AIBUMA Publishing
African Journal of Business & Management (AJBUMA)
http://www.aibuma.org/journal/index.htm
Vol. 1 (2010), 11 pages

THE EFFECTIVENESS OF ELECTRONIC TAX REGISTERS IN PROCESSING OF VALUE ADDED TAX RETURNS

Perspectives from Registered VAT Taxpayers in Kisii Town, Kenya

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Abstract

This study aimed to assess the effectiveness of Electronic Tax Registers (ETRs) in the processing of Value Added Tax returns. The study sought to determine the extent to which the Electronic Tax Registers are being used by the taxpayers, the problems if any that they were encountering in using them as well as get possible solutions to the problems. Since many researchers had concentrated much of their work on tax systems, tax evasion, taxes and interest rates, a lot was desired especially in this area to assess the effectiveness of Electronic Tax Registers had been recently introduced by the Kenyan tax authority. The study sought to establish if the Electronic Tax Registers had increased the speed at which taxpayers processed their VAT returns and if there were any associated costs in the processing of VAT. The population under study comprised of 98 VAT registered taxpayers in Kisii town according to the regional KRA office's records which was stratified into; service providers, wholesalers & large scale retailers and supermarkets. The main instrument of collecting primary data was the questionnaires while secondary data was obtained from the KRA regional office. Analysis of data was mainly done using descriptive statistics. The findings of this research project will assist the Kenya Revenue Authority look for ways of improving the processing of VAT returns. Due to limited sources of literature, this research was not considered as exhaustive but could form the basis for further investigation.Data was collected from 78 registered VAT taxpayers in Kisii town. The respondents were senior, middle level and low managers. Out of the 78 registered VAT taxpayers to whom the questionnaires were administered, only 68 responded. This gives a response rate of 87% percent. Data analysis tools used in the research were Excel and SPSS and data was presented in form of tables and graphs.Based on the results from data analysis and findings of the research, one can safely conclude the following; First, Kenya has witnessed significant changes in many aspects of its economy over the last four decades, but like most developing countries, it has had to contend with the common problems that plague tax systems of developing countries (Karingi, Wanjala, Dec, 2005). Secondly, the timely filling of the monthly VAT returns is attributed to many factors. ETR is one of the factors. Further the introduction of ETR has assisted in cutting costs that the business used to incur in processing VAT. Thirdly, It was found that ETRs have enhanced the revenue collection resulting from sound sales and stock audits. Fourthly, to evaluate the effectiveness of ETRs in filling VAT Returns at regular intervals, it was found that the use of ETRs was not a waste of funds and has assisted the business in many ways. They also don't ETRs break down too often. Lastly, KRA has articulated a vision for Kenyan customs, and in the process of delivering such mandate, it has faced challenges while meeting its pillars that include The following challenges need to be addressed within the KRA: the cost and classification of the businesses which need to use ETRs.: ETRs are expensive, cost to be paid in instalments; ETRs should be compatible with computers in business premises.

Keywords: ***Electronic Tax Registers, Value Added Tax Returns, Electronic Signature Devices &, Electronic Signature Devices***

1. Introduction

1.1 General Background

A lot of debate has been going on in the country between business owners and the Kenya Revenue Authority (KRA) on the adoption of Electronic Tax Registers. Electronic Tax Registers were introduced by KRA to replace the manual paper system of remitting VAT returns that was considered inefficient and straining.

To enhance the accountability systems for Value Added Tax, the Kenya Revenue Authority (KRA) has spearheaded the introduction of the Electronic Tax Registers and Electronic Signature Devices. These devices offer unique benefits to traders and the Revenue Authority alike by recording transaction data in such a manner that it cannot be deleted. The Government of Kenya on the other hand allowed businesses to offset the cost of the ETR installation against the input VAT as well as training of traders on the use and benefits of those devices.

Kisii town is among the fast growing commercial towns in Western Kenya. It is located 300 miles away from the country's capital city Nairobi along the Nairobi Isebania road. Major businesses that are carried out in the town range from large scale businesses, service provision industries, processing industries to small scale businesses. Majority of the traders are registered taxpayers and have adopted the Modern Electronic Tax Registers. Initially the tax payers used to file their VAT returns using prescribed forms that are provided by KRA.

This study aimed at assessing in detail the effectiveness of ETRs in processing of VAT returns by taxpayers that were introduced to replace the earlier manual system of VAT processing. The study also tried to establish if there was any increase or reduction in costs incurred in the preparation and remittance of VAT to the Kenya Revenue Authority with the introduction of the electronic devices. The study was to find out if there was any time saved in the process and if both the taxpayer and KRA were enjoying these advantages.

Variables to be explored in this study were be; time of processing VAT returns, problems encountered in processing of VAT returns using ETRs, financial resources that go into the processing, remittance and management of the VAT returns and improve public revenue capture through more accurate data entry, operational expenses, tax agencies expenses, costs of processing refund claims, costs of inspection and audit by the KRA to establish evaders and defaulters, filing of tax returns systems, costs that are incurred in processing tax refunds, costs of auditing sales records, the cost of maintenance of the Electronic Tax Registers, the cost of training staff to handle or rather operate the machines, the cost of time value of money that was used in purchasing of the tax registers until such a cost is finally offset by the Kenya Revenue Authority as well as the cost of replacing such machines and the learning curve effect of using the devices. Time taken to process the VAT as well as the extra labour that was required to sort and analyse the sales books to come up with the VAT values by separating the VATable from the non VATable items as well as the Zero rated ones.

The Kenya Revenue Authority focuses on effective methods of revenue collection so as to meet the country's budget revenue targets. The tax base in Kenya, as in most sub-Saharan African countries, is extremely narrow. So far, attempts to increase tax revenue have focused on closing the 'taxation gap' and expanding the tax base. The main policies recommended by the IMF have led to trade liberalization, the transition from a sales tax to a system of VAT. (IMF, Nov.2005). Such policies have been adopted by most African countries with Kenya being no exception.

Kenya has witnessed significant changes in many aspects of its economy over the last four decades. One of the striking characteristics of Kenya is that unlike many other Sub-Saharan countries today, it is a high tax-yield country with a tax-to-GDP ratio of over 20 per cent. Kenya is able to finance a large share of its budget, while external donor finances are used to cover a much smaller share than in other countries of the region. This is mainly because of the efforts made in overcoming problems affecting its tax system. Like most developing countries, it has had to contend with the common problems that plague tax systems of developing countries (Karingi, Wanjala, Dec, 2005). This was also confirmed by President Mwai Kibaki's (2006) speech during Kenyatta day celebrations. Most scholars in finance have ignored focusing on the costs to traders of the tax systems that are now used in the processing and remittance of tax returns to revenue collection institutions. Not to mention the modern electronic systems like the Kenyan ETR. The modern Kenyan ETR that has been put in place will therefore form a good case whose use will be assessed.

It was in this regard therefore that the Kenyan revenue authority had tried to move from a system; with rates and structures that are difficult to administer and comply with; that are unresponsive both to growth and discretionary tax measures hence offering low tax productivity; that raise little revenue but introduce serious economic distortions; that provide opportunities for differential treatment of individuals and businesses in similar circumstances, and that are selective with regard to tax administration and enforcement to an electronic system (ETR) that should be categorized as; Efficient, fair and administratively feasible both for the specific tax instruments and for the entire tax regime.

Looking at how far Kenya's tax system had adopted the modern Electronic devices and how its benefits had differed from the previous system of effecting tax returns on costs that was incurred by the small scale traders was an area whose outcome (s) was quite desired. There was little literature available on the introduction and adoption of Electronic Tax Registers in Kenya as well as in other developing countries. Developed countries like the United States of America and Canada made use of electronic filing and electronic commerce to collect taxes from the taxpayers.

1.2 Electronic Taxation

The sign of the relationship between efficiency and the method of processing tax returns and the system of tax collection used by taxpayers is one of the questions that still are not resolved nowadays. Allingham and Sandmo (1972) introduced the portfolio approach to solve the individual tax cost problem and showed that, under weak tax processing systems, a number of costs are incurred.

However, Yitzhaki (1994) found out that a rise in the tax rate increases the amount of tax processing costs. A number of issues can therefore be regarded as possible problems that are faced by taxpayers in processing of their VAT returns using Electronic Tax Registers. Such issues include: Time taken in processing VAT returns; Tax preparation costs; Staff costs required to process returns and improve revenue capture through more accurate data entry; Costs of stationery in form of receipt books, writing materials, files and filing of tax returns systems; Costs that are incurred in processing tax refunds; Costs of auditing sales records; Insurance costs for the ETRs; Space for keeping past data records; and Prosecution and refund follow up time and costs.

Despite dramatic improvements in recent years in information technology, including automated data capture, the administrative and taxpayer compliance burden associated with large-scale invoice matching continues to be significant. Recent diagnostic reviews by FAD of invoice cross-checking systems have shown that these systems continue to generate considerable unproductive work. In Thailand, for example, IMF observed that more than half of the large taxpayer units of highly skilled auditors were substantially engaged in following-up and checking invoice discrepancies reported from the invoice matching system. Examination of the discrepancies revealed that many related to data entry errors (for example errors in taxpayer identification numbers and addresses), thereby creating administrative costs with no associated revenue benefits.

Under Kenya's VAT laws, refund claims exceeding a specified amount must be certified by a CPA registered with the Institute of Certified Public Accountants of Kenya. The law imposes sanctions on accountants who knowingly certify false claims. Tax authorities, traders, and accounting professionals all contend that this approach has benefits. Tax officials argue that it helps eliminate fraudulent claims, and reduces administrative costs. Kenyan officials report that the number of refund claims by exporters dropped by 40 percent following introduction of the scheme, suggesting that many firms had been submitting false claims. By placing the onus on CPAs to certify the validity of refund claims, the government has in effect outsourced, in part, its verification program. Large exporters support the arrangement because it speeds up refunds, and for this they are willing to bear the increased compliance costs. CPA firms are also in favour because of the opportunity to generate service fees.

Automation is not an end in itself, but a crucial component of taxation reforms, which aims at modernizing tax administrations and aligning the legal framework and procedures with international standards and best practices. Automation facilitates the clearance of legitimate trade, improves the efficiency of taxation controls and secures revenue collection. In addition, it helps address expectations of traders and transport operators regarding transparency, predictability and reliability, as well as the simplification of border-crossing and administrative procedures (Jon M.Peha,1999).

An IMF study, 2005 on VAT refunds found out that a pre-condition for successful reform is a strong commitment on the part of government and key stakeholders. The premises and equipment necessary for automation may include new or rehabilitated offices, hardware, software, internal communication systems and connections to external networks, and they may also require the set-up of wireless networks and links. Furthermore, the introduction of ICTs needs to be accompanied by extensive capacity building.

Benefits of automation include a reduction of fraud, remote access to information, improved collection of statistics, and uniform application of tax legislation. The introduction of tax automation minimizes direct contacts between tax collection officers and traders or their agents, and hence leads to a reduction of corruption. Further benefits achieved through customs automation include improved reporting, control of file transfers, automatic reconciliation of tax returns declarations, and compliance testing of bank files. Paperless declarations and customs automation save time and make it easier to focus on inspecting high-risk consignments. The possibility of submitting tax returns declarations on-line has in some cases made it possible to reduce the associated fees; in other cases it has helped eliminate the obligatory contracting of Customs agents (Robert S., 1997).

ICTs can significantly reduce the number and the potential negative impact of physical inspections. ICTs allow, inter alia, for pre-arrival clearance, risk analysis by tax authorities, and separation of release from clearance. With the help of ICTs, it is further possible to better plan the timing and location of physical inspections, thus significantly reducing the waiting times for trucks and containers. Finally, ICT solutions allow for better measurement of the length and number of physical inspections. Such measurement needs to cover the complete trade and transport operation and not be limited to tax clearance times only.

1.3 Development of Electronic Tax Collection Systems in Kenya

Value Added Tax (VAT) is a type of sales tax. Other countries like Canada and Singapore call it a goods and services tax. It is a form of indirect tax that is collected from someone but the tax burden is borne by somebody else who is the final consumer of the taxable goods and services (Allingham et al, 1972).

VAT was invented by a French economist in 1953. Maurice Laure, joint director of French tax authority introduced VAT with effect from 10th April 1954 for large businesses, and extended over time to all business sectors. In Kenya, it was established in the year 1995 (GOK, 2004) and is the most important source of state finance and accounts for approximately 46% of state revenues (GOK, 1993).

Revenues from VAT are frequently lower than expected because they are difficulty and costly to administer and collect. VAT has become more and more important in many jurisdictions as tariff levels have fallen worldwide due to trade liberalization, as VAT has essentially replaced lost tariff revenues. Whether the costs and distortions of VAT are lower than economic inefficiencies and enforcement issues like smuggling from high import tariffs is debated, theory suggests VATs are far from efficient (Waweru, 2006).

Tax collection systems in Sub – Saharan Africa unlike in the Western countries are still developing. The World Customs Organisation (WCO) has helped in setting up standards that averagely need to be adopted by almost every country in order to combat tax vices that exist in almost all countries (IMF, Nov. 2005).

In recognition of the need to undertake coherent and comprehensive reforms, some years back, the KRA adopted a Tax Administration Reform and Modernisation Programme whose primary objective was to modernise and integrate its operations in line with international best practice of tax collection. Under this ongoing programme, KRA has implemented the following key measures aimed at enhancing revenue collection and service delivery to taxpayers: Deployment of the SIMBA 2005 System in the Customs Services Department; Installation of X-ray Cargo Scanners at the Kilindini Port in Mombasa; Implementation of a function-based rather than tax-based organisational structure in order to offer seamless service to taxpayers. In this regard, the former Income Tax and VAT departments were merged to form the domestic taxes department, which also incorporates domestic excise tax operations. Currently the focus has shifted towards aligning service delivery to market segments as reflected in the recent decision to establish the large taxpayers unit into a full-fledged department; Implementation of a computerised system for the management of Motor Vehicle records and payments. Other past reform initiatives include the introduction of, among others, the Personal Identification Number (PIN), the Income Tax self-assessment programme, as well as the simplification of documentation and processes in various areas.

The KRA commissioner general during tax payers' day, (Daily Nation, Oct. 2006) said that KRA is looking into the introduction of electronic data interchanges with taxpayers and their bankers and the full integration of the taxpayer database via the PIN. It is also in the process of implementing an electronic cargo tracking system aimed at addressing the intractable problem of the dumping of transit goods.

The ETR programme is one among many tax administration reform measures that the KRA has undertaken. ETRs were introduced in June 2004 to ensure that sales are properly recorded by registered taxpayers in the country (Price Waterhouse Coopers, Oct. 2005). This initiative, which is initially focused on improving compliance with VAT requirements, has the capacity to transform revenue collection in this field, as is the case in other countries where it has been used. Indeed estimates place the potential for additional VAT collection from this initiative at up to Ksh.10 billion annually. This is so because much of the VAT monies that Kenyans pay over shop counters never reach the intended destination, ending up instead in the pockets of unscrupulous traders. This is a grossly unfair situation because apart from taxpayers being duped into paying taxes that end up in private pockets, the government is denied the resources necessary to facilitate service delivery improvement.

Value Added Tax (VAT) applies to most transactions at 16%. Businesses with an annual turnover above 3 Million Kenyan shillings must register for VAT, but in some cases registration is compulsory regardless of turnover. A lower rate of 14% used to apply to restaurant services, and accommodation and other services provided by hotels but it was recently increased to 16 % to ensure uniformity in tax collection by the Minister of Finance during the 2006/07 budget, (GOK, 2006). Exports, some agricultural inputs, medicines, educational equipment, liquid petroleum gas, kerosene, maize flour, milk and newspapers are zero-rated.

Exemptions to VAT include live animals, most foodstuffs, building materials, financial services (subject to certain exceptions), insurance, passenger transport, entertainment (subject to certain exceptions), and the rental and lease of land and buildings (Deloitte & Touch, 1997).

1.4 Statement of the Problem

The introduction of Electronic tax registers (ETR) in Kenya was introduced with the main aim of combating vices that were mainly associated with the collection of taxes like; Tax evasion, filing of wrong tax returns and claiming of undeserved tax refunds. As much as it was initially looked from such a perspective, a clear analysis has to be made to establish if it also benefits the traders as well. Earlier indications are that it assists traders in such ways as; Saves time initially wasted in perusing of records. Reduction in tax preparation costs for example those paid to tax agencies. Reduction in labour costs e.g. overtime cost. Good record keeping – increases profits. Increases efficiency in businesses. Reduces costs of tax refund claims. This study will therefore ascertain if this is really the case and to what extent this has been possible.

The adoption of Electronic Tax Registers by traders as a means of processing VAT returns has been a court battle for a long time. Traders claim that there were punitive operating expenses that the KRA is unwilling to bear besides the actual cost of the machine. On the contrary KRA is of the view that the ETR machines will help increase efficiencies in operations as well as in VAT processing. It is therefore important to assess the effectiveness of ETRs by taxpayers in processing of VAT returns and if their use has also assisted the Kenya Revenue Authority to collect as much VAT as possible. ETRs are expected to help taxpayers process their VAT returns efficiently without major problems that were associated with the earlier paperwork system. The costs of installing and operating the machines will be expected to be correlated with the benefits accruing to their use and comparatively lower than those incurred in the earlier system.

The general objective of the study was to assess the effectiveness of Electronic Tax Registers in the processing of Value Added Tax returns by taxpayers. The specific objectives are;

i. To examine the effectiveness in terms of time and costs of ETRs in the processing of VAT returns.
ii. To find out possible solutions to the problems encountered in processing of VAT returns using Electronic Tax Registers.

It was equally hypothesized that the use of Electronic Tax Registers has increased efficiency in the processing of VAT returns by taxpayers; and the use of Electronic Tax Registers has helped reduce problems encountered in the processing of VAT returns.

2.0 Research Strategy

The study covered Kisii town. Kisii town is located 300 miles away from the country's capital city Nairobi along the Nairobi Isebania road. The study adopted a case study design to assess the use of Electronic Tax Registers on the processing of VAT returns by business managers in Kisii town so as to test their effectiveness as far as VAT processing is concerned. Descriptive case study designs are used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification (Orodho, 2002).

The target population for this study comprised of all the registered VAT taxpayers in Kisii town, who were 98 in number as provided by the regional KRA office. Kisii town was chosen because it was convenient to the researcher and it was also a lucrative business town. The population was stratified as; 31 Service providers, which was equivalent to 32% of the total population; 60 Wholesalers and large-scale retailers, which represented 61% of the total population; 7 Supermarkets which represented 7 % of the total population.

A systematic random sampling was adopted in this study. A nominal scale of 1 interval was applied to select the sample size from each of the strata. This design ensured that all elements of the population were given an equal chance of being selected. In this way, no element of chance was left and highest accuracy was obtained (Kothari C.R, 2002**).** Therefore the sample size was distributed as; 28 Service providers; 44 Wholesalers and large scale retailers; and 6 Supermarkets.

In this study, both primary data and secondary data were collected by the researcher. Primary data was collected by use of questionnaires. The questionnaire was structured, open ended and closed ended which were dropped and then picked later. Primary data was also coded and tested for completeness. Secondary data was mainly collected from the KRA's regional office by analysing official documents and by past records inferences. A pilot study was however done using a few taxpayers to test the validity and reliability of the questionnaires.

Raw data collected from the field was sorted and summarised in tables and diagrams. The process of data analysis involved several stages. Completed questionnaires were edited for completeness and consistency. The data was then coded and checked for any errors and omissions (Kaewsonth & Harding, 1992). The responses from the open-ended questions were coded; the mean and standard deviation were used for likert-scale responses. Content analysis was also used in the analysis of some of the open-ended questions. The data was analyzed using procedures within Statistical Package for Social Sciences (SPSS)_PC version 10.

3.0 Data Analysis, Findings and Discussions

This section covers data analysis and findings of the research. Data was collected from 78 registered VAT taxpayers in Kisii town. The respondents were senior, middle level and low managers. Out of the 78 registered VAT taxpayers to whom the questionnaires were administered, only 68 responded. This gives a response rate of 87% percent.

3.1 Business Profile & Background Information

The number of years a business has been in operation determines the experience of the business in filling its tax returns. It also determines one's ability to evaluate an old tax system, when changing to a new automated tax regime. The respondents were asked to give the age of their businesses, and from the research data, it was found that most businesses have been in operation for more than fives, that is 68% of the businesses have been in operation for over 5 years, while 6% of them have been in operation for between 3 and 5 years, and less than 2 years respectively. This is an indication that the information provided in this study was given by experienced businesses and informants.

The registered VAT taxpayers in Kisii town are 98 in number as provided by the regional KRA office. The town is a lucrative business town. There are three categories of registered VAT taxpayers; 31 Service providers; 60 wholesalers and large-scale retailers; and 7 Supermarkets. The respondents were asked to indicate the type of business they are engaged in, and it was found that 65% of the businesses were supermarkets, 27% service providers, and 8% were supermarkets. This is an indication that the all the registered VAT taxpayers in Kisii town were well represented looking at their proportionate numbers.

Kenya has witnessed significant changes in many aspects of its economy over the last four decades, but like most developing countries, it has had to contend with the common problems that plague tax systems of developing countries (Karingi, Wanjala, Dec, 2005). ETRs have been introduced to get the country out of the problems that plague tax systems of developing countries.

The respondents were asked to indicate whether they have acquired ETR machines or not, and 91% of the respondents indicated that they have acquired ETR machines, as 9% indicated they have not acquired any. This is an indication that most businesses in kisii town have complied with the VAT requirements in Kenya. The were also asked to indicate the time when they might have acquired the ETR machines, and most businesses acquired their ETR machines, that 71% more than two years ago, 19% 1-2 years ago, and the rest less than one year ago. This is also a clear indication of compliance.

An IMF study, 2005 on VAT refunds found out that a pre-condition for successful reform is a strong commitment on the part of government and key stakeholders. Under Kenya's VAT laws, refund claims exceeding a specified amount must be certified by a CPA registered with the Institute of Certified Public Accountants of Kenya. The law imposes sanctions on accountants who knowingly certify false claims. The respondents were asked to indicate whether they have received a refund for the initial cost of the ETR machine and the timing, or not, and55% of the respondents indicated they have not received any refund. For the 45% who have received their refunds indicated that 43% of them took less than 1 month's time, 28% took 1 -2 years , 15% took more than 2 years, and 13% took less than 1 year. Indeed this these refunds are on the premises that equipment necessary for automation may include new or rehabilitated offices, hardware, software, internal communication systems and connections to external networks, and they may also require the set-up of wireless networks and links.

3.2 VAT Returns and the ETR Machines

The Kenya Government allows businesses to offset the cost of the ETR installation against the input VAT as well as training of traders on the use and benefits of those devices. The respondents were asked to indicate percentage of the business' total monthly VAT returns that was equivalent to the cost of the ETR machine, and out of those who were sampled, 35% indicated that they have less than 10%, and between 10% – 30 % (percentage) of the business' total monthly VAT returns equivalent to the cost of the ETR machine respectively. 22% indicated between 30%and 50 %, as 7% indicated above 50%. In addition, 39% of the respondents indicated that they have between 3% and 5% percentage of the Business' Total Monthly VAT Returns Equivalent to the Cost of the ETR Machine, as 35% indicated less than 1%, 16% indicated more than 5%, as 9% indicated between 1% – 3 %. This is an indication that most businesses in kisii town have between 3% and 5% percentage of the Business' Total Monthly VAT Returns Equivalent to the Cost of the ETR Machine.

The preparation of VAT returns at the end of the month may take different time ranges. The respondents were asked to indicate the time they take to prepare their VAT returns at the end of the month, and42% of the businesses take less than 2 days to prepare their VAT returns at the end of the month, 33% indicated more than three days, as 23% indicated less than three days. This is an indication that the businesses prepare and file their VAT returns in good time to beat the KRA deadlines.

Businesses sometime seek the involvement of tax agents' services in filling tax returns and with a proportion of the proportion of the monthly VAT returns paid to the agents. The respondents were asked to indicate whether they involve the tax agents' services in filling tax returns and with a proportion of the proportion of the monthly VAT returns paid to the agents, and 65% of the respondents indicated that they don't involve the tax agents' services in filling tax returns. Of the 35% who involve the tax agents' services in filling tax returns, 21% of them pay more than 30%, between 20% and 30%, and less than 10% of their monthly VAT returns respectively to the tax agents' services in filling tax returns. This is an indication that most businesses can file their returns on their own, and even those who use agents are not exploited as they all pay a normal fee.

The involvement of an agent in the preparation and filling of the monthly VAT returns can involve a fixed fee or a variable fee. The respondents were asked to indicate whether they pay an overtime wage to the tax agents in the preparation of VAT returns, and, 73% pf the respondents who involve tax agents in the preparation of VAT returns don't pay overtime wage to the agents, as 265 pay. This might be because the businesses in the town have been in operation for long hence experienced in the preparation and filling of the VAT returns.

The preparation of VAT returns may be a tedious exercise. It might lead to delays hence a penalty. The respondents were asked to indicate whether they have ever had any delay in filing the business monthly VAT returns and by how long, and75% of the respondents indicated that they have never delayed their filing of the business monthly VAT returns, as 25% indicated they do. The high rate of compliance might be attributed to timeliness in the preparation of the returns and the shorter time it takes the businesses to prepare the returns. Also from the results, out of the 35% of the businesses who delay their returns filling, 64% delay them for less than fie days, as 35% delay them for more than 10days. This is not such serious given a small number of businesses who delay in filling the VAT returns at the end of the month.

The timely filling of the monthly VAT returns as seen above may be attributed to many factors. ETR is one of the factors. The respondents were asked to indicate whether the timely filing of monthly and 63% of the respondents indicated that timely filling of VAT returns can be attributed to the adoption of the ETR machine.

The use of ETR machines can lead to improved sales audit for the business, since everything that is VAT-able is captured to record. At the same time, it is expected that the sales audit frequency should be low. The respondents were asked to indicate whether they have enjoyed any benefits in the faculty of sales audit through the adoption of ETR machine, how frequent they do their sales audit post adoption of the ETR machine, and 73% of the respondents indicated that the use of ETR machines has led to improved sales audit for their business, as 27% indicated it has not improved. This is an indication that indeed the use of ETRs can improve sales audit on top of timely filling of monthly VAT returns. Also from the results, out of the 73% who enjoy the benefits of ETRs in sales audit, 62% of the businesses are able to conduct their sales audit daily. A clear indication that ETRs can reduce the frequency of audits giving prompted sales patterns and feedbacks. This can not be the same for those who do not use ETRs, or maybe because of scale.

Out of the 27% who do not enjoy the benefits of ETRs in sales audit, 77% of the businesses are able to conduct their sales audit monthly. An indication that failure to use ETRs can lead to pronged frequencies of audits leading to failure to give prompted sales patterns and feedbacks. This can not be the same for those who use ETRs, or maybe because of scale.

Stock taking is the act or process of inventorying merchandise or the supplies on hand (Christensen, 1997). The use of ETR machines can lead to improved stock taking for the business, since everything that is VAT-able is captured to record. At the same time, it is expected that the stock taking frequency should be low. The respondents were asked to indicate whether they have enjoyed any benefits in the faculty of stock taking through the adoption of ETR machine, how frequent they do their stock taking post adoption of the ETR machine, and 73% of the respondents indicated that the use of ETR machines has led to sound reappraisal of their business stock situation to improve the stock taking prospects, as 27% indicated it has not improved. This is an indication that indeed the use of ETRs has improved stock taking in addition to timely sales audit.

Wise control of inventory is often a critical factor in the success of businesses in which inventories are significant (Christensen, 1997). Out of the 73% who enjoy the benefits of ETRs in stock taking, 46% of the businesses are able to reappraise their stock level on daily basis, 40% on monthly basis and 13% on weekly basis. An indication that ETRs has assisted businesses the implementation of management's inventory policies in a manner that assures that the goals of inventory management are met. Out of the 26% who do not enjoy the benefits of ETRs in sales audit, 73% of the businesses are able to conduct their sales audit daily too, but this should not be the expected scenario on the any business setting. This can not be the same for those who use ETRs, or maybe because of scale.

ETRs like any other machine is subject to breakdown which might lead to drawbacks including failure to file returns, failure to pay correct taxes, tax evasion activities, non-payment of duty on imported goods including motor vehicles, diversion of transit goods, undisclosed payments to employees, unethical conduct by KRA officers and /or taxpayers (http://www.kra.go.ke/customercare/comp). The respondents were asked to indicate whether they business has ever encountered a breakdown of the ETR machine; the time period the ETR breakdown lasted; and the cost of repairing the ETR breakdown; 61% of the registered businesses in the town have encountered ETR break down; but with 57% lasting for six hours, 26% lasting for between 4-6 hours and 16% for less than 2 hours. This is actually quite temporal. On the cost of repairing the ETR breakdown, 59% indicated that it costs between Kshs 1,000 and Kshs 5,000; 22% indicated that it costs less than Kshs 1,000; as 19% indicated that it costs over Kshs. 5,000. an indication that the breakdowns were minor, costing very little less than five thousand, compared to the initial cost of acquiring the ETRs.

The businesses are advised to report any breakdown of their ETRs to KRA, since such breakdowns might lead to failure to file returns, failure to pay correct taxes, tax evasion activities, non-payment of duty on imported goods undisclosed payments to employees, unethical conduct by KRA officers and /or taxpayers, which amount to corruption (http://www.kra.go.ke). After reporting the breakdowns, it is the responsibility of KRA to take action. The respondents were queried on their ability to report the ETR machine breakdown to KRA, and actions taken by KRA and the term breakdown has several similar but distinctly different meanings. The term may apply to a failure of an electric circuit or system with consequent lack of function. Alternately, it may refer to a rapid reduction in the resistance of an electrical insulator that can lead to a spark jumping around or through the insulator. This may be a momentary event (as in an electrostatic discharge), or may lead to a continuous arc discharge if protective devices fail to interrupt the current in a high power circuit (Young *et al.,* 2004). From the research data, 58% of those ho had experienced ETR machine breakdown reported them to KRA and the actions taken by KRA featured no action taken as 71% and 29% for a claim form. This is ok based on the various dimensions of breakdown.

3.3 The Effectiveness of Electronic Tax Registers in Processing of Value Added Tax Returns

Electronic tax Registers reduce the tax-reporting burden on businesses while improving the efficiency and effectiveness of government operations, provides timely and accurate tax information to businesses, increases the availability of electronic tax filing, and models simplified state tax employment laws.

Revenue is a business term for the amount of money that a company receives from its activities in a given period, mostly from sales of products and/or services to customers. It is not to be confused with the terms "profits" or "net income" which generally mean total revenue less total expenses in a given period. In Europe the term is turnover. For individuals, the equivalent term is *income*. For government, revenues refer to the gross proceeds received from taxes and fees. For non-profit organizations, revenue from products and services can be expanded to include proceeds from donations, grants, trade in lieu of cash, and other liquid assets (http://www.answers.com/topic/revenue). Revenue is often referred to as the "top line" due to its position on the income statement at the very top. This is to be contrasted with the "bottom line" which denotes net income, revenues after all applicable costs. At times, the term "Sales" is used interchangeably, but is only accurate when the amount described is denoted in currency as opposed to units.

ETRs can enhance the revenue collection resulting from sound sales and stock audits The respondents were asked to indicate whether the use of ETRs have improved revenue collection for their businesses, and from the results in table 4.27 below, 70% of the respondents indicated that the use of ETRs has increased the amount of money the businesses receive from its activities in a given period, mostly from sales of products and/or services to customers.

The VAT returns can be influenced by the amount of money that a company actually receives during a specific period, including discounts and deductions for returned merchandise. The calculation of VAT returns is the "top line" or "gross income" figure from which costs are subtracted to determine net income.

The respondents were asked to indicate whether monthly VAT returns have increased with the implementation of ETRs and from the results, 80% of the respondents indicated that the monthly Vat returns have increased with the implementation of the ETRs. Thus the ETRs are effective in the VAT returns documentation. The respondents were asked to give their opinion on how the introduction of ETR has assisted their businesses, while citing reasons. From the research data, 66% of the respondents qualified the use of ETRs in business to have accrued many benefits to their businesses, as opposed to 34% who indicated they have not enjoyed any benefits by the use of ETRs.

Of the 66% who indicated that they have harvested the benefits of ETRs, they cited the following reasons ranging from:

- Increased efficiency in sales audit
- Increase in sales collection
- Increased efficiency in stocktaking
- Easy VAT Processing leading to less risk of prosecution
- ETRs have led to timely preparation of reports
- ETRs have led to Increase in returns
- Fast and Efficient

Of the 34% who indicated that they have not benefited from the use of ETRs, cited the following reasons ranging from:

- The ETRs do not suit their kind of business
- The ETRs give inaccurate records and results for businesses that field sales
- The ETR Machine is not applicable to service providers
- Some businesses had already had point of sale software that did all calculations

In summary on the benefits, the benefits hold a strong case against the consequences.

Customs and Excise require VAT registered businesses to complete VAT Returns at regular intervals. These tax periods are set according to the needs of the business and the department. One is required to fill in a return so that VAT can be accounted for at the correct time. To evaluate the effectiveness of ETRs in fulfilling this objective, the respondents were asked to evaluate the use of ETRs, and the results are as in table 3.1. From table 3.1below, it was found that the use of ETRs was not a waste of funds and has assisted the business in many ways. They also don't ETRs break down too often. Further the introduction of ETR has assisted in cutting costs that the business used to incur in processing VAT; ETRs have really helped increase profits due to their efficient nature, and lastly the introduction of ETR has assisted ease the work of processing VAT returns. All the above were to a high extent considering the mean of two with a significant standard deviation.

Table 3.1: Effectiveness of Using ETRs in VAT processing

Effectiveness of Using ETRs in VAT processing	**Descriptive Statistics**		**Rank**
	Mean	**Std. Dev**	
ETR was a waste of funds and has not assisted the business in any way.	2.31	1.123	1
ETRs break down too often.	2.91	1.206	2
The introduction of ETR has assisted in cutting costs that the business used to incur in processing VAT.	3.00	1.496	3
ETRs have really helped increase profits due to their efficient nature.	3.06	1.402	4
The introduction of ETR has assisted ease the work of processing VAT returns.	3.84	1.367	5

Source: Research Data

3.4 Suggestions Made to the Kenya Revenue Authority (KRA) Regarding Electronic Tax Registers by the Registered VAT Taxpayers

The KRA has articulated a vision for Kenyan customs, and in the process of delivering such mandate, it has faced challenges while meeting its pillars that include: Building the capacity of customs to better carry out its responsibilities in a fast changing global environment; Better synergy and cooperation between customs, and customs and other government agencies, intergovernmental organizations and the private sector; A commitment to good governance; and Promoting intra-African trade and investment.

The respondents were asked to give some recommendation to the Kenya Revenue Authority (KRA) regarding electronic tax registers by the registered VAT taxpayers: From the research findings, the respondents made the following recommendation: ETRs are expensive, cost to be paid in instalments; ETRs should be compatible with computers in business premises; ETRs should be free since thy benefit the government in revenue collection and not the businesses; KRA should introduce ETRs that can handle field sales should be provided; KRA should introduce cheaper ETRs; KRA should introduce ETRs that have less rates or breakdowns; KRA should educate business people and customers on ETRs; KRA to introduce different system for different businesses; and KRA should introduce reimburse servicing expenses or terminate use of ETRs

4.0 Conclusions and Recommendations

4.1 Conclusions

Based on the results from data analysis and findings of the research, one can safely conclude the following;

First, Kenya has witnessed significant changes in many aspects of its economy over the last four decades, but like most developing countries, it has had to contend with the common problems that plague tax systems of developing countries (Karingi, Wanjala, Dec, 2005). ETRs have been introduced to get the country out of the problems that plague tax systems of developing countries. From the research data, most businesses (91%) have acquired ETR machines, which were acquired more than two years ago; an indication that most businesses in Kisii town have complied with the VAT requirements in Kenya. But most businesses (55%) have not received any refund which takes less than 1 month's time. Indeed this these refunds are on the premises that equipment necessary for automation may include new or rehabilitated offices, hardware, software, internal communication systems and connections to external networks, and they may also require the set-up of wireless networks and links.

Secondly, the timely filling of the monthly VAT returns is attributed to many factors. ETR is one of the factors. Most businesses indicated that timely filling of VAT returns was attributed to the adoption of the ETR machine. The use of ETR machines has also led to improved sales audit for the business, since everything that is VAT-able is captured to record. This is an indication that indeed the use of ETRs has improved sales audit on top of timely filling of monthly VAT returns. The frequency of sales auditing has reduced to daily giving prompted sales patterns and feedbacks. Stock taking is the act or process of inventorying merchandise or the supplies on hand (Christensen, 1997), as it was found that the use of ETRs has improved stock taking in addition to timely sales audit.

Thirdly, on the Effectiveness of Electronic Tax Registers in processing of Value Added Tax returns; Electronic tax Registers reduce the tax-reporting burden on businesses while improving the efficiency and effectiveness of government operations, provides timely and accurate tax information to businesses, increases the availability of electronic tax filing, and models simplified state tax employment laws. It was found that ETRs have enhanced the revenue collection resulting from sound sales and stock audits. Thus most businesses (66%) qualified the use of ETRs in business to have accrued many benefits to their businesses, citing the following reasons ranging from: Increased efficiency in sales audit; Increase in sales collection; Increased efficiency in stocktaking; Easy VAT Processing leading to less risk of prosecution; ETRs have led to timely preparation of reports; ETRs have led to Increase in returns, and Fast and Efficient.

Fourthly, customs and excise require VAT registered businesses to complete VAT Returns at regular intervals. These tax periods are set according to the needs of the business and the department. One is required to fill in a return so that VAT can be accounted for at the correct time. To evaluate the effectiveness of ETRs in fulfilling this objective, it was found that the use of ETRs was not a waste of funds and has assisted the business in many ways. They also don't ETRs break down too often. Further the introduction of ETR has assisted in cutting costs that the business used to incur in processing VAT; ETRs have really helped increase profits due to their efficient nature, and lastly the introduction of ETR has assisted ease the work of processing VAT returns. All the above were to a high extent considering the mean of two with a significant standard deviation.

Lastly, KRA has articulated a vision for Kenyan customs, and in the process of delivering such mandate, it has faced challenges while meeting its pillars that include: Building the capacity of customs to better carry out its responsibilities in a fast changing global environment; Better synergy and cooperation between customs, and customs and other government agencies, intergovernmental organizations and the private sector; A commitment to good governance; and Promoting intra-African trade and investment. Of the few (34%) businesses who indicated that they have not benefited from the use of ETRs, cited the following reasons ranging from: the ETRs do not suit their kind of business; the ETRs give inaccurate records and results for businesses that field sales; the ETR Machine is not applicable to service providers; and some businesses had already had point of sale software that did all calculations.

4.2 Recommendations for Improvement

The following challenges need to be addressed within the KRA: the cost and classification of the businesses which need to use ETRs. This can be achievable if only the following can be done in order to fully reap the fruits and benefits of ETRs: ETRs are expensive, cost to be paid in instalments; ETRs should be compatible with computers in business premises; ETRs should be free since thy benefit the government in revenue collection and not the businesses; KRA should introduce ETRs that can handle field sales should be provided; KRA should introduce cheaper ETRs; KRA should introduce ETRs that have less rates or breakdowns; KRA should educate business people and customers on ETRs; KRA to introduce different system for different businesses; and lastly, KRA should introduce reimburse servicing expenses or terminate use of ETRs.

4.3 Suggestion for Further Research

Areas of further research that were identified include a similar study to be carried out on other lucrative towns, A study on ETRs effectiveness by businesses and the benefits or challenges encountered and how efficient the ETRs help the Business in providing VAT returns. Crucially further research is should be done to determine how ETR contribution to a companies financial performance can be measured and to what extent can the benefits if any be quantified by the organizations.

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