

**‘THE EFFECT OF ELECTRONIC TAX REGISTER SYSTEM ON
THE DURATION OF VALUE ADDED TAX AUDIT IN KENYA’**

BY

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DECLARATION

This research project is my original work and has not been submitted for award of any degree in any other university.

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This research project has been submitted for examination with my approval as a University of Nairobi supervisor.

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DEDICATION

I would like to dedicate this to my dear family: my husband Moffat Kago and son Roy Mutugi who have been of great encouragement to me while undertaking my MBA course.

I also dedicate it to my friends Faith Mwangi and Betty Mukolwe who walked with me from the start to the end of the course.

Finally is to the tax students who would like to do further studies on the topic covered.

May the Lord bless you all.

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ABSTRACT

In the effort to reduce tax evasion, KRA introduced the use of the Electronic Tax Registers (ETRs) by traders. These devices have aided in many ways such as reduction of tax evasion and reduction of the time taken by auditors to assess the records maintained by traders in relation to VAT.

This study sought to assess the effect of the ETRs on the duration taken by KRA auditors to examine and assess the records maintained by the traders with an aim of detecting any tax evasion.

Primary data was used, which was collected through the use of questionnaires which were filled in by KRA ETR auditors. 40 respondents were selected using random sampling method. Frequency distribution tables, bar graphs and pie charts were used to present the data.

The results of the study were that the use of the ETRs has significantly reduced the duration taken by VAT auditors and the respondents recommended the continued use of the ETRs by the traders.

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CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND OF THE STUDY

This section presents a background on the concept of Value Added Tax (VAT) and the reforms that have taken place in Kenya with the introduction of the Electronic Tax Register (ETR) System whose aim, among other things, was to reduce tax audit duration and paperwork for taxpayers and tax auditors. The use of the fiscalised device ensures lesser paper work, accuracy of records and standardized records thus reducing the time taken to carry out VAT audit by KRA auditors. It continues to highlight on the parties who will benefit from this study.

Kenya's attempt to reform the tax system was initiated under the tax modernization program in 1980's with the aim of raising more revenue. Jenkins and Kou (2000) recommend that if governments of developing countries want to rely on VAT over time, they must move aggressively to broaden the base and enhance compliance as part of necessary reforms. From the Kenyan tax reform experience, it can be established that an essential precondition for the reform of tax administration is the simplifying of the tax system in order to ensure that it can be applied effectively in the generally low compliance contexts of developing economies. According to VAT Act part III, tax to be known as VAT, shall be charged in accordance with the provision of this Act on the supply of goods and services in Kenya and on importation of goods and services into Kenya. This implies that all services and goods provided in Kenya are vatatable excluding that which is specifically exempted by the third schedule.

In a move to enhance compliance, the Finance Bill, 2004 amended the VAT Act giving the Commissioner of VAT powers to require every person to use an ETR. Pursuant to this, ‘The VAT Act (ETR) Regulations, 2004’ were issued vide Notice No. 110 on 8th October 2004, which came into operation on 1st January 2005.

An ETR has been defined as an ordinary cash register modified to have security features that guarantee the trustworthiness of the fiscal memory. It has an embedded fiscal, write once, read only fiscal memory. The hardware is proven to comply with certain specifications and is therefore not easy to destroy or manipulate critical data. This data is well protected even in cases of power failure or malicious attempts (Kumar, 2005). This guarantees tax auditors reliable data when auditing the tax records maintained by businessmen. Tax audit duration is also shortened because there is less paperwork in form of sales invoices and other sales documents. Kumar, 2005 further describes ETR as a small device with undeletable and irremovable features, which can record, store and preserve all sales transactions conducted at the front office of an enterprise or through the cashier. The device is useful to traders for issuing sales receipts while at the same time keeping accurate sales records.

According to, Electronic Tax Register system at a glance Guidelines as at 14/07/2005, the records to be kept and produced to an authorized officer for audit under this regulation include: Copies of all invoices issued in serial number order; copies of all credit and debit notes issued, in chronological order; all purchase invoices; copies of customs entries, receipts for the payment of customs duty or tax, and credit and debit notes received, to be filed chronologically either by date of receipt or under each supplier's name; details of the amounts of tax charged on each supply made or received; a VAT account showing the

totals of the output tax and the input tax in each period and a net total of the tax payable or the excess tax carried forward, as the case may be, at the end of each period; details of goods manufactured and delivered from the factory of the taxable person; copies of all stock records kept periodically as the Commissioner may determine and details of each supply of goods and services from the business premises, unless such details are available at the time of supply on invoices issued at, or before, that time.

According to “The Value Added Tax Act (Electronic Tax Registers) Regulations, 2004”, a major reform area aimed at not only improving the operations of the trading community but also improves tax compliance, was the requirement that all VAT registered traders install and use the ETR. The ETR was not an entirely new idea as it had been implemented in other countries with significant success.

According to Electronic Tax Register system at a glance Guidelines, the aim of KRA’s installation of ETR was to avoid tax evasion (VAT) so as to increase government revenue by collecting as much taxes as possible from traders. The system was to replace the manual system which was slow and ineffective in processing the VAT returns.

1.2 PROBLEM STATEMENT

Over the last two decades, research on taxation has escalated especially in countries such as the United States, Australia, Netherlands and Sweden. Nevertheless, there are still some issues that are in need of further investigation. For example, research into the uncertainty effects of audits is continuing and clear-cut conclusions are not easy or indeed feasible (Hasseldine, 1995). Issues on the effectiveness of tax audit as well as on alternative sanction mechanisms used by the tax authorities in influencing taxpayer

reporting decisions still remain research problems till today (Jones & Pendlebury, 2000). In Kenya taxpayers exhibit varying levels of tax compliance.

Apart from unpublished study by Simiyu, 2003 whose objective was to identify factors influencing tax payers' voluntary compliance among local authorities, there is no evidence as to any other study that has been carried out to establish how taxpaying through introduction of ETR influence tax audit duration in Kenya. However, he did not attempt to cover the study of the use of ETR in Kenya, therefore there is need to find out whether the objective envisaged by KRA through the introduction of ETR of reducing the VAT audit duration has been achieved or not.

Osoro, 1995 did a study on the tax evasion in Tanzania where he stated that this was a virus that would wreck the National economy unless drastic measures were taken to patch existing loopholes. He also did not attempt to study on the effect of the use of the ETR system on the duration taken to audit VAT.

The study seeks to answer the question: What is the effect of the use of the ETR system on the duration of VAT audit in Kenya?

1.3 RESEARCH OBJECTIVE

The objective of this study is to assess the effect of ETR system on the duration of VAT audit.

1.4 SIGNIFICANCE OF THE STUDY

1.4.1 Kenya Revenue Authority

The study will help KRA, the Government and the tax auditors assess whether the ETR system has been effective in reducing tax audit period. KRA is the arm of government which collects tax after parliament has passed laws regarding taxation. It has therefore come up with mechanisms to enable it hit the set targets of the amount of revenue they are supposed to collect in a financial year. These mechanisms include the introduction of the ETR system to collect VAT, which has to be audited by the KRA auditors. This study will help KRA evaluate whether the use of the ETR system has assisted in reducing the time taken by the auditors in examining the records maintained by traders with respect to VAT.

1.4.2 Students of Taxation and Accounts and Contribution to existing literature on ETR

Taxation is an interesting area, which is of concern to every citizen. Both undergraduate and postgraduate students need to know the origin of taxation, its dynamics and future direction concerning enforcement. This will foster a better understanding of the topic and the urge to do more research.

1.4.3 The tax payer

The tax payer is the target of all tax measures. This research will evaluate the experience and attitudes of the taxpayers in implementing the ETR as directed by KRA. The taxpayers will appreciate and understand the purpose of the ETR in their businesses.

CHAPTER TWO: LITERERATURE REVIEW

2.1 INTRODUCTION

This chapter presents the review of literature on VAT and ETR system. It starts by reviewing the theories guiding the study and then the tax reforms that have taken place in Kenya and other countries with the aim of improving national income. It also touches on the role played by KRA in ensuring compliance with the set rules and regulations as stipulated in the VAT Act. The chapter also explains the impact of the use of ETR on the VAT audit duration and finally looks at the application of the ETR in other countries.

2.2 THEORETICAL REVIEW

2.2.1 Economic Theories

Economic theories of tax compliance are also referred to as deterrence theory. According to Trivedi and Shehata (2005), economic theories suggest that taxpayers “play the audit lottery”, i.e. they make calculations of the economic consequences of different compliant alternative, such as whether or not to evade tax; the probability of detection and consequences thereof, and choose the alternative which maximizes their expected after tax return/ profit. The theories suggest that taxpayers are moral utility maximizers hence; economic theories emphasize increased audits and penalties as a solution to compliance problems. Economic based studies suggest that tax payers’ behavior is influenced by economic motives such as profit maximization and probability of detection, business income, taxpayers operating in informal economy among many other factors (Trivedi & Shehata, 2005).

2.2.2 Prospect Theory

This theory explains how people evaluate risk and holds that people are risk averse in regards to gains but risk-seeking in regards to loss. Consequently, the manner in which a decision is framed will affect for a person's willingness to take risks. It also means that a tax payer will be more willing to take risks (not to comply) when the issue is framed as a loss (penalty from an audit) than as a gain (bonus from a refund), (Sridharan, 1999). Consequently, the manner in which information is communicated to a tax payer can have a major impact on his willingness to comply with the tax laws.

According to this theory, tax compliance should increase if paying taxes is seen as a gain not a loss. If a tax payer views his situation as interconnected with the nation's either because he or she is a collectivist and/or through identification with the nation, then taxpaying is more likely to be viewed as a gain than a loss (Rajararaman and Indira, 1995). One study suggests that if a tax payer views taxes as a national obligation, then after tax income is the tax payer's reference point and therefore: tax compliance decisions are made in the gain domain, which leads tax payers to pursue risk-averse behavior. On the other hand, if the tax payer considers paying taxes as loss, then his/her reference point would be their income before tax. In this case, the tax payer will be likely to engage in risk-seeking behavior.

2.3 TAX REFORMS

According to Smith, "The subject 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.

Governments use different kinds of taxes and vary the tax rates.” This is done to distribute the tax burden among individuals or classes of the population involved in taxable activities (Hunter, 2010). Governments collect tax revenue to enable them offer public goods and services in a consistent and sustainable manner.

Globally, the trend has been moving from direct taxation to indirect taxation. Apparently, indirect taxes are becoming more important as the burden of direct taxation fall. It is important to note that countries all over the world have reformed or are attempting to reform their tax system. This is after realizing that taxation is a sensitive instrument and if properly used, it can give handsome dividend. If resorted to indiscrimination, it can damage the very foundation of progress. According to Chad and Wolf (1973), a number of countries have made efforts to deal with weak tax administration as well as reduced tax evasion and avoidance. Chad and Wolf (1973), indicate that as in other economic policies where reforms have been successful, a number of common elements have been present and these include: a well thought program of action support for major policy makers and systematic implementation and monitoring aimed at broader and simpler tax basis on which lower rates are imposed. Procedural demands that complicated administration are minimized (Chad and Wolf, 1973).

According to Mwikali (2006), countries all over the world are reformed or are attempting to reform their tax systems with the main impetus being the increasing complexity of tax codes, narrow tax bases and concerns with horizontal equity. Like many developing countries, the Kenya tax system has undergone a number of changes. These changes are aimed at first ensuring that as many individuals as possible are brought into the tax net. Secondly, due to the changing aspects of the economy, the tax systems must be seen to

reflect those realities. Indeed, the most important motivation for the less developed countries tax reform is the need to raise more revenue. It is necessary that there be quantitative measure to evaluate success in stimulating public resources through tax policy. One such measure is the responsiveness of tax revenue structure to national income. Mwikali, (2006), quoting Kusi, (1998) says that the response of revenue to national income is known as productivity of tax system, which traditionally was measured using buoyancy and elasticity.

2.4 ROLE OF KRA

The KRA collects revenue on behalf of the government by way of taxes, duties, levies, fees and charges. Taxes are classified in the following categories: Income tax, Value added tax, Corporation tax, Customs duties and other duties on import and export goods, Excise tax, General sales tax, National stamp duties, Taxes from the national lottery and schemes of a similar nature, Taxes on transport by road, air and water, Rents from houses and other property owned by the national government, Fees for licenses issued by the national government, Court fees, fines and forfeitures, Exchange reports, Motor vehicle registration fees and driving license fees, Fees for national government goods and services and any other taxes authorized by national legislation(KRA website). After the taxes are collected, KRA sends its appointed auditors to examine the records maintained by the traders and agents to come up with an opinion whether proper records have been maintained or not (Jones, 2000)

In the case of income taxed before receipt, the principle of taxation at the source is thus where a `person is in receipt of income which is paid to him regularly by other persons, it's possible to collect the tax upon such income from the person by whom it is paid

(allowing him to deduct an equivalent amount figure due to the PAYE instead of levying it upon the ultimate taxpayer direct). It has been found that this system has three advantages of being cheap, easy and conclusive to the prevention of tax evasion, since as a general rule, the person making the payment has no inducement to evade collection of tax and the recipient has no opportunity to do so (Newport, 1936).

KRA has therefore come up with mechanisms to curb tax evasion especially the Value Added Taxes levied on vatable goods and services (The Weekly Review No. 1186, April 3, 1998, pp 16-18). This has been done through the introduction of the ETRs which should be used by business people in keeping record of their daily sales thus making it easy for KRA to know the amount of VAT such businesses have collected from their sales. ([KRA](#) website).

Kenya like most developing countries has had to contend with the common problems that plague tax systems of developing countries (Karingi Wanjala, 2005). Over the years, individuals and organizations responsible for the payment of such taxes have tried to evade and avoid tax payment thus making the government lose a lot of its revenue. As per the rules governing tax payment, tax avoidance is allowed but tax evasion is illegal and individuals and firms evading taxes risk heavy fines and penalties by the KRA. For this reason, the KRA asked the continent's revenue agencies to be cautious with large businesses that use complex tax avoidance and evasion schemes. KRA Commissioner General said this category of tax payers is a significant contributor of government revenue and therefore needs to be handled well and monitored closely. He said these tax payers wield considerable political and economic influence in their home countries and

hire specialized tax planners, legal advisers and expert audit services. (Daily Nation newspaper, Smart Company Magazine, 22nd February 2011, page 4)

Tax evasion exists and it's a big problem in the country's tax system. To cite an example, on 25th December 1991 a Dar-es-Saalam based company was discovered to have evaded taxes amounting to Ts 85 million within a period of two years two years. The firm was also a clearing and forwarding company (Osoro, 2005).

2.5 THE VAT LAW

According to Simiyu, 2003, the basic law is contained in the Value Added Tax Act, Cap. 476 of the laws of Kenya and the regulations stemming from it. Alan, 2010 states that registered persons should submit a return to the KRA, showing the input tax for the period covered by the return. Any excess of output tax over input tax is payable to KRA, whilst any excess of input tax is repayable by KRA. A registered person making supplies which are wholly or mainly zero rated will be entitled to a VAT repayment in most tax periods. Such a person may opt to submit VAT returns monthly rather than quarterly, so speeding up tax repayments at the expense of making twelve returns per year rather than four.

Simiyu, 2003, states that once a person is registered he is required to charge, collect and account for VAT on all his taxable operations and remit the tax to the Commissioner. All registered persons are legally bound to submit monthly returns (VAT 3's) containing details of tax on goods charged to their customers and tax suffered on goods and services charged by their suppliers.

Melville, 2010 says that if a taxable person makes a taxable supply to another taxable person, a tax invoice must be issued. The purpose of the invoice is to provide documentary evidence of the transaction so allowing the person receiving the supply to reclaim the input tax related to that supply.

2.6 VAT AUDIT

According to the VAT Act, the Kenya Government has in the recent few years shifted emphasis of taxation from direct to indirect taxation. VAT has therefore, grown to be one of the major revenue earners for the government. During the same period the KRA has also embarked on extensive audit procedures for taxpayers as part of their tax modernization programmes whose emphasis has again been shifted to VAT. Unlike Income Tax audits where they usually audit two consecutive years and then may give you a breather for three to four years, VAT audits are done on a continuous basis. The subsequent audit will therefore pick up from where the previous audit ended.

The audit will usually focus on compliance with VAT laws and regulations and therefore do assessment of VAT not correctly charged, disallowance of input tax incorrectly claimed, identification of other offenses and errors, levying of penalties and interest for the defaults and errors and finally educating taxpayers thereby ensuring better compliance in future. (Operations of VAT in Kenya at a glance, 2002)

According to RSM Ashvir, 2002 whilst most taxpayers will be subjected to annual or bi-annual VAT audits circumstances such as audit of related companies, sales in accounts different from VAT 3 figures, imported goods figures not tallying with customs records, persistent refunds for non-export entities, information from competitors and employees,

persistent late submission of returns and transactions requiring PIN can trigger an audit as well. (Operations of VAT in Kenya at a glance, 2002)

The process of tax audit can take several weeks and can be so cumbersome sometimes especially if it is a comprehensive audit that is being carried out. In such situations where the process is comprehensive, several records are usually reviewed and all the transaction processes checked. This is normally done to ascertain where a particular mistake or error is emanating from. During this process, inspectors go through records such as sales tax returns, worksheets and cancelled checks, income tax returns, bank statements, sales invoices, exemption documents that support items or services that are non taxable. Other records that are verified include general journal and general ledger.

(<http://www.zuuply.com>)

ETRs eliminate deliberate failure to charge VAT on sales by traders who openly ask purchasers whether they wish to pay tax or not. They also deter businessmen from keeping various sets of records some of which are excluded from tax declaration and manipulation of records for purposes of supporting tax payable. Fiscalisation will authenticate documents used in tax declaration and other purposes ([KRA website](#)).

Many countries today have special laws in place that make it obligatory for anyone who is selling goods or services to consumers to use approved by the tax authorities cash registers that have special security features that enable the authorities to check in a reliable manner.

The business organizations mostly involved in tax audit are the service based businesses where there is provision for various kinds of tax on every transaction carried out with a

customer. Some of the taxes that customers are usually charged for include VAT and several other consumer based taxes that customers or the end consumers of that service are required to pay. It is normally expected that businesses or vendors of such services will keep a good record of all transactions carried out especially those involving tax collections and remittances. This is what the tax auditor from revenue authority look out for when they carry out their routine investigations (Yoshimi, 2003).

According to Jones, 2000, the documentation and book keeping of tax records can sometimes be very voluminous and complex, but it can be made to be very easy to understand. Once the right book keeping protocols are used and the specifications of record types are adhered to as stated by Internal Revenue Service Guidelines and protocols, everything becomes easy. It is also made to be so simple that even people with college level literacy that are finance or accounting professionals can easily read and understand what is stated in the record books. Some of these records are actually automated especially for big organizations. This makes the whole task very simple.

2.7 EMPIRICAL STUDIES ON ETR AND VAT AUDIT DURATION

Melville, 2010 defines VAT as an indirect tax which is charged on the supply of a wide variety of goods and services. According to him, the basic principle of VAT is that tax should be charged at each stage of the production and distribution process but that the total tax due should be borne by the final consumer of the product.

Traders who are registered for VAT are required to charge VAT on their sales and must account for this output tax, but such traders are allowed to recover the input tax which

they pay to their suppliers, so that in effect, registered traders suffer no VAT and the total VAT is borne by the consumer at the end of the distribution chain (Melville, 2010).

Simiyu, 2000 defines VAT as a tax on consumer expenditure introduced in Kenya in 1990 in replacement of Sales Tax, which had been in operation since 1973. It was introduced as a measure to increase Government revenue through the expansion of the tax base which hitherto was confined to income tax, and the sale of goods at manufacturing and at importation level under the Sales Tax system. VAT is levied on consumption of taxable goods and services supplied in Kenya or imported into Kenya. It is collected at designated points by registered persons who then remit to the Commissioner of VAT.

ETR is a Cash Register with embedded fiscal memory. According to Price Waterhouse Coopers, 2005, ETRs were introduced in June 2004 to ensure that sales were properly recorded by registered tax payers in the country and thus leading to shorter audit periods for the tax auditors. These devices are used to record sales and therefore store tax information at the time of sale. They are therefore official accounting books that tax auditors lay trust on because they offer more reliable trade statistics. Audits are therefore easy to automate hence shorter audit periods. They also offer increased integrity in field audit exercise hence less disputes between KRA and traders. Availability of audit trails further clarifies scenarios of tax evasions. They also assist in ending diversion of fuel/oil in the country ([KRA website](#)).

According to Melville, 2010, VAT is chargeable when a taxable supply of goods or services is made by a taxable person in the course of business. The term 'person' can

refer to an individual, partnership or company, as well as to any other body which supplies goods or services in the course of business.

2.8 APPLICATION OF ETR IN OTHER COUNTRIES

In his study, Osoro, 1995 stated that tax evasion was a virus that would wreck the National economy unless drastic measures were taken to patch existing loopholes” (Osoro, 1995). Tanzania did not implement a fiscal system of Tax Registers but of Cash Registers which are non-fiscal, since July 2002. These were to be used by VAT registered tax payers to process their VAT returns as required by the Tanzanian law. A presentation to a VAT conference in Tanzania established that in the first year of introduction of ETRs, Tanzania’s estimated revenue increased by 19% in the first year but decreased to 13% in the second year. This was due to: resistance from the business community, credibility of the scheme as loopholes that were experienced earlier on still existed, expensive goods sold at retail level that required proper receipts /tax invoices, expensive machines among other reasons. Successful countries are Argentina, Brazil, Cyprus, Czechoslovakia, Greece, Italy, Kenya, Poland, Serbia, Turkey and Yugoslavia

In the UK, there is no general statutory provision designed to counter the avoidance of tax. Instead the Tax Act contains a number of individual anti avoidance provisions. Many of these provisions are aimed at preventing the treatment of income as capital gains. In the case of commission to deduct tax under rule 21 of income tax, where there’s a duty to deduct and account for the tax, both payer and recipient are liable to be charged in respect of the payment on question, although tax will not, of course, actually be recovered from both. (Brierley, 1983)

In the 2010 Zimbabwe National Budget statement announced by the Minister of Finance on 2nd December 2009, it stated that all operators required to register for Value Added Tax will be obliged to use an ETR to record VAT collected from every transaction processed. This came into effect from 1st October 2010 according to Zimbabwe Revenue Authority (ZIMRA). According to the Minister, he stated that the ETR has been successfully practiced in Kenya and therefore felt that it would benefit their economy as well considering that the economy was experiencing hyperinflation from year 2003.

Briely, 1983 states that every business entity is always very careful about their sales record and always conscious to ensure that when a tax audit is carried out they will come out with a clean slate. This is because there are some particular kinds of tax that they are mandated by law to charge their clients in their transactions and later make remittances of such funds received from clients for tax purposes. The remittances are usually made to the internal revenue service, which later transfer all of such payments to the government treasury. It is usually taken seriously because all of such transactions will always be scrutinized to ensure that the right thing was done.

2.9 CONCLUSION

According to Musgrave, 1987, it is certainly difficult to conceive of a tax administration that can perform its tasks efficiently without using some form of computer technology like the one contained in the ETR machines. The problem of tax administration reform is essentially how to alter the outcomes of administrative effort by appropriate investment in developing new legal and administrative effort by appropriate investment in developing new legal and organizational frameworks, adopting new technology and altering the allocation of administrative resources. This literature reveals that there is still

a serious gap in this field that needs to be filled by more researches on the topic of ETR and VAT audit duration.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research methodology is a system of rules and procedures upon which research is based and against which claims for knowledge are evaluated (Nachmias, 1996). This chapter encompasses the research methodology to be used in the field. It focuses on sources of data and their collection techniques, the sampling procedures adopted and tools for data collection, analysis, interpretation and presentation.

3.2 RESEARCH DESIGN

This research adopted a descriptive design. According to Creswell (2003), a survey design is a quantitative account of views, style and feelings of a population by analyzing a sample of that population and the results are used to make declarations about the population. The descriptive study adopted was designed to assess the use of ETRs in Kenya so as to test their effect as far as the audit duration is concerned. Descriptive case study design was used to allow the researcher to gather information, summarize, present and interpret the data for the purpose of clarification (Orodho, 2002)

3.3 TARGET POPULATION

Population refers to the whole group of people or elements of interest that a researcher wishes to investigate. The target population for this study comprises of all the VAT auditors of KRA, based in Nairobi who are more than 100 in number as provided by the KRA office. The Nairobi region was chosen because of its convenience and the intensity

of the audit work carried out by these auditors as compared to those in up country regional offices.

3.4 SAMPLE SIZE AND SAMPLING TECHNIQUE

According to Mugenda and Mugenda (2003), a sample should be selected from an accessible target population. A researcher should take as big a sample as possible which should be representative of the population. The sample consisted of 60 of the KRA VAT auditors based the in Nairobi. They represented the other auditors based in other stations who were trained and posted from Nairobi, all having the same training and experience in VAT auditing. Simple random sampling was used to select the auditors to respond to the questionnaires.

3.5 DATA COLLECTION METHODS/TOOLS

Research information was collected by use of primary data. This data was be gathered by use of structured questions administered through the use of questionnaires with closed and open-ended questions. The closed ended questions enabled the researcher to collect quantitative data while open ended questions aided in collection of qualitative data. Section one of the questionnaire was concerned with the general information of the respondents while section two dealt with the evaluation of the effect of the ETR system on the VAT audit duration. The questionnaires were dropped to the respondents and picked after two days.

3.6 DATA ANALYSIS AND PRESENTATION

The data collected was examined and checked for completeness and comprehensibility. The data was then summarized, coded, tabulated and checked for any errors and

omissions (Kaewsonth & Harding, 1992). Descriptive statistics such as the mean, standard deviation and frequency distribution was used to analyze the data.

Data presentation was done by use of pie charts, bar charts and graphs, percentages and frequency tables. This ensured that all the gathered information was clearly understood. Data was coded and entered into Excel programme for analysis. Excel was used to perform the analysis as it aids in organizing and summarizing the data by the use of descriptive statistics such as tables.

The extent of the use of the ETR system was measured by the auditors' responses on whether their clients have embraced the use of the system and the percentage of the clients using the system. The auditors' experience will be measured by the number of years the auditor has worked as VAT auditors and the training they have received on ETR system auditing.

3.7 DATA VALIDITY AND RELIABILITY

Measures to ensure the validity and reliability of data depend on the approach used in collecting the data. The level of skill and training of the individuals who are responsible for administering a quantitative survey is important to determining the reliability of the data. Triangulation was used to ensure data validity and reliability. This involved the systematic use and comparison of data collected with independent methods. Data triangulation involved the use of a variety of data sources in the study, for example interviewing people in different status positions. Method triangulation involved the use of multiple methods to study a single problem such as interviews, questionnaires and written secondary sources.

CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter presents analysis and findings of the research. Findings in this chapter have tried to fulfill the objectives of this study. A total of 40 respondents were involved in the survey out of the target population of 60 thus constituting a 66% response rate.

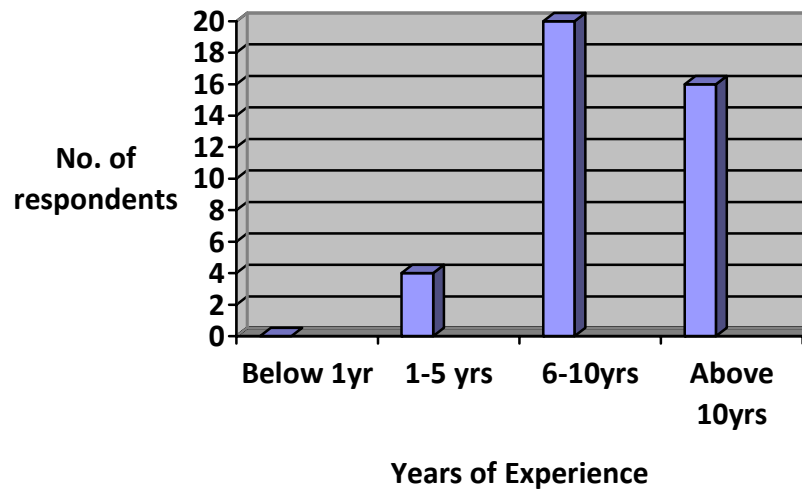
4.2 Years of working experience

This section sought to find out the number of years the respondents have worked with KRA as tax auditors.

Table 1: Years of work experience

Number of years	Frequency	Percentage
Below 1 year	0	0
1-5 years	4	10
6-10 years	20	50
Above 10 years	16	40
Total	40	100

Figure 1: Years of work experience



The results show that twenty of the respondents constituting 50% have worked as tax auditors for a period of 6-10 years while 40% have worked for more than 10 years. Only 10% have worked for a period of 1-5 years.

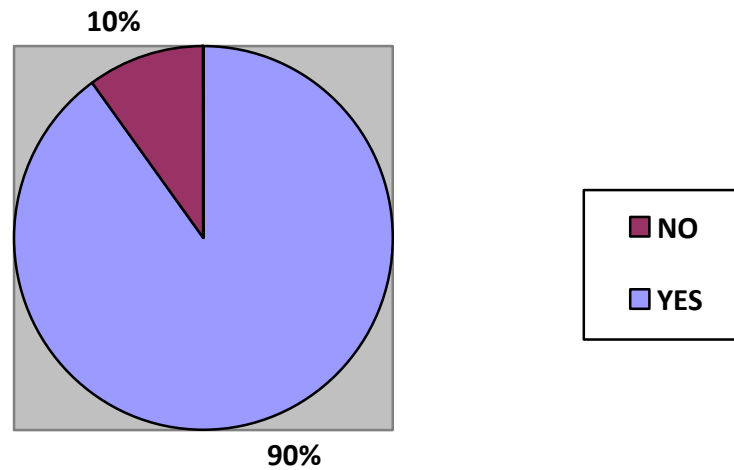
4.3 VAT auditing experience before the introduction of the ETR system

The researcher sought to find out if the respondents had audited the VAT records before KRA introduced the ETR system. The result is shown in the table below:

Table 2: Audit experience before ETR system

	Frequency	Percentage
Yes	36	90
No	4	10
Total	40	100

Figure 2: Audit experience before ETR system



The results indicate that 36 of the respondents constituting 90% of the respondents had experience in auditing VAT records before KRA introduced the ETR system while 10% did not have such experience.

4.4 Training on ETR audit

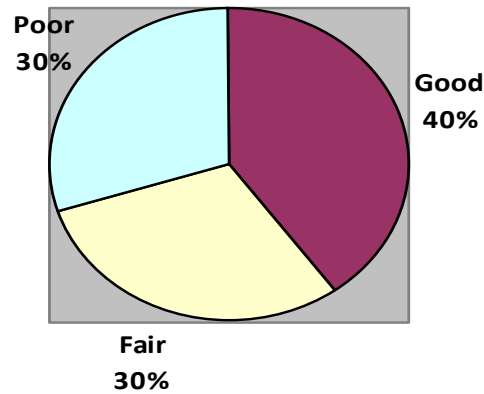
In this category, the researcher tried to find out whether KRA trains its tax auditors before they start auditing clients VAT records.

The results indicated that of all the 40 respondents (100%) have been trained on ETR audit. All the members of staff hired by KRA are trained on their operations before they are posted to their respective stations of duty including the VAT auditors.

4.5 Clients' ETR system acceptability

The researcher tried to assess how well the KRA clients who use the ETR system have embraced the use of the machines.

Figure 3: Clients' ETR system acceptability



It can be seen from the figure that 40% of the respondents rate their clients' acceptability of the ETR system as Good, 30% of the respondents say their clients have fair acceptability while 30% of the respondents say that their clients have poor acceptability of the ETR system.

4.6 Clients' use of the ETR system

This section tries to establish how many of the clients audited by KRA have embraced the use of the ETR system.

100% of the 40 respondents reported that all their clients have adopted the use of the ETR system.

4.7 Avoidance of use of the ETRs

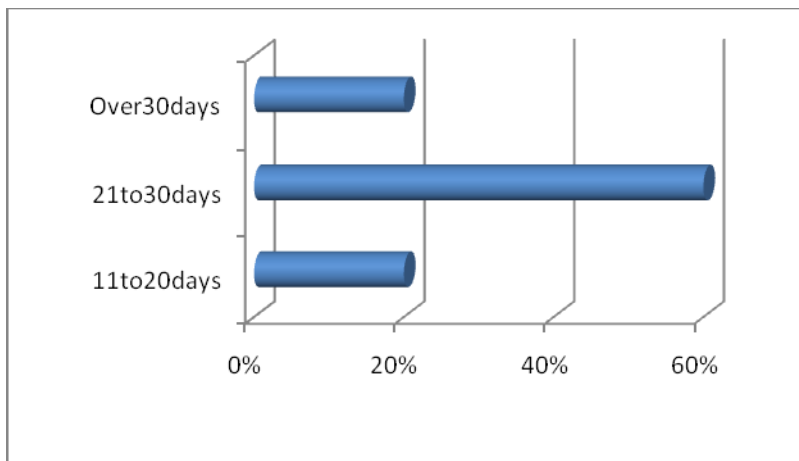
In this section, the researcher tries to establish whether there are instances where the clients avoid the use of the ETRs when transacting.

100% of the 40 respondents reported that there are instances where their clients have avoided the use of the ETRs when transacting.

4.8 Duration of audit before the introduction of the ETR system.

Here, the researcher is trying to establish the duration that the VAT auditors used to take to audit the VAT records before the introduction of the ETR system by KRA.

Figure 4: Duration of audit before introduction of ETR

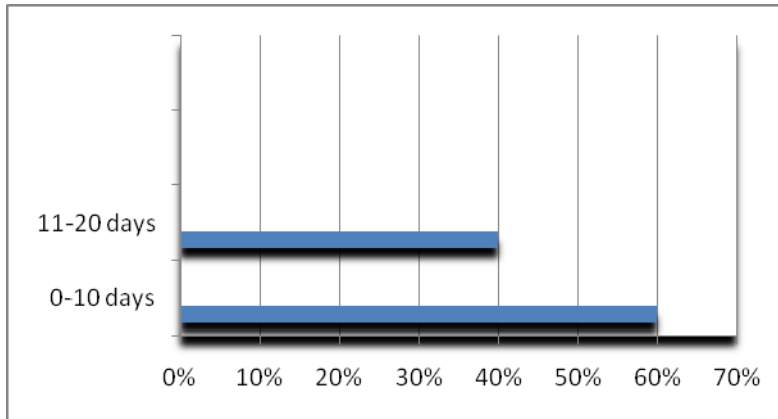


The figure above indicates that 60% of the 40 tax auditors used to take a period of 21-30 days to audit the VAT records before the introduction of the ETR system, while 20 % used to take 11-20 days and 20% used to take over 30 days for the same work.

4.9 Duration of audit after the introduction of the ETR system

Here, the researcher is trying to establish the duration that the VAT auditors used to take to audit the VAT records after the introduction of the ETR system by KRA.

Figure 5: Duration of audit after the introduction of the ETR system



60% of the 40 respondents reported that they usually take duration of 0-10 days while 40% take 11-20 days to audit the VAT records for their clients, depending on the size of the client.

4.10 ETRs' effect on VAT record keeping and audit period

Here, the researcher is trying to establish whether the use of ETRs have had an effect on the VAT record keeping and the duration of VAT audit

100% of the 40 respondents strongly agreed that the use of ETR has made the VAT record keeping easier thus reducing the duration taken by the tax auditors to audit such records.

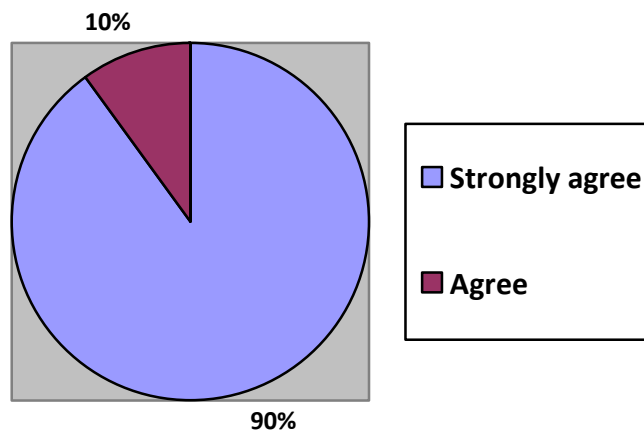
4.11 Ease of errors and frauds detection as a result the use of ETR

In this section, the researcher tries to establish whether the use of ETR has made it easier to detect errors, omissions and frauds committed by clients when transacting.

Table 3: Ease of errors and frauds detection as a result the use of ETR

	Frequency	Percentage
Strongly agree	36	90
Agree	4	10
Total	40	100

Figure 6: Ease of errors and frauds detection as a result the use of ETR



90% of the respondents strongly agreed that it is easier to detect errors, omissions and frauds with the use of records generated by the ETR system while 10% agreed with the same.

4.12 Ease of report generation and interpretation using the ETR system

Here the respondent tries to establish whether the ETR system has made the generation and interpretation of reports relating to VAT easier than before.

100% of the 40 respondents strongly agreed that the use of ETR system has eased the generation of reports that relate to VAT. They also strongly agreed that the interpretation of the same data has also been made easier.

4.13 Recommendation on the continued use of the ETR system

This part sought to find out whether the VAT auditors would recommend the continued use of the ETR system by their clients.

100% of the 40 respondents strongly agreed that their clients should continue using the ETR system.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter provides a summary of the findings, conclusion and recommendations into the effect of the use of ETR system on the duration of VAT audit by the KRA auditors.

5.2 Summary

The findings indicate that the respondents had worked as tax auditors at KRA for a period of time ranging from one year and above. All of them had received training on the audit of records generated by the ETR system. This explains their understanding of the ETR operations during the audit of their clients and therefore a reason for authenticity of the response gathered from the survey.

While all of the clients audited by the respondents use the ETR system in their transactions, most of the respondents said that their clients had a ‘good’ acceptability of the ETR system and therefore embrace the same and only a few who have not fully embraced its use with a ‘fair’ and ‘poor’ ratings. All the respondents said that there have been instances where their clients have avoided the use of the ETRs when making sales.

Some of the respondents who had served longer periods had experience in auditing the VAT records before the introduction of ETR system. The findings indicate that auditors used to take longer periods in their audits than they take after the introduction of the ETR system. This can be explained by the fact that VAT record keeping by the clients has been made easier since the number of records maintained is fewer. It is also easier to

detect errors, omissions and frauds committed by clients through the use of ETR and it is also easier to generate and interpret reports generated by the ETRs.

Lastly, the respondents recommended the continued use of the ETR system by their clients as this has made their audit work easier and faster.

5.3 Conclusion

Payment of taxes in form of VAT is mandatory for every individual and business in the tax bracket. However, most tax payers would want to evade the payment of the same in one way or another. For this reason, the body entrusted with the mandate of tax collection, KRA, has to be vigilant to audit all taxpayers so as to ensure that all government revenue in form of VAT has been paid to KRA.

In the effort to collect all the VAT, the use of machinery such as the ETR system has been instrumental in curbing tax evasion. In addition, it has made the work of tax auditors easier through the reduction of documents that need to be maintained and at the same time traders maintain standardized sets of records which are easier to audit and assess.

The analysis has shown that the duration of audit has reduced significantly from the time the ETR system was introduced in Kenya. This explains the reason as to why all the respondents recommend the continued use of the system as it has yielded positive benefits to their work.

5.4 Recommendations

KRA being the body entrusted with the collection of government revenue should put effort into establishing the reason as to why some businesspeople have not fully

embraced the use of the ETR system. This is because most of such people may require being enlightened on the benefits, both direct and indirect, of using the system.

Training should also be extended to the business people using the ETR system so as to enable them use it with much ease. Incentives should be given to those who are fully complying with the use of ETR system. This will entice those avoiding the system since they would also like to earn the same incentives being earned by those complying.

5.5 Limitations of the study

Care must be taken to generalize the results of this study as there were some limitations. First, this study included only a portion of KRA tax auditors based in Nairobi. Other auditors are based in other regions of the republic and could not be reached due to factors such as time and distance.

5.6. Further study

The current research is limited due to the number of respondents involved in the study. The future research may consider how they can incorporate tax auditors all over the republic to have a more representative sample size.

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APPENDIX III: QUESTIONNAIRE

TOPIC:

ASSESSMENT OF THE IMPACT OF THE ELECTRONIC TAX REGISTER (ETR) SYSTEM ON THE VALUE ADDED TAX (VAT) AUDIT PERIOD.

The researcher is undertaking a study on the above topic. Information in this questionnaire will be treated in confidence and at no instance will it be used for any other purpose other than this research.

Kindly spare a few minutes of your time to fill the questions accurately for your candid opinion. Either tick in the appropriate box or answer in the space provided.

1. For how long have you served as an employee of this institution as a tax auditor/assessor?

☐ Below 1 year ☐ 1-5 years ☐ 6-10 years ☐ Above 10 years

2. Were you trained on audit of ETR generated records?

Yes ☐ No ☐

3. How do you rate your clients' ETR system acceptability?

☐ Very good ☐ Good ☐ Fair ☐ Poor ☐ Very poor

4. How many of your clients use the ETR system?

5. Are there instances where your clients avoid the use of the ETRs?

☐ Yes

☐ No

6. Did you have experience in auditing the VAT accounts/records before the introduction of the ETR system? ☐ Yes ☐ No

7. Have you had experience in auditing VAT accounts after the introduction of the ETR system?

☐ Yes

☐ No

8. On average, how long were you taking to audit your clients before the introduction of the ETR system?

☐ 0-10 days ☐ 11-20 days ☐ 21-30 days ☐ Over 30 days

9. How long do you currently take to audit your clients after the introduction of ETR system?

☐ 0-10 days ☐ 11-20 days ☐ 21-30 days ☐ Over 30 days

10. The ETR system has made the VAT record keeping easier thus reducing the audit period.

☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree

11. It is easier to detect errors, omissions and frauds with the use of records generated by the ETR ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree

12. It is easier to generate and interpret reports using the ETR system records

☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree

13. I would recommend the continued use of the ETR system by businesses.

☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree