questionnaires	Complete Questionnaires	Response rate
347	333	39	294	84.7%

Primary data was collected through structured questionnaires of taxpayers registered under Value Added Tax in Eldoret Town domestic tax department. Additional information about the respondents is as elucidated below;

#### 4.2 Back Ground Information of the Respondents

The demographic information of the respondents are as presented in table 4.2. The demographic information focused mainly on the respondents' gender, age, highest level of education, period the business has been in existence and the sector the business belongs to. All respondents were willing to disclose their ages without problems. One's age is always related to experience and understanding of a given issues of interest.

Individuals of different age groups usually have different opinions of a given topic of study and this provides comprehensive data on the topic from all dimensions. From the findings, 8.8% (26) of the respondents were aged below 25 years, 25.5% (75) of them between 26 to 30 years, 27.6% (81) between 31 to 35, 18.0% (53) of them between 36 to 40 years, 12.6% (37) between 41 to 45, 5.1% (15) between 46 to 50 while 2.4% (7) of the respondents were above 51 years.

**Table 4.2: Demographic information**

<b>n = 294</b>		<b>Frequency</b>	<b>Percent</b>
Age	< 25	26	8.8
	26 – 30	75	25.5
	31 – 35	81	27.6
	36 – 40	53	18.0
	41- 45	37	12.6
	46 – 50	15	5.1
	> 50	7	2.4
	Total	294	100.0
Gender	Male	141	48.0
	Female	153	52.0
	Total	294	100.0
Highest education	Primary	18	6.1
	Secondary	84	28.6
	Diploma	47	16.0
	Bachelor	112	38.1
	Masters	26	8.8
	PhD	7	2.4
	Total	294	100.0
Period the business has been in existence	< 1	87	29.6
	1-5	93	31.6
	6 – 10	75	25.5
	11 – 15	29	9.9
	16 – 20	6	2.0
	> 21	4	1.4
	Total	294	100.0
Sector the business belongs to	wholesale and retail trade	95	32.3
	service related	83	28.2
	Hardware	51	17.3
	other type of business	65	22.1
	Total	294	100.0

This implies that majority of the respondents were aged between 31 to 35 years. In relation to gender, 153 (52.0%) of the total respondents were male while 141(48.0%) of them are female. From the study findings, male individuals comprise the majority. There was no problem in the statement of one's level of education therefore all respondents disclosed this vital information. One's level of education provides a good picture of how one understands the topic of study. Furthermore education level can provide a clue on how individuals are willing to contribute to the development of research knowledge on a given area. In a bid to establish the highest level of education, 18 (6.1%) of the respondents had primary education, 84 (28.6%) had secondary, 47 (16.0%) had diploma, 112 (38.1%) had a bachelors' degree while 7(2.4%) of them were PhD holders. Majority of the respondents had a bachelor' degree level of education.

In regards to the period the business has been in existence, 87 (29.6%) of the businesses had been in existence for less than one year, 93 (31.6%) between one to five years, 75 (25.5%) between six to ten years, 29 (9.9%) between eleven to 15 years, 6 (2.0%) between 16 to 20 years while 4 (1.4%) of the business had been in existence for over 21 years. This implies that majority of the small and medium enterprises had been in existence for a period of one to five years. The period the business has been in existence is important as it helps explain the respondent's knowledge on important issues of the business; in this case it helps explain value added tax compliance. Majority of the respondents businesses had been in existence for between one to five years. In regards to the sector the business belongs to, 95 (32.3%) of the small and medium enterprises belong to the wholesale and retail trade, 83 (28.2%) service related, 51(17.3%) had a hardware while 65 (22.1%) of them had othr type of business such as consultancy firms.

### 4.3: Descriptive Analysis for the study variables

This section presents the descriptive analysis of the study variables. Measures such as mean and standard deviations are used to explain the data.

#### 4.3.1 Value added tax compliance

This study sought to assess the tax compliance among the small and medium enterprises as a result of the introduction of the iTax system in Kenya as shown in Table 4.3:

#### 4.3 Value added Tax Compliance

<b>n = 294</b>		<b>VLE</b>	<b>LE</b>	<b>N</b>	<b>GE</b>	<b>VGE</b>	<b>Mean</b>	<b>Std. Deviation</b>
The smes' files their tax returns	F	43	42	71	103	35	3.1531	1.23944
	%	14.6	14.3	24.1	35.0	11.9		
Declaration of correct returns	F	17	60	70	89	58	3.3776	1.17872
	%	5.8	20.4	23.8	30.3	19.7		
Timely and accurate payment of taxes	F	23	35	72	99	65	3.5034	1.18508
	%	7.8	11.9	24.5	33.7	22.1		
Quality data on tax returns	F	27	28	71	102	66	3.5170	1.20212
	%	9.2	9.5	24.1	34.7	22.4		
Correct self-assessment of taxes owed.	F	23	25	66	104	76	3.6293	1.18089
	%	7.8	8.5	22.4	35.4	25.9		
<b>Composite Values</b>							<b>3.4361</b>	<b>1.19725</b>

In regards to filing of tax returns, 43 (14.6%) of the respondents acknowledged to a very low extent, 42(14.3%) of them to a low extent, 24.1% (71) were undecided, 103 (35.0%) great extent and 35 (11.9%) of them noted to a very great extent. The item realized a mean of 3.1531 implying that majority of the small and medium enterprises files their tax return which has influenced positively tax compliance with a variation in responses of 1.23944. Also, 17 (5.8%) acknowledged that declaration of correct returns had affected tax compliance to a very low extent, 60 (20.4%) of them opined to a low extent, 70

(23.8%) were undecided, 89 (30.3%) noted to a great extent while 58 (19.7%) revealed to a very great extent. The mean value was 3.3776 and the standard deviation was 1.17872.

In relation to timely and accurate payments of taxes, 23 (7.8%) revealed to a very low extent, 35 (11.9%) to a low extent, 72 (24.5%) were undecided, 99 (33.7%) acknowledged to a great extent while 65 (22.1%) of them confirmed to a very great extent. The item realized a mean of 3.5034 and a standard deviation of 1.18505 implying that timely and accurate payment of taxes has improved tax compliance to a great extent. 27(9.2%) noted that quality data on tax returns has influenced tax compliance to a very low extent, 28 (9.5%) to a low extent, 71 (24.1%) of the respondents were undecided, 102 (34.7%) of them to a great extent while 66 (22.4%) to a very great extent. The mean was 3.5170 and the standard deviation was 1.20212.

In regards to correct self-assessment of taxes owed, 23 (7.8%) of the respondents revealed to a very low extent, 25 (8.5%) acknowledged to a low extent, 66 (22.4%) were undecided, 104 (35.4%) noted that it had improved to a great extent while 76 (25.9%) of them revealed to a very great extent. The item realized a mean of 3.4361 and a standard deviation of 1.19725. The items of tax compliance in general realized a mean of 3.4361 implying that iTax system has influenced tax compliance of small and medium enterprises to a great extent.

### 4.3.2 Effect of online tax filing on value added tax compliance

The researcher sought to determine the extent to which online tax filing affects tax compliance. A five point likert scale was used ranging from very low extent to very great extent as shown in Table 4.4:

**Table 4.4: Online Tax Filing**

<b>n = 294</b>		<b>VLE</b>	<b>LE</b>	<b>N</b>	<b>GE</b>	<b>VGE</b>	<b>Mean</b>	<b>Std. Deviation</b>
Easy and simple filing of tax returns	F	62	39	53	86	54	3.1054	1.41389
	%	21.1	13.3	18.0	29.3	18.4		
Convenient filing of tax returns	F	28	59	67	82	58	3.2823	1.25512
	%	9.5	20.1	22.8	27.9	19.7		
Accuracy in tax payments	F	19	49	94	80	52	3.4456	1.90976
	%	6.5	16.7	32.0	27.2	17.7		
Shorter time in obtaining taxpayer pin	F	34	38	53	97	72	3.4592	1.30241
	%	11.6	12.9	18.0	33.0	24.5		
E filing for tax refunds	F	29	49	69	97	50	3.3061	1.21769
	%	9.9	16.7	23.5	33.0	17.0		
Reduces the time taken	F	34	45	47	87	81	3.4626	1.34379
	%	11.6	15.3	16.0	29.6	27.6		
Ease of processing tax payments	F	22	38	55	84	95	3.65931	1.25925
	%	7.5	12.9	18.7	28.6	32.3		
<b>Composite Values</b>							<b>3.38864</b>	<b>1.38598</b>

In regards to whether iTax system facilitates convenient filing of tax returns, 28 (9.5%) of the respondents revealed that to a very low extent, 59(20.1%) low extent, (67) 22.8% were undecided, 82 (27.9%) to a great extent while 58 (19.7%) to a very great extent. The mean realized was 3. 2823 and 1.25512 as the standard deviation as shown in Table 4.4: The study results were similar to the findings of Azm and Kamarulzaman (2009) that iTax system facilitates convenient filing of tax returns.

In a bid to establish the accuracy in tax payments as a result of matching of returns against filing requirements, 19 (6.5%) of the respondents noted to a very low extent, 49 (16.7%) to a low extent, 94 (32.0%) were undecided, 80 (27.2%) to a great extent and 52 (17.7%) to a very great extent. The mean and the standard deviation were 3.4456 and 1.90976 respectively implying that there was accuracy in tax payments but with a variation in responses to the magnitude of 1.90976. This study is in agreement with the findings of Muita (2010) that Itax system facilitates accuracy in tax payments.

In relation to whether there is shorter time in obtaining taxpayer pin as a result of tax payer internet based pin registration, 34 (11.6%) confirmed to a very low extent, 38 (12.9%) to a low extent, 53 (18.0%) were undecided, 97 (33.0%) to a great extent and 72 (24.5%) to a very great extent. The item realized a mean of 3.4592 and a standard deviation of 1.30241. The study results resembles the findings of Jones (2009) that iTAX system facilitates a shorter time in obtaining taxpayer pin as a result of tax payer internet based pin registration.

In regards to e filing for tax refunds, 29(9.9%) said that it has decreased to a very low extent, 49 (16.7%) to a low extent, 23.5% (69) were undecided, 97(33.0%) to a great extent while 50 (17.0%) to a very great extent. The mean realized was 3.3061 and 1.21769 as the standard deviation. This is similar to the findings of Lubua (2014) that iTAX system facilitates e-filing for tax refunds. Besides, 11.6% (34) of the respondents noted that iTax system reduces the time taken to process returns to a very low extent, 45(15.3%) to a low extent, 47 (16.0%) were undecided, 87(29.6%) to a great extent and 81 (27.6%) to a very great extent. The mean value and standard deviation was 3.4626 and



1.34379 respectively. The study is in agreement with the findings with Wamathu (2013) that iTax system reduces the time taken to process returns.

Furthermore, 22 (7.5%) of the respondents acknowledged that ease of processing tax payments and matching them against assessments affects tax compliance to a very low extent, 38 (12.9%) to a low extent, 55(18.7%) were undecided, 84 (28.6%) to a great extent and 95 (32.3%) to a very great extent. The item realized a mean of 3.65931 and a standard deviation of 1.25925. The study is in agreement with the findings of Kuznetsova (2010) that there is ease of processing tax payments and matching them against assessments affects tax compliance. In summary, online tax filing had a mean of 3.38864 and a standard deviation of 1.38598. The implication of this is that online tax filing positively influences tax compliance but with a variation in responses of 1.25925.

#### **4.3.3 Effect of tax remittance on value added tax compliance**

The study ascertained the extent to which online tax payments affects tax compliance as tabulated below: In regards to easy access on due dates, 54 (18.4%) of the respondents noted to a very low extent, 41 (13.9%) to a low extent, 72 (24.5%) were undecided, 81(27.6%) to a great extent and 46 (15.6%) to a very great extent. The mean was 3.0816 and 1.33225 as the standard deviation. The study agrees with the findings of Hung et al. (2006) that iTAX system facilitates easy access on due dates.

Also, 12 (4.1%) of the respondents noted that iTax system makes our business make tax payments with much ease to a very low extent, 56 (19.0%) to a low extent, 58 (19.7%) were undecided, 105 (35.7%) to a great extent and 63 (21.4%) to a very great extent. The mean of the item was 3.5136 and the standard deviation was 1.14398 implying iTax

system makes our business make tax payments with much ease. The study results are intandem with the findings of Anuar (2010) that the business makes tax payments with much ease.

In relation to whether server downtime is shorter in the process of making online tax payments, 17 (5.8%) confirmed to a very low extent, 54 (18.4%) to a low extent, 85 (28.9%) were undecided, 85 (28.9%) to a great extent while 53 (18.0%) to a very great extent. The item has a positive influence to tax compliance with a mean of 3.3503 and a standard deviation of 1.14319. The study result resembles the findings of Ayodeji (2014) that server downtime is shorter in the process of making online tax payments.

In a bid to establish whether the business makes accurate tax payments, 25 (8.5%) revealed to a very low extent, 29 (9.9%) to a low extent, 77 (26.2%) were undecided, 96 (32.7%) to a great extent while 67 (22.8%) to a very great extent. The mean of the item was 3.5136 and 1.19076 as the standard deviation. The study results resemble the findings of Lerche et al. (2011) that the business makes accurate tax payments.

In regards to whether there is reduction in administrative and collection costs as a result of adoption of iTax system, 20 (6.8) confirmed to a very low extent, 38 (12.9%) to a low extent, 77 (26.2%) were undecided, 95 (32.3%) to a great extent and 64 (21.8%) to a very great extent. The mean value was 3.4932 and 1.16474 as the standard deviation as shown in Table 4.5: The study is in agreement with the findings of Nasr (2015) that there is reduction in administrative and collection costs as a result of adoption of iTax system.

**Table 4.5: Tax Remittance**

<b>n = 294</b>		<b>VLE</b>	<b>LE</b>	<b>N</b>	<b>GE</b>	<b>VGE</b>	<b>Mean</b>	<b>Std. Deviation</b>
Easy access on due dates	F	54	41	72	81	46	3.0816	1.33225
	%	18.4	13.9	24.5	27.6	15.6		
Tax payments with much ease	F	12	56	58	105	63	3.5136	1.14398
	%	4.1	19.0	19.7	35.7	21.4		
Server downtime is shorter	F	17	54	85	85	53	3.3503	1.14319
	%	5.8	18.4	28.9	28.9	18.0		
The business makes accurate tax payments	F	25	29	77	96	67	3.5136	1.19076
	%	8.5	9.9	26.2	32.7	22.8		
Administrative and collection costs	F	20	38	77	95	64	3.4932	1.16474
	%	6.8	12.9	26.2	32.3	21.8		
Saves time	F	14	26	53	108	93	3.8163	1.11778
	%	4.8	8.8	18.0	36.7	31.6		
Transparency in assessment and collection of taxes.	F	25	82	69	61	107	3.6565	1.29886
	%	8.5	10.9	23.5	20.7	36.4		
<b>Composite Values</b>							<b>3.4893</b>	<b>1.19879</b>

Furthermore, 14 (4.8%) of the respondents confirmed that the business saves time as a result of online tax payments influences tax compliance to a very low extent, 26 (8.8%) to a low extent, 53 (18.0%) were undecided, 108 (36.7%) to a great extent and 93 (31.6%) to a very great extent. The item realized a mean of 3.8163 and a standard deviation of 1.11778 implying time saved as a result of online tax payments influences tax compliance. The study is agreement with the findings of Ezomike (2016) that the business saves time as a result of online tax payments. Besides, 25 (8.5%) of the respondents revealed that transparency in assessment and collection of taxes as a result of online tax payments influences tax compliance to a very low extent, 82 (10.95) to a low

extent, 69 (23.5%) were undecided, 61(20.7%) to a great extent and 107 (36.4%) to a very great extent. The mean was 3.6565 and the standard deviation as 1.29886. The study is in agreement with the findings of Folger (2014) that iTAX system facilitates transparency in assessment and collection of taxes as a result of online tax payments. Finally tax remittance recorded a mean of 3.4890 implying that it influences tax compliance but with a variation in responses of 1.19879.

#### **4.3.4 Effect of compliance costs on value added tax compliance**

Compliance costs were also assessed to determine its impact on tax compliance. In relation to keeping of detailed records of all input tax and output tax to facilitate the completion of VAT returns in a cheaper way, 67 (22.8%) acknowledged to a very low extent, 43 (14.6%) to a low extent, 53 (18.0%) were undecided, 77 (26.2%) to a great extent and 54 (18.4%) to a very great extent. The item realized a mean of 3.0272 and a standard deviation of 1.43551. This implies that iTAX system facilitates keeping of detailed records of all input tax and output tax to facilitate the completion of VAT returns in a cheaper way. This study findings are in agreement with the findings of Ojeka (2012) that iTAX system facilitates keeping of detailed records of all input tax and output tax to facilitate the completion of VAT returns in a cheaper way.

Also, in relation to whether the business incurs a hustle free process of taxpaying, 21(7.1%) of the respondents noted to a very low extent, 52 (17.7%) to a low extent, 84 (28.6%) were undecided, 92 (31.3) to a great extent and 45 (15.3%) to a very great extent. The mean of the item was 3.4150 and 1.91222 as the standard deviation. This study is in agreement with the findings of Kayaga (2007) that the business incurs a hustle free process of taxpaying.

**Table 4.6: Compliance Costs**

		VLE	LE	N	GE	VGE	Mean	Std. Deviation
Keeping of detailed records	F	67	43	53	77	54	3.0272	1.43551
	%	22.8	14.6	18.0	26.2	18.4		
Hustle free process of tax paying	F	21	52	84	92	45	3.4150	1.91222
	%	7.1	17.7	28.6	31.3	15.3		
Affordable compliance costs	F	23	30	86	101	54	3.4524	1.13708
	%	7.8	10.2	29.3	34.4	18.4		
The business incurs cost of hiring a tax agent	F	15	47	62	110	60	3.7158	2.61335
	%	5.1	16.0	21.1	37.4	20.4		
Psychological costs	F	17	56	73	99	99	3.3639	1.13891
	%	5.8	19.0	24.8	33.7	16.7		
Planning and administration costs	F	11	39	51	114	79	3.7177	1.11086
	%	3.7	13.3	17.3	38.8	26.9		
Industry specific compliance costs	F	33	26	63	80	92	3.5850	1.31333
	%	11.2	8.8	21.4	27.2	31.1		
Composite							3.4681	1.52303

Besides, 23 (7.8%) of the respondents acknowledged that affordable compliance costs incurred by the firm affects tax compliance to a very low extent, 30 (10.2%) to a low extent, 86 (29.3%) were undecided, 101 (34.4%) to a great extent and 54 (18.4%) to a very great extent. The mean realized was 3.4524 and the standard deviation was 1.13708. This implies that firms incur affordable compliance costs. The study results are similar to the findings of Hijattulah and Pope (2008) that the firm incurs affordable compliance costs.

Furthermore, 15 (5.1%) of the respondents confirmed that the act of the business incurring cost of hiring a tax agent affects tax compliance to a very low extent, 47

(16.0%) to a low extent, 62 (21.1%) were undecided, 110 (37.4%) to a great extent and 60 (20.4%) to a very great extent. The mean value was 3.7158 and the standard deviation was 2.61335. Additionally, in regards to psychological costs as a result of the tax payer having to deal with tax affairs, 17 (5.8%) of the respondents acknowledged very low extent, 56(19.0%) of them low extent, 73 (24.8%) undecided, 99 (33.7%) great extent while 99 (16.7%) very great extent. The mean value is 3.3639 and the standard deviation is 1.13891. This implies that businesses incur psychological costs as a result of the tax payer having to deal with tax affairs. The study results are similar to the findings of Coolidge (2010) that businesses incur psychological costs as a result of the tax payer having to deal with tax affairs.

Besides, in relation to whether the business incurs planning and administration costs, 11(3.7%) of the respondents very low extent, 39 (13.3%) of them low extent, 51(17.3%) were undecided, 114 (38.8%) great extent while 79 (26.9%) very great extent. The item realized a mean of 3.7177 and a standard deviation of 1.11086. The study results are similar to the findings of Olweny and Omondi (2011) that the business incurs planning and administration costs.

Also, in regards to industry specific compliance costs such as environmental assessments and human resources policies, 33 (11.2%) of the respondents very low extent, 26 (8.8%) low extent, 63 (21.4%) undecided, 80 ( 27.2%) great extent and 92 (31.1%) very great extent. The mean value was 3.5850 and the standard deviation was 1.31333 implying that industry specific compliance costs such as environmental assessments and human resources policies. The study results are similar to the findings of Mogeni (2012) that the

business incurs industry specific compliance costs such as environmental assessments and human resources policies. Overall, the mean and the standard deviation was 3.4681 and 1.52303 respectively implying that industry specific compliance costs influences tax compliance.

#### **4.3.5 Effect of online tax registration on value added tax compliance**

The study sought to determine the extent to which online tax registration affects tax compliance. In relation to simple access for tax registration, 64 (21.8%) of the respondents confirmed very low extent, 31 (10.5%) low extent, 68 (23.1%) were undecided, 71 (24.1%) great extent and 60 (20.4%) very great extent. The mean and the standard deviation 3.1088 and 1.42445 respectively. This implies that iTAX system provides a simple access for tax registration. The study findings are in agreement with the findings of Moyi and Ronge (2010) that iTAX system provides a simple access for tax registration.

Additionally, 25 (8.5%) of the respondents noted that online tax registration offers a secure module and it affects tax compliance to a very low extent, 44(15.0%) to a low extent, 65 (22.1%) were undecided, 81 (27.6%) great extent and 79(26.9%) to a very great extent. The mean and the standard deviation was 3.4932 and 1.26584 respectively. This implies that online tax registration offers a secure module. This study findings are in agreement with the findings of Kariuki (2013) that online tax registration offers a secure module. Furthermore, 8.2% (24) of the respondents acknowledged that iTax system offers a reliable and user friendly mode to a very low extent, 40 (13.6%) to a low extent, 68 (23.1%) were undecided, 105 (35.7%) to a great extent and 57 (19.4%) to a very great

extent. The item realized a mean of 3.4456 implying that a reliable and user friendly module influences tax compliance as shown in table 4.7:

**Table 4.7: Online Tax Registration**

		VLE	LE	N	GE	VGE	Mean	Std. Deviation
Simple access for tax registration	F	64	31	68	71	60	3.1088	1.42445
	%	21.8	10.5	23.1	24.1	20.4		
Online tax registration offers a secure module	F	25	44	65	81	79	3.4932	1.26584
	%	8.5	15.0	22.1	27.6	26.9		
iTax system offers a reliable and user friendly module	F	24	40	68	105	57	3.4456	1.18383
	%	8.2	13.6	23.1	35.7	19.4		
The iTax system provides a uniform tax identification number	F	13	45	72	107	57	3.5102	1.10146
	%	4.4	15.3	24.5	36.4	19.4		
Enhancement of self-identification assessment	F	15	27	72	117	63	3.6327	1.07457
	%	5.1	9.2	24.5	39.8	21.4		
iTax system simplifies the tax identification code	F	9	32	71	100	82	3.7279	1.07759
	%	3.1	10.9	24.1	34.0	27.9		
The business adoption of e registration module	F	13	12	50	105	114	4.0034	1.05965
	%	4.4	4.1	17.0	35.7	38.8		
Composite							3.5603	1.16963

Also, 13(4.4%) of the respondents noted that iTax system provides a uniform tax identification number which affects tax compliance to a very low extent, 45 (15.3%) to a low extent, 72 (24.5%) were undecided, 107 (36.4%) great extent and 57(19.4%) to a very great extent. The mean was 3.5102 and the standard deviation was 1.1014. This implies that iTax system provides a uniform tax identification number. The study agrees



with the findings of Musgrave (2013) that iTax system provides a uniform tax identification number.

Besides, 15(5.1%) of the respondents postulated that enhancement of self- identification assessment affects tax compliance to a very low extent, 27 (9.2%) low extent, 72 (24.5%) were undecided, 117 (39.8%) of them to a great extent and 63 (21.4%) to a very great extent. The item realized a mean of 3.6327 and a standard deviation of 1.07759. This implies that iTAX system enhances self-identification assessment. This study is in agreement with the findings of Kirchler (2008) that the iTAX system enhances self-identification assessment.

Furthermore, 9 (3.1%) of the respondents revealed that iTax system simplifies the tax identification code to a very low extent, 32 (10.9%) to a low extent, 71 (24.1%) undecided, 100 (34.0%) great extent and 82 (27.9%) to a very great extent. The item realized a mean of 3.7279 and a standard deviation of 1.07759. This implies that iTax system simplifies the tax identification code. The study findings are in agreement with the findings of Brockmann et al. (2015) that iTax system simplifies the tax identification code.

In a bid to establish whether the business adoption of e registration module affects tax compliance, 13 (4.4%) revealed to a very low extent, 12 (4.1%) to a low extent, 50 (17.0%) undecided, 105 (35.7%) to a great extent and 114 (38.8%) to a very great extent. The mean value was 4.0034 and the standard deviation was 1.05965. This implies that Mutua (2012) The study results resembles the findings of Mutua (2012) that the business adoption of e registration module affects tax compliance. The mean of the composite

online tax registration was 3.5603 implying that only tax registration affects tax compliance with a variance in responses of 1.16963.

#### **4.4 Factor Analysis of iTax system versus value added Tax Compliance**

Factor analysis was done on all main factors to describe variability among observed and correlated variables in terms of a potentially lower number of unobserved variables (Brockmann et al., 2015). Principal components analysis was used to reduce the number of components in each of the indicators of iTax system. The maximum likelihood estimation procedure was used to extract the factors from the variable data. Kaiser's rule was used to determine which factors were most eligible for interpretation because this rule requires that a given factor is capable of explaining at least the equivalent of one variable's variance. The relevant variables with the highest loading were retained. The variables retained were used to develop composite values which were used to develop regression model for analysis. This helped in achieving the research objectives and hypothesis. The result of the factor analysis is outlined below;

##### **4.4.1 Sampling Adequacy**

Joppe (2000) provides that the validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. Kaiser (1974) introduced a Measure of Sampling Adequacy (MSA) of factor analytic data matrices. This is just a function of the squared elements of the 'image' matrix compared to the squares of the original correlations. The overall MSA as well as estimates for each item are found. The index is known as the Kaiser-Meyer-Olkin (KMO) index. The results from Kaiser-Mayer-Olkin measures of sampling adequacy were found to be 0.820 which

is middling as per StataCorp (2013). The Bartlett's Test of Sphericity was found to be significant indicating that the sample is adequate for the research.

**Table 4.8: Kaiser-Mayer-Olkin measures of sampling adequacy**

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.820
Bartlett's Test of Sphericity	Approx. Chi-Square	2.970E3
	Df	528
	Sig.	.000

#### **4.4.2 Factor analysis on iTax System**

Four group-wise measures of iTax system consisting of seven measures in each group were used. These included online tax filing, tax remittance, compliance costs and online tax registration. Principal component analysis was done on each measure with a requested retention of several components in each and the results interpreted in the table 4.9: In Extraction Sums of Squared Loadings, the number of rows in this panel of the table corresponds to the number of factors retained while Rotation Sums of Squared Loadings values represent the distribution of the variance after the Varimax rotation.

Varimax rotation tries to maximize the variance of each of the factors, so the total amount of variance accounted for is redistributed over the extracted factors. The cumulative percent column under Rotation Sums of Squared Loadings contains the cumulative percentage of variance accounted for by the current and all preceding factors. For example, the fourth row shows a value of 38.355. This means that the first four factors together account for 38.355% of the total variance.

**Table 4.9: Total variance explained**

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Var.	Cum. %	Total	% of Var.	Cum%	Total	% of Var.	Cum. %
1	7.747	23.477	23.477	7.747	23.477	23.477	4.077	12.354	12.354
2	1.846	5.593	29.070	1.846	5.593	29.070	3.253	9.858	22.213
3	1.558	4.721	33.791	1.558	4.721	33.791	2.757	8.353	30.566
4	1.506	4.564	38.355	1.506	4.564	38.355	2.570	7.789	38.355
5	1.408	4.266	42.620						
6	1.350	4.090	46.710						
7	1.307	3.961	50.671						
8	1.219	3.693	54.364						
9	1.125	3.409	57.773						
10	1.069	3.238	61.012						
11	1.009	3.059	64.071						
12	.927	2.808	66.879						
13	.880	2.667	69.546						
14	.830	2.515	72.061						
15	.792	2.399	74.461						
16	.729	2.210	76.671						
17	.664	2.013	78.684						
18	.653	1.978	80.662						
19	.625	1.893	82.554						
20	.610	1.849	84.403						
21	.594	1.799	86.202						
22	.551	1.671	87.873						
23	.538	1.630	89.503						
24	.475	1.440	90.942						
25	.443	1.343	92.286						
26	.408	1.238	93.523						
27	.382	1.158	94.682						
28	.369	1.119	95.800						
29	.340	1.031	96.831						
30	.312	.945	97.777						
31	.287	.869	98.646						
32	.230	.698	99.343						
33	.217	.657	100.000						

Extraction Method: Principal Component Analysis.

Further, the rotated component matrix is as shown below;

#### 4.4.2.1 Rotated Component Analysis

In the rotated component analysis, the variables with higher factor loading were extracted in each construct of iTax system as shown in table 4.10.

**Table 4.10: Factor matrix on iTax System**

<b>Rotated Component Matrix<sup>a</sup></b>				
	<b>Component</b>			
	1	2	3	4
The smes' files their tax returns	.552			
Declaration of correct returns		.539		
Timely and accurate payment of taxes				
Quality data on tax returns		.694		
Correct self- assessment of taxes owed				
Easy and simple filing of tax returns	.585			
Convenient filing of tax returns	.574			
Accuracy in tax payments				.582
Shorter time in obtaining taxpayer pin		.566		
e filing for tax refunds				.545
Reduces the time taken to process returns				
Ease of processing tax payments			.709	
Easy access on due dates	.692			
Business makes tax payments with much ease	.646			
Server downtime is shorter				.593
The business makes accurate tax payments		.625		
Reduction in administrative and collection costs				.521
The business saves time as a result of online tax payments			.583	
Transparency in assessment				
Keeping of detailed records of all input tax and output tax	.721			
The business incurs a hustle free process of tax paying				.503
Your firm incurs affordable compliance costs			.536	
The business incurs cost of hiring a tax agent			.557	
Psychological costs			.515	
Planning and administrative costs				
Industry specific compliance costs		.616		
Simple access for tax registration	.685			
Online tax registration offers a secure module				
Offers a reliable and use friendly module		.540		
Provides a uniform tax identification number				.599
Enhancement of self- identification assessment			.568	
iTax system simplifies the tax identification code				
The business adoption of e registration module		.684		

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.  
 a. Rotation converged in 9 iterations.

These variables had values above 0.50 whereas those below this mark were dropped. Varimax with Kaiser Normalization was used as it simplifies the factors where it normalizes factor loadings before rotating them, and then de-normalizing them after rotation. This helps to increase the reliability and validity of the scale. The selected components were used to develop composite values which were used for further correlation and regression analysis:

#### **4.5 Data transformation**

Data transformation was achieved through retention of factors in each independent variable rotation matrix to obtain composite values in each category. These factors were indexed as per the loading where factors with higher loading were selected in each group online tax filing, tax remittance, compliance costs and online tax registration. The idea of data transformation is essential in achieving higher factors reliability and achieving normality for further data analysis. Data transformation was also done to increase the sensitivity of the statistical tests. Before transformation, the data was highly skewed but after transformation, normality was achieved. To achieve this, the factors with a loading of more than 0.5 for each of the variables were considered for transformation, after which, correlation and multiple regressions were carried out with the transformed data.

#### **4.6 Reliability Analysis for the Study Variables**

Confirmatory factor analysis was first conducted on the data to check reliability of the research instruments to ensure they were consistent with the study. The study established that the variables were highly consistent with study. The Cronbach coefficients alpha was

at 0.772 (77.2%) which was above the minimum required value of 0.7(70%). This ascertained that the research tools were reliable and hence further analysis could be done.

**Table 4.11: Reliability analysis of each variable**

<b>Item</b>	<b>Cronbach's alpha</b>	<b>No. of items</b>
Tax Compliance	.759	3
Online Tax Filing	.854	5
Tax Remittance	.748	6
Compliance Costs	.874	6
Online Tax Registration	.627	6
Composite	.772	26

#### **4.7 Descriptive statistics for composite variables**

From the rotated table, the variables (i.e. online tax filing, tax remittance, compliance costs and online tax registration) were transformed. The idea of the data transformation was to convert the data so that it could assume the normality and use parametric tests. To achieve this, the factors with a loading of more than 0.5 for each of the variables were considered for transformation. Descriptive statistics for the rotated composite variables was done with mean and standard deviation used to display the results as shown in the Table 4.12:

**Table 4.12: Descriptive statistics for the composite variables**

<b>n=294</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Deviation</b>
Tax Compliance	3.00	15.00	10.0476	2.63951
Tax Filing	5.00	24.00	16.3980	4.59575
Tax Remittance	8.00	30.00	21.1156	4.51999
Compliance Costs	8.00	30.00	21.4388	4.23717
Online Tax Registration	7.00	41.00	20.5204	4.75092

Compliance costs had the highest mean while tax compliance had the lowest mean represented by 21.4388 and 10.0476 respectively. Tax filing had a mean of 16.3980 while tax remittance and online tax registration had mean of 21.1156 and 20.5204 respectively.

#### 4.8 Correlation analysis of value added tax compliance versus iTax system

Correlation analysis of variable under study was conducted to establish where there was any significant relation between dependent and independent variables under study. The result of the analysis is tabulated in Table 4.13:

**Table 4.13: Correlations between tax compliance and iTax system**

		Correlations N=294				
		Compliance	Tax filing	Tax Remit	Compliance costs	Tax registration
Compliance	Pearson Correlation	1				
	Sig. (2-tailed)					
Tax filing	Pearson Correlation	.509*	1			
	Sig. (2-tailed)	.000				
Tax remittance	Pearson Correlation	.530*	.633**	1		
	Sig. (2-tailed)	.000	.000			
compliance costs	Pearson Correlation	.386**	.520**	.524**	1	
	Sig. (2-tailed)	.000	.000	.000		
Tax registration	Pearson Correlation	.245**	.500**	.392**	.369**	1
	Sig. (2-tailed)	.000	.000	.000	.000	

\*. Correlation is significant at the 0.05 level (2-tailed).  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).

Correlation is a powerful tool to measure presence of a relationship between two or more variables. It tries to establish whether there is positive or negative relationship between variable and using statistical correlation coefficient determine the strength of this



relationship. This was then tested for significance at 5%. Tax compliance was found to have some relationship with iTax system among small and medium enterprises. Tax filing and Tax remittance was found to have significant relationship with tax compliance with p value of 0.000 and 0.000 respectively at 5% level of significance. On the other hand compliance costs and online tax registration were found to have significant relationship with tax compliance among small and medium enterprises investigated with a p value of 0.000 and 0.000 respectively at 1% level of significance.

#### 4.9 Multiple regression analysis

Multiple regression analysis is a powerful technique used for predicting the unknown value of a variable from the known value of two or more variables- also called the predictors. In this case, multiple regression analysis will help predict tax compliance from online tax filing, tax remittance, compliance costs and online tax registration.

##### 4.9.1 Model summary

The results from multiple regression analysis are as displayed below;

**Table 4.14: Model Summary**

<b>Model Summary</b>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.581 <sup>a</sup>	.338	.329	2.16243	1.656

a. Predictors: (Constant), tax registration, compliance costs, Tax remittance, Tax filing  
b. Dependent Variable: Compliance

From the table above, the value of adjusted R-square is 0.329 which indicates that the model explains 32.9% of tax compliance from the predictor variables (i.e. online tax filing, tax remittance, compliance costs and online tax registration). The Durbin-Watson's

d tests the null hypothesis that the residuals are not linearly auto-correlated. The value of Durbin-Watson was at 1.656 which indicates no autocorrelation among the variables.

#### 4.9.2 Analysis of variance

Analysis of variance was employed to measure the differences in means between tax compliance and its predictor variables. The results are shown in the Table 4.15:

**Table 4.15: ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	689.940	4	172.485	36.886	.000 <sup>a</sup>
	Residual	1351.393	289	4.676		
	Total	2041.333	293			

a. Predictors: (Constant), tax registration, compliance costs, Tax remittance, Tax filing  
b. Dependent Variable: Compliance

The F-ratio was 36.886 at 4 degree of freedom which is the variable factor. This represented the effect size of the regression model and the model is significant at 95% confidence level ( $p=0.000$ ) indicating that tax compliance can be predicted from the aforementioned independent variables.

#### 4.9.3 Coefficient analysis

Coefficient analysis from multiple regression analysis are as shown below;

**Table 4.16: Coefficient analysis**

Model		Unstandardized	Standardized	Beta	T	Sig.
		Coefficients	Coefficients			
1	(Constant)	2.829	.772			
	Tax filing	.165	.039	.287	4.229	.000
	Tax remittance	.189	.038	.324	4.996	.000
	Compliance costs	.055	.037	.089	1.505	.033
	Tax registration	.333	.031	.059	1.053	.041

a. Dependent Variable: Compliance

As aforementioned, the model was found to be statistically significant. Further, the regression model can be outlined as follows;

$$\text{Tax Compliance} = (2.829) + X_1(.165) + X_2(.189) + X_3(.055) + X_4(.333) + .772$$

#### 4.10 Hypotheses Testing

The study was guided by four hypotheses which are discussed systematically below. The results are summarized in the table 4.17:

**Table 4.17: Summary of variables significance**

Hypotheses	Coefficient Result	P – value	Interpretation
HO <sub>1</sub> :Online tax filing has no significant effect on value added tax compliance	.165	.000	Significant effect
HO <sub>2</sub> :Tax remittance has no significant effect on value added tax compliance	.189	.000	Significant effect
HO <sub>3</sub> : Compliance costs has no significant effect on value added tax compliance	.055	.033	Significant effect
HO <sub>4</sub> :Online tax registration has no significant effect on value added tax compliance	.333	.041	Significant effect

Hypothesis 1 (H<sub>01</sub>) predicted that online tax filing has no significant effect on value added tax compliance. The results in table 4.17 indicate that online tax filing has significant effect on value added tax compliance  $p < 0.05$ . Thus we reject the null hypothesis that online tax filing has no significant effect on value added tax compliance.

Hypothesis 2 (H<sub>02</sub>) predicted that tax remittance has no significant effect on tax compliance. The results in table 4.17 indicate that tax remittance has a significant effect on value added tax compliance ( $p < 0.05$ ) implying that the null hypothesis is rejected and

the alternative hypothesis that tax remittance has a significant effect on value added tax compliance is accepted.

Hypothesis 3 (H<sub>03</sub>) predicted that compliance costs has no significant effect on tax compliance. Table 4.17 indicates that Compliance costs has a significant effect on tax compliance ( $p < 0.05$ ) implying that the null hypothesis is rejected that compliance costs has no significant effect on value added tax compliance. Hypothesis 4 (H<sub>04</sub>) predicted that online tax registration has no significant effect on value added tax compliance. The results in table 4.17 indicate that online tax registration has a significant effect on value added tax compliance ( $p < 0.05$ ) implying that the null hypothesis that online tax registration has no significant effect on value added tax compliance is rejected.

## **CHAPTER FIVE**

### **DISCUSSIONS**

#### **5.1 Introduction**

This section presents information on the discussions of the study variables as guided by the objectives of the study.

##### **5.1.1 Online tax filing and Tax compliance**

Under online tax filing, it was found that online tax filing had a positive significant effect on the tax compliance of small and medium enterprises. This implied that the more small and medium enterprises used online tax filing the greater the tax compliance. The reasons for improved tax compliance are; efficiency in revenue collection, work load reduction, timely filling, reporting of required tax information, correct self-assessment of taxes owed and the timely payment of those taxes without enforcement action. The study found similar results to Lubua (2014), Jones (2009) and Muita (2010) that online tax filing has a positive effect on tax compliance.

##### **5.1.2 Tax remittance and Tax compliance**

It was found that tax remittance had a positive significant effect on tax compliance. This implied that tax remittance via iTax system improves tax compliance. The reasons for improved tax compliance are; easy access on due dates, reduction in administrative and collection costs and transparency in assessment and collection of taxes as a result of online tax payments. The results were similar to the findings of Ayodeji (2014) that the adoption of electronic tax systems technologies, tax administration is effective and plays

an important role in the increase of internally generated revenue by ensuring tax compliance thereby boosting productivity and economic activities in the country.

The study further agrees with the findings of Lerche, Kiefer, Seelmann and Lucante (2011) that the benefits of a computerized integrated system are better tax compliance and lower compliance cost, reduced administrative and collection costs, decreased need for personnel, time savings for tax payers, transparency in assessment, collection, and related processes. An Online tax system speeds up tax assessment and service delivery as the waiting period for a taxpayer for information on his individual account is reduced from about four hours to only three minutes.

### **5.1.3 Compliance costs and Tax compliance**

On compliance costs, the study found that compliance costs affects tax compliance. The results of this current study were similar to the findings of Coolidge (2010) who found that businesses especially small enterprises often face heavy costs in the process of preparing, filing, and paying taxes in addition to the burden of tax payments. This compliance costs, adds to fines, penalties, and the risks of inspections and demands for bribes, often deter business creation and growth in developing and transition countries. This study further agrees with Mogeni (2012) that complicated tax systems makes it difficult and expensive for some taxpayers to comply with policies and procedures owing to the costs associated with record keeping and the need for specialized information to comply with complex tax laws. The study further is in tandem with the findings of Olweny and Omondi (2011) who investigated the effect of determinants of tax compliance on the firms listed at the Nairobi Securities Exchange, Kenya. They found

out that tax compliance cost, perceived opportunity for tax evasion etc. affect tax compliance level among firms.

#### **5.1.4: Online tax registration and Tax compliance**

On online tax registration, the study found that it influences tax compliance. The study findings are in agreement with the findings of Mutua (2012) who noted that negligence on taxpayer registration will create a lot of obstacles for accurate, usable data. The composition of names, consisting of first, middle and last name causes erroneous entries; missing birth dates make it difficult to differentiate between taxpayers with the same name. The study further agrees with Waweru (2013) that online tax registration enables taxpayer internet based PIN registration, returns filing and payment registration to allow for tax payments and status inquiries with real-time monitoring of accounts.

## CHAPTER SIX

### CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 Conclusions

From the results on online tax filing, the study concluded that it positively significantly affects value added tax compliance. Online tax filing eases and simplifies filing of tax returns, it facilitates convenient filing of tax returns, it ensures accuracy in tax payments as a result of matching of returns against filing requirements. There is shorter time in obtaining taxpayer pin as a result of taxpayer internet based pin registration and iTax system reduces the time taken to process returns.

On tax remittance, it was concluded that it positively significantly affects value added tax compliance. ITax system makes the business make tax payments with much ease. There is a reduction in administrative and collection costs as a result of adoption of iTax system. The business saves time as a result of online tax payments. There is transparency in assessment and collection of taxes as a result of online tax payments.

In regards to compliance costs, it is concluded that it positively significantly affects value added tax compliance. The keeping of detailed records of all input tax and output tax facilitates the completion of VAT returns. The firm incurs affordable compliance costs. Industry specific compliance costs such as environmental assessments and human resources policies affects tax compliance. Lastly on online tax registration it offers a secure module. ITax system offers a reliable and user friendly module and it simplifies the tax code. Corresponding cost estimates are substantial when tax regulations are



complex. This is especially the case for small businesses with low information capacities and limited internal resources.

## **6.2 Recommendations**

### **6.2.1 Policy Recommendations**

The study recommends that SMEs should file their taxes online as it positively influences value added tax compliance. It also eases and simplifies filing of tax returns, it facilitates convenient filing of tax returns, it ensures accuracy in tax payments as a result of matching of returns against filing requirements. It facilitates a shorter time in obtaining taxpayer pin as a result of taxpayer internet based pin registration and it reduces the time taken to process returns. Since compliance costs positively significantly affects value added tax compliance. The study recommends that SMEs should keep detailed records of all input tax and output tax that facilitates the completion of VAT returns. Also, in regards to online tax registration, the study found that it positively affects value added tax compliance; therefore the study recommends that SMEs should adopt online tax registration as it offers a secure module.

### **6.2.2 Recommendation for Further Research**

The study suggests that further research to be conducted on the effects of iTax system on value added tax compliance of small and medium enterprises using predictors of value added tax compliance other than online tax filing, tax remittance, compliance costs and online tax registration. This study focused on the effect of iTax system on value added tax compliance of smes' in Eldoret Town. It can be replicated with a larger sample. It is also recommended that this study be replicated on smes' in other towns in Kenya besides

Eldoret. Furthermore, it would be interesting to know whether the observed findings hold for smes' in other towns as well.

Major contextual and settings to be considered in future researches should consider insights from this study influencing value added tax compliance including online tax filing, tax remittance, compliance costs and online tax registration as playing an important role in influencing smes' value added tax compliance.

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## APPENDICES

### APPENDIX I: INFORMED CONSENT

Dear Respondent,

**RE: REQUEST FOR YOUR PARTICIPATION**

I am a student at University of Eldoret in the school of business and management sciences and I am conducting a research entitled **effect of iTAX system on value added Tax Compliance among of Small and Medium Enterprises in Eldoret Town, Kenya.**

The research is part of the fulfillment of my postgraduate course. This is to give you information in the hope that you will participate in the study for the research which is for academic purpose only. Participation in this study is entirely voluntary. The information you provide is confidential and your name will not be exposed anywhere. The Information you provide will be treated only as a source of background research, alongside books and other research carried earlier. There are no known or anticipated risks to you as a participant in this study. If you have any questions regarding this study or would like additional information please ask me before, during, or after the exercise.

Thank you for your assistance.

Yours faithfully,

George Lunani

## APPENDIX II: QUESTIONNAIRE FOR SME'S

### SECTION A: INTRODUCTION

I am a student at University of Eldoret in the school of business and management sciences and I am conducting a research entitled **effect of iTAX system on value added Tax Compliance among of Small and Medium Enterprises in Eldoret Town, Kenya.** The research is part of the fulfillment of my postgraduate course. This is to give you information in the hope that you will participate in the study for the research which is for academic purpose only. Participation in this study is entirely voluntary. The information you provide is confidential and your name will not be exposed anywhere. The Information you provide will be treated only as a source of background research, alongside books and other research carried earlier. Kindly append your signature as a sign of acceptance to freely participate in the study and subsequently indicate the date of receipt of the questionnaire. Participant' signature ..... Date .....

#### ✓ Tick as appropriate

1. Age bracket?

Below 25 [ ] 26-30 years [ ] 31-35 years [ ] 36-40 years [ ] 41-45 years [ ]  
46-50 years [ ] Over 50 [ ]

2. Gender? Male [ ] Female [ ]

3. Highest educational qualification attained?

Primary [ ] Secondary [ ] Diploma [ ] Bachelor [ ] Masters [ ] PhD [ ]

4. For how long has the business been in operation?

Less than a year [ ] 1-5 years [ ] 6-10 years [ ] 11-15 years [ ] 16-20 years [ ]  
Over 21 years [ ]

5. Which sector of the business do you belong to?

Wholesale and Retail Trade [ ] Service Related [ ] Hardware [ ] Other type of  
business [ ]

## SECTION B: Tax Compliance

On the five-point scale, rate your businesses' tax compliance on the following measurements indicating your position on the 5-point scale ranging from **1 = "Very low extent"** to **5 = "Very Great extent"**:

<b>B</b>	<b>Tax Compliance</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
B <sub>1</sub>	The SMEs' files their tax returns.					
B <sub>2</sub>	The business declares correct returns					
B <sub>3</sub>	The business makes timely and accurate payment of taxes					
B <sub>4</sub>	Quality data on tax returns.					
B <sub>5</sub>	Correct self- assessment of taxes owed.					

## SECTION C: Effect of Online Tax Filing on Tax Compliance

To what extend does online tax filing on tax compliance? Please rate your perceptions by indicating your position on the 5-point scale. **Very low extent= 1, Low extent=2, Neutral = 3, Great extent = 4, Very great extent = 5**

✓ **Tick as appropriate**

<b>C</b>	<b>Online Tax Filing</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
C1	The business files tax returns in an easy and simple manner					
C2	iTax system facilitates convenient filing of tax returns					
C3	There is accuracy in tax payments as a result of matching of returns against filing requirements.					
C4	The business a shorter time in obtaining taxpayer pin as a result of taxpayer internet based pin registration					
C5	The business files tax refunds using e-filing					
C6	iTax system reduces the time taken to process returns					
C7	The businesss incurs ease of processing tax payments and matching them against assessments.					

## SECTION D: Effect of Tax Remittance on Tax Compliance

To what extent does online tax payments affect tax compliance? Please rate your perceptions by indicating your position on the 5-point scale. **Very low extent= 1, Low extent=2, Neutral = 3, Great extent = 4, Very great extent = 5**

✓ **Tick as appropriate**

<b>D</b>	<b>Tax Remittance</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
D1	There is easy access on due dates					
D2	iTax system makes our business make tax payments with much ease.					
D3	Server downtime is shorter in the process of making online tax payments					
D4	The business makes accurate tax payments					
D5	There is a reduction in administrative and collection costs as a result of adoption of iTax system					
D6	The business saves time as a result of online tax payments					
D7	There is transparency in assessment and collection of taxes as a result of online tax payments					

### SECTION E. Effect of Compliance Costs on Tax Compliance

To what extent does compliance costs affect tax compliance? Please rate your perceptions by indicating your position on the 5-point scale.

**Very low extent= 1, Low extent=2, Neutral = 3, Great extent = 4, Very great extent = 5**

✓ **Tick as appropriate**

<b>E</b>	<b>Compliance Costs</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
E1	Keeping of detailed records of all input tax and output tax to facilitate the completion of VAT returns in a cheaper way.					
E2	The business incurs a hassle free process of taxpaying.					
E3	Your firm incurs affordable compliance costs.					
E4	The business incurs cost of hiring a tax agent.					
E5	Psychological costs as a result of the taxpayer having to deal with tax affairs.					
E6	The business incurs planning and administration costs.					
E7	Industry specific compliance costs such as environmental assessments and human resources policies.					

### SECTION F: Effect of Online Tax Registration on Tax Compliance

To what extent does online tax registration affect tax compliance? Please rate your perceptions by indicating your position on the 5-point scale.

**Very low extent= 1, Low extent=2, Neutral = 3, Great extent = 4, Very great extent = 5**

✓ **Tick as appropriate**

<b>F</b>	<b>Online Tax Registration</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
F1	Simple access for tax registration					
F2	Online tax registration offers a secure module.					
F3	iTax system offers a reliable and user friendly Module.					
F4	The iTax system provides a uniform tax identification number.					
F5	Enhancement of Self-identification Assessment					
F6	iTax system simplifies the tax identification code.					
F7	The business adoption of e- registration module.					

**Thank you for your cooperation**

## APPENDIX III : RESEARCH PERMIT



**NATIONAL COMMISSION FOR SCIENCE,  
TECHNOLOGY AND INNOVATION**

Telephone: +254-20-2213471,  
2241349,3310571,2219420  
Fax: +254-20-318245,318249  
Email: dg@nacosti.go.ke  
Website: www.nacosti.go.ke  
When replying please quote:

NACOSTI, Upper Kabete  
Off Waiyaki Way  
P.O. Box 30623/00100  
NAIROBI-KENYA

Ref No: **NACOSTI/P/18/10128/25181** Date: **31<sup>st</sup> October, 2018**

George Wamocha Lunani  
University of Eldoret  
P. O. Box 1125-30100  
**ELDORET.**

**RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "*Effect of Itax system on tax compliance of Small and Medium Enterprises in Eldoret Town, Kenya*" I am pleased to inform you that you have been authorized to undertake research in **Uasin Gishu County** for the period ending **29<sup>th</sup> October, 2019**.

You are advised to report to the **County Commissioner and the County Director of Education, Uasin Gishu County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

  
**BONIFACE WANYAMA**  
**FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner  
Uasin Gishu County.

The County Director of Education  
Uasin Gishu County.

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION P.O. BOX 30623/00100

# APPENDIX IV: SIMILARITY REPORT

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