EFFECT OF INNOVATION IN REVENUE COLLECTION PROCESSES ON ORGANIZATIONAL PERFORMANCE OF NAIROBI CITY COUNTY

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ABSTRACT

In today's competitive, fast-paced business landscape, getting the most out of available resources is not an option but rather a requirement. Organizations are taking a highly proactive approach to systems modernization and operations in an effort to increase efficiency and effectiveness in their operations. There is an increasing need by the government to collect much revenue by way of taxes to face the increasing financial expenditures budgeted by the country. The study aimed at assessing the influence of automation of revenue collection process on organizational performance, a case study of Nairobi County. The objectives of the study were to assess the extent in which online billing process influence the organization performance, to establish to what extent online receipting process influence organization performance, to determine in what ways online payment process influence organization performance and to determine how online response influence organization performance in Nairobi County. The design of this research was a descriptive survey research. The population for this study composed of 13 top level managers, 41 middle level managers and 102 low level managers. Stratified proportionate random sampling technique was used to select the sample of 111 respondents. The study use d a semi structured self-administered questionnaire to collect data from the respondents. Quantitative data was analyzed by descriptive analysis using SPSS and presented in form of frequency tables. Content analysis was used for the qualitative data and then presented in prose. The study also conducted a multiple regression analysis to establish the relationship between the variables. The study found that that online billing process had very great extent on organisational performance. The study deduced that online receipting process significantly affects organizational performance in Nairobi County. The research further established that online receipting makes the electronic communication between two parties easier compared to the physical receipting. The research also found that established that online payment greatly affected organisational performance in Nairobi County. The result of the findings showed that online responses affect the organisational performance to a very great extent. Basing on the findings of the study concludes that online billing process affects organisational performance. The study found that automation of revenue collection processes enables fairer and less corrupt tax systems. The study further concludes that online receipting process affects organizational performance in Nairobi County. The research established that online payment affected organisational performance in Nairobi County. The study finally concludes that online responses affect the organisational performance of Nairobi County. The study concludes that online billing process had the greatest effect on the organizational performance, followed by online receipting process, then online responses while online payment had the least effect to the organizational performance. Basing on the findings of the study and conclusions the study recommends management staff of organizations in Nairobi County should impress online billing process in their organisations.The study further recommends that the management team organisation in Nairobi County should implement and maintain a

proper online receipting process .The study again recommends to the management team of the organisations of Nairobi County need to have an efficient that online payment instead of manual collection of tax.

Key Words: *innovation, revenue collection processes, organizational performance, Nairobi City County*

INTRODUCTION

This chapter gives a brief introduction of the research study by looking into factors influencing the land rates. The chapter explores the objectives of this study while stating the research questions which this study hopes to have answers to. The chapter also states the problem at hand and goes ahead to give the objectives of the study while at the same time giving the significance of this study. Innovativeness is one of the fundamental instruments of organization strategies to enter new markets, to increase the existing market share and to provide the company with a competitive edge. Motivated by the increasing competition in global markets, institutions have started to grasp the importance of innovation, since swiftly changing technologies and severe global competition rapidly erode the value added of existing products and services. Thus, innovations constitute an indispensable component of the corporate strategies for several reasons such as to apply more productive processes, to perform better in the market, to seek positive reputation in customers' perception and as a result to gain sustainable competitive advantage (Wasilewski, 2010; Kuratko et al., 2011). Hornsby (2009) defined performance management as an ongoing process of communication between a supervisor and an employee in support of accomplishing the strategic objectives of the organization or in ways that contribute to achieving the organizations mission indispensably for a business organization.

In today's knowledge based world, providing public services are heavily depend on information and communication technologies. One of the important application area related to the use of information technologies in the public services is taxation. Electronic tax return, payment systems and tax automation systems generated in this area gain an increasing importance because of their ability to increase collections. Electronic tax management applications firstly started in the USA, and then spread in other developed and developing countries. Factors such as information and communication technologies which develop rapidly together with the process of globalization, gain strength and decrease costs and the increasing information sharing have extended the electronic tax management applications all over the world (de Wulf & Sokol, 2012).

Automation of revenue collection system involves investing in modern technologies for example: ICT in order to upgrade the revenue system to achieve integration and information sharing so as to enhance efficiency and effectiveness of the system. All Sectors of the County should put in place an effective and efficient revenue collection system in monitoring framework that ensures adequate supervision of the budgeted programs and project activities to enhance accountability and absorption of resources (Amin, 2013). Automation of revenue

collection systems and structures is instrumental in improving and simplifying administration of taxation through utilizing modern technologies for example ICT.

Public revenue collection is an integral component of fiscal policy and administration in any economy because of its influence on government operations. It is the fuel of every government as it is the main instrument through which government funding is ensured. Tax revenue collection should comply with best practices of equity, ability to pay, economic efficiency, convenience and certainty (Visser& Erasmus, 2012). For any organization to match in performance with the growth and expectations of its clients, it needs to increase its fiscal depth without incurring costly recurring overheads (Gidisu, 2012).

Revenue administration automation has a positive impact on the cost of tax administration, automation and effectiveness of revenue collection. In Addition, automation of process at revenue collection points has a positive impact on the tax clearance time (Haughton &Desmeules, 2001). Automation of Tax-Information Processing System does not require high equipment cost, but rather helps to ease the burden of over-staffing, high re-engineering cost confronted by among other government institutions.

Verifying that the correct amount of tax has been paid is an important component of improving compliance. Limited resources restrict the ability of revenue authorities to audit each and every tax return submitted (Amin, 2013). Increased focus on areas of greater revenue risk would form a major part of the strategy of any revenue authority, which relies on a self-assessment system. In order to curb tax evasion, revenue authorities make use of data base programs to assist with case selection. A data base is a research tool which combines data from various revenue information systems and identifies areas of risk to be investigated by the audit section (Dramod, 2014). External data base programs from other Government or non-Government agencies are also used, such as those of the Registrar of Companies, the Title Deeds Office, and others. As such, modernization of tax collection system has a great impact on the level of revenue collection in any economy (de Wulf & Sokol, 2012).

In today's knowledge based world, providing public services are heavily depend on information and communication technologies. The internet has simply become the basic information communication and sharing area of the future (UNCTAD, 2013). While information technologies provide austerity at an important level, they also improve the quality of the public service. One of the important application area related to the use of information technologies in the public services is taxation. Electronic tax return, payment systems and tax automation systems generated in this area gain an increasing importance because of their ability to increase collections. Electronic tax management applications firstly started in the USA, and then spread in other developed and developing countries. Factors such as information and communication technologies which develop rapidly together with the process of globalization, gain strength and decrease costs and the increasing information sharing have extended the electronic tax management applications all over the world (de Wulf & Sokol, 2012).

Automation system based approaches have become an important vehicle for achieving efficiency in tax administration (UNCTAD, 2014). Hence, automation impacts on the efficiency of tax administration. Efficiency of tax administration is defined as costs, tax clearance time and effectiveness of revenue collection. According to a study conducted in Ghana by Gidisu (2012) on the automation system procedure of the Ghana revenue authority on the effectiveness of revenue collection, Ghana Revenue Authority (GRA) adopted the UNCTAD developed Automated System for Customs Data and Management, which is fully integrated and covers the complete tax clearance process. The system handles customs declarations, accounting procedures, transit and other suspense procedures, generation of trade data that can be used for statistical and economic analysis (United Nations Economic Commission for Europe, 2011).

Several studies have identified automation as a predictor of efficiency and research shows a link between customs administration efficiency and automation (Engman, 2012). However, he posits that the costs of implementing, maintaining and operations are substantial, echoing the view advanced. Further, GRA continued to witness tax processing and clearance delays, despite its use of computer programs transfer electronic information required by tax authorities to authenticate tax declarations, accurate assessment of tax dues, increased time efficiency, reduced tax administration cost, and improved effectiveness of revenue collection (Sykesville, 2013). Recent studies associate significantly positive impact of automation on containing the high cost, time inefficiency and ineffective manual procedures of tax administration and revenue collection, corruption, delays and computing errors (Vasudevan, 2011; Peled, 2010; Zineldin, 2011). These scholars posit that automation is an avenue to efficiency and effectiveness in terms of clearance time and cost of revenue collection.

According to Amin (2013), local governments are a level of government below the central government (second-tier) in the case where the state is unitary, or below the regional, provincial or state government in the case of a federation (third-tier). The Constitution of Kenya 2010 introduces a two tier system, national and county governments. Further schedule four of the constitution mandates county governments to provide a range of services as set out by law to its constituents and has a legal authority to do so. It also has legal powers to enforce its executive and regulatory decisions on its citizens without resorting to unnecessary social pressures to achieve this. Its instruments define its area of authority and basis for representation on its political leadership platform. It has its own staff and revenue (Kamolo, 2014).

In Kenya, many of the second-tier governments have been faced with an impossible situation where their entire revenues have not been enough to meet their budgetary needs. Most of these have not had enough money to pay the wages of their employees. The situation in these second-tier governments is a fiscal crisis of unprecedented dimensions for the State Governments. Even with sincere efforts to correct the situation, it is estimated that it will take the Indian government several years to come out of the current fiscal imbalance. Consequently, the State is starved of funds to meet the essential investment needs in social and infrastructure sectors. Large borrowings are resorted to by several States just to meet the

current expenditure. Almost all the indicators of fiscal health of the State economies are steadily deteriorating. Unless drastic measures to correct the situation are resorted to without delay, several State finances will collapse. The situation in Kenya in regard to revenue maximization by local governments has also been wanting. For example, revenue collected is inadequate to achieve the objectives of self-reliance and structural transformation of the rural environment. Though there are many revenue avenues, there are some aspects of local revenue administration which are not fully operationalized; for instance, only rudimentary assessments of the ratable liabilities are undertaken (Manyasi, 2012).

STATEMENT OF THE PROBLEM

In today's competitive, fast-paced business landscape, getting the most out of available resources is not an option but rather a necessity. Organizations are taking a highly proactive approach to systems modernization and operations in an effort to increase efficiency and effectiveness in their operations. System automation allows firms to automate new platforms of their revenue collection systems in order to reap maximum benefits (Bahwan, 2012). System modernization provides measureable improvements in the efficiency and effectiveness of development and maintenance activities with on-time delivery and predictable quality (UNCTAD, 2013).

Despite Nairobi County being host to Kenya's capital city, the county has been faced with severe economic challenges that have seen increased incidences of crime. The county government in 2013 missed its target for locally collected revenue by 43% raising Kshs1.3 billion against a target of Kshs3.02 billion. The inability to raise the full budgeted revenue even with the wake of automation coupled with administrative challenges in accessing the county revenue fund account contributed to the low absorption rates (Republic of Kenya, 2014). Therefore, effective strategy for raising revenue to meet the high needs of the region is a significant milestone of turning the dwindling opportunities for the county government. Nairobi has been grappling with revenue losses due to a flawed collection system across all its revenue streams, a problem it hopes to cure with outsourcing of the service and automation. The county management expect this to increase as it seal all loopholes created by the manual system, which its estimated has been losing up to 30 percent of the revenue collected daily.

It is also true that Taxation which is one entry point for improving governance on the Country has received little attention. Tax revenues collection is relatively poor in Nairobi County. Further, taxes have often not translated into improvements in public service delivery. Raising additional tax revenue is further constrained by weak county legitimacy as taxes have often not translated into improvements in public service delivery. Most of the revenue collected is either wasted due to lack of proper databank, recovery system, proper records or poor ways of revenue collection by use of manual methods e.g. issuing of receipts manual to confirm payment but with no clear records due to unscrupulous employees issuing counterfeit receipts. This is a major drawback in the growth and development of the County.

Several studies have been done previously on strategy and revenue generation. Latema (2011) in a study on the business models for revenue generation and enhancement adopted by County Governments in Kenya, it recommends the need for county governments in Kenya to innovate new models of revenue enhancement and revenue generation. Victor (2014) looks at ways of engendering public participation in county government governance just giving a general overview of strategies of raising revenues at the county levels. Kariuki (2009) did a survey of revenue enhancement strategies by Local Authorities. It was observed that to enhance revenue collection by local authorities, political will, technological reforms, taxpayer education and incentives to those involved are required so as to enhance the revenue mobilization effort.

OBJECTIVES OF THE STUDY

The main aim of this study was to assess the effect of innovation of revenue collection process on organisational performance with reference to County Government of Nairobi.

SPECIFIC OBJECTIVES

1. To assess extent to which online billing process influence organization performance.
2. To establish how online receipting process influences organization performance.
3. To determine how ways online payment process influence organization performance.
4. To establish how online response influences organization performance.

THEORETICAL REVIEW

To fulfill the objective of this study, theories were employed to guide the study. Theories are important in any research study since they provide a model to test concepts and a framework to guide the study. The following theories were employed: optimal tax theory, theory of equal sacrifice and rational expectations theory of technology adoption. These theories were discussed here under.

Optimal Tax Theory

Optimal tax theory is based on the foundational work of Ramsey et al (1928). The standard theory of optimal taxation posits that a tax system should be chosen to maximize a social welfare function subject to a set of constraints. The social planner is posited as a utilitarian: that is, the social welfare function is based on the utilities of individuals in the society. Optimal tax theory is concerned with the ideal level and form of economic redistribution. The optimal tax theory seeks to determine how government can maximize social welfare through taxes and transfers, without increasing the sacrifice on the part of tax payers (Prichard, 2010).

Rational Expectations Theory of Technology Adoption

Rational expectations theory of technology adoption was developed by Davis (1989). In this theory, Davis posited that maximizing adoption of technology requires understanding of the motivations of different groups of users and tailoring the deployment messages and materials to address their perspectives. This theory indicates that much of the technology adoption decision depends on a firm's expectations about the benefits and costs of the technology. In

this research, the rational expectations theory was used to test the adoption of ETR Machines in VAT filing and see how Hotels have received this idea. This theory indicates that adoption of a technology such as ETR Machines depends on how the stakeholders value it in terms of bringing benefits to the business and / or reducing costs and increasing efficiency. This theory was therefore valuable since it provided the researcher with a theoretical framework to test the ETRs effect (Gutierrez, 2013).

Theory of Equal Sacrifice

Equal sacrifice theory which is based on the works of Seligman (1948) holds that each taxpayer should make the same sacrifice of utility that he or she obtains from income. The magnitude of a person's sacrifice depends not only on the size of the tax payment but also on the person's income and other circumstances. This principle is often used to justify introduction of taxes and methods of payment. This theory leads to two corollary notions of equity: vertical equity and horizontal equity. Vertical equity states that a person with a greater ability to pay taxes should contribute a larger amount. Horizontal equity states that taxpayers with the same ability to pay should contribute the same amount in taxes (Rao, 2010).

Benefit Theory of Taxation

Katsuya-Takii (2013) developed this theory and indicated that tax payers should make the least sacrifice when paying taxes which should be equal to the benefit they expect from payment of those taxes. This sacrifice can be seen in form of tax paid and the method of payment. One of the very generally accepted principles of taxation is that taxes may be levied according to the benefits derived; that is, the amount of each person's tax should correspond to the services which society renders him. Obviously, however, such a principle has, in practice, serious limitations (Katsuya-Takii, 2013).

EMPIRICAL REVIEW

This section focuses on various aspects of innovation strategies on organizational performance. In this study, automation of tax collection process has been defined as a new innovative based system that does not necessitate for tax payers to go to tax authorities to pay their taxes due (Gidisu, 2012).

Online Billing Process and Organizational Performance

Revenue collection system implementations in county government in Kenya have been to integrate different administrative functions into a more systematic and cost effective approach to gain a strategic advantage. The integration of administrative functions in the county government sector spans the integration of stock holders administration, human resource management, facilities management, and financial systems that have in the past been supported by separate legacy systems. The main advantages of Revenue collection system for county government are (1) improved information access for planning and managing the institution, (2) improved services for the faculty, students and employees, (3) lower business risks, and (4) increased income and decreased expenses due to improved efficiency.

Automation of tax collection is a new form of tax payment that does not require going to tax authorities and tax payment through information and communication. It is a new electronic government application and a new perspective for public service. In this study, automation of tax collection process has been defined as a new technology based system that does not necessitate for tax payers to go to tax authorities to pay their taxes due (Gidisu, 2012). System is composed of turning in tax declaration forms that defines tax owned to tax authorities in an electronic format and pay taxes due via electronic environments based on Internet through interactive bank accounts or by ATM bank machines. Electronic tax is called to collect taxes due by tax authorities in electronic environments via electronic declaration and electronic payment methods. In Turkey, most of tax payers declare their taxes due in electronic environments and pay their taxes by going to the bank or via Internet based interactive bank accounts. Of course, taxes declared online would be paid by personally going to tax authorities.

Automation of tax payment was first coined in US. Australia is among the countries that had implemented the system in the management of their municipalities (Turner et al, 2014). However, the purpose of the tax strategy in Turkey is to simplify tax laws and regulations and to harmonize tax law with European Union law. The development and utilization of modern technology in revenue mobilization has become a critical feature of every country particularly developing countries. This is as a result of the numerous usefulness modern technology offers in the development of municipalities.

Mitullah (2013) investigated the management of resources by municipalities in Turkey. The main aim of the study was to establish the effect of automation of tax collection by municipalities. The study involved a longitudinal causal study supplemented by in-depth qualitative interviews. Judgmental sampling was used in selecting 79 respondents out of 321 based on the size and level of activity. The study used both primary and secondary data sources. The study found that the automation of tax collection saves the cost and enhances the operations of the municipalities. The adoption of the system in Turkey saved the country $23.1 million dollars as the system presented a platform for few workers to be employed with optimum efficiency: Another usefulness is time savings, in Turkey the new system of municipal management offers great deal of effective management as the system is employed to perform a multiple tasks within a limited timeframe. Automation of tax collection also brings about efficiency and effectiveness in the declaration and subsequent payment of tax due. The situation in Turkey indicated that the new system offers a framework for all tax payers to be tracked. The ultimate of all of these is that more revenue is generated.

Online Receipting Process and Organizational Performance

The adoption of technology on online receipting process has showed a positive impact on organization performance in developed countries (Booze et al 2011). Compared to the traditional receipting process, an online receipting is a value-added service that allows a reliable online communication between the sender and the recipients (Zhou & Madhikeni, 2013). A certified receipting process has to guarantee the following aspects. First, the validity of the origin and the receipt exchange must not be denied and both the sender and Impeding

Mechanisms for Adopting a New Technology the recipient receive a confirmation in case the receipt is delivered successfully or if the delivery fails (Zhou & Madhikeni, 2013).

Furthermore, the correctness and the unmodified status of the content have to be assured (Maw & Khin, 2014). The both parties, the sender as well as the recipient, should be identified so that the restricted access of the transferred receipt can be ensured for them only. The main goal of a certified receipt service is not only to enable a reliable online payment, but also to make the electronic communication between two parties easier compared to the physical receipting. Since only identified and authenticated users are able to use this service, the recipient has the certainty that the online payment is legitimate and not an abusive phishing attempt. This communication includes not only the exchange of receipt messages, but also the transfer of documents. This service is useful for organizations, private citizens, or authorities, when making online payment (Katsuya-Takii, 2013).

Booze et al. (2011) investigated automation of revenue collection in Washington DC.A total of sixty three factories out of the sixty five managed participated in this study. Primary data was collected from production managers inquiring into the impact of online receipting process on customer satisfaction. The study found that the adoption of technology on online receipting process has showed a positive impact on organization performance in developed countries. Compared to the traditional receipting process, an online receipting is a value-added service that allows a reliable online communication between the sender and the recipients. The study recommended that the validity of the origin and the receipt exchange must not be denied and both the sender and Impeding Mechanisms for Adopting a New Technology the recipient receive a confirmation in case the receipt is delivered successfully or if the delivery fails.

Online Payment Process and Organizational Performance

Traditionally, tax were being collected by non-automated systems are manual systems of revenue collection which are centrally from one place. Before the introduction of automated systems of revenue collection, local authorities used manual systems of collections by using manual receipts. Problems such as high costs for collection, fraud, underpayment and leakages in revenue were worse by massively expanding the current taxable base without the use of adequate computerized solutions (Fjeldstad & Heggstad, 2012).

The Effects of automation of tax collection process on the Tax Administration in Kenya have been identified by the way ETR Machines have helped the government of Kenya to solve the problem of increased costs and time consumed in administering tax in Kenya. ETRs have also helped in reducing tax avoidance and tax evasion by companies in Kenya which is the reason why they were adopted since they contribute positively in the Tax Administration in Kenya. Tax Administration is one of the key issues that government puts in place as regards to the collection of taxes in order to ensure the intended purpose of tax payment and legislation is met. Kenya now has solved many issues which are associated with VAT and hence increasing its Tax Collection.

Prichard (2010) conducted a study on taxation and state building. The study aimed to compare none automated systems and automated systems in identifying fraud or rogue revenue collectors in United Kingdom. Primary data was collected using structured interview guides with the managers of revenue authorities. Content analysis was used to perform data analysis where the interview responses were structured based on various themes as espoused by objectives of the study. Secondary data were also used to corroborate the results of the interviews by looking at the documents for the reforms and modernization program. The study established that none automated systems of revenue were attributable to problems of tracking and identifying fraud or rogue revenue collectors since they are only compounded by the usage of manual or centralized systems due to the resources and overheads needed to monitor and control such problems. Manual collection of payments at several service points lead to delayed customer service with built- in Risk Of manual cash management Minimal payment channels.

Kamolo (2014) conducted an analysis of risks that affect value added tax revenue collection by Kenya Revenue Authority. The purpose of the study was to analyze the risks that impact on Value Added Tax (V AT) revenue collection by the Kenya Revenue Authority (KRA). The study was necessitated by the declining VAT revenue despite KRA implementing several innovative strategies to maximize revenue collection. The study was to identify the risks that affect revenue collection and secondly to analyze the impact of those risks as to whether they are high, moderate or low. The sampling technique applied was probability sampling which used stratified sampling. This was important as all elements responsible for identifying risks at every level was captured. The semi structured questionnaires has been administered to the staff. As this is a policy oriented research, the qualitative data analysis method has been used. The study found out that the risks are well understood and identified by the tax managers and some tax auditors. However, the revenue officers who are the majority did not identify the risks adequately as the other groups. The risks do affect revenue collection. The study found out the most of the identified when analyzed has high rate occurrence and high impact on the revenue receivable by the Authority.

Online Response and Organizational Performance

Automation of tax collection allows tax data entry, automated processing, computation and analysis as well as automatic production of tax reports and feedback required for control and risk management purposes (Holniker, 2012). According to Holniker (2012), automation of tax collection includes developing powered computer programs to carry out tax assessments and computations; and to determine tax dues at high levels of speed and accuracy hence ensuring quick response to the recipient. Automation argues Katsuya-Takii (2013) is a catalyst and stimulus for customs modernization.

Booze et al (2011) saw the main functions of automation of customs administration to include: controlling cross-border flow of goods, ensuring compliance with government rules and regulations, collecting of the duties and taxes due according to the national customs tariff and tax code, and protecting a country against the importation of goods and materials intended for illegal purposes. Customs automation makes extensive use of computer systems

consisting of comprehensive and integrated software packages which Greenwood et al (2013) describes as cargo control, to monitor all movements of importation, transit and exportation, and ensure that all goods are duly cleared before release; and declaration processing, to capture and process data for duty and revenue collection.

Fjeldstad and Heggstad (2012) also pointed out that traditionally, tax were being collected by non-automated systems are manual systems of revenue collection which are centrally from one place. Before the introduction of automated systems of revenue collection, local authorities used manual systems of collections by using manual receipts. Problems such as high costs for collection, fraud, underpayment and leakages in revenue were worse by massively expanding the current taxable base without the use of adequate computerized solutions.

Graham and Wendy (2013) adds statistics and reporting, to extract data for dissemination of foreign trade statistics and to generate management reports for customs for efficient communication between customs, traders, and other government agencies. The system increases transparency in the assessment of export and import duties and taxes, reduces substantially the customs clearance time, and predictability. The overarching benefit is the direct and indirect reduction in administration cost and increased effectiveness in collection of customs revenue (Katsuya-Takii, 2013).

Automation of tax collection is a new form of tax payment that does not require going to tax authorities and tax payment through information and communication. It is a new electronic government application and a new perspective for public service. System is composed of turning in tax declaration forms that defines tax owned to tax authorities in an electronic format and pay taxes due via electronic environments based on Internet through interactive bank accounts or by ATM bank machines. Electronic tax is called to collect taxes due by tax authorities in electronic environments via electronic declaration and electronic payment methods. In Turkey, most of tax payers declare their taxes due in electronic environments and pay their taxes by going to the bank or via Internet based interactive bank accounts. Of course, taxes declared online would be paid by personally going to tax authorities.

Kariuki (2012) investigated the impact of automation as a structural change strategy on customs clearing procedures at Kenya Revenue Authority. The basis of the problem regarding the impact of automation on processes that the research study aimed to explore is discussed based on the following research objectives: to establish whether automation has resulted to efficient service delivery at the customs service department, to establish if automation has led to skills improvement of staff working at Kenya Revenue Authority and other stakeholders; what impact the improved skills have had on performance at the customs department, to establish if automation has brought about improvement in effectiveness of customs clearance procedures, to establish if automation of customs clearance procedures has resulted in cost saving, to establish if automation has improved governance in the customs department. The target population of the study consisted of licensed customs clearing agents. Respondents of the study involved 57 licensed customs clearing agents based in Nairobi and Mombasa. Interview guides were used to collect data from the agents. Quantitative and

qualitative analysis techniques were used to analyze the data. The findings emerging from the analysis were used to compile this report. The research study concluded that with the introduction of the Trade X-Simba system in the customs department, there has been improved efficiency, improved effectiveness, improved staff skills, reduced costs and improved governance. Recommendations based on the findings of this study propose that the management of KRA consider the security of the system from manipulation, which is a major threat.

RESEARCH METHODOLOGY

The design of this research was a descriptive survey research. This design refers to a set of methods and procedures that describe variables. It involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data. Descriptive studies portray the variables by answering who, what, and how questions (Babbie, 2004). According to Tewksbury (2009), descriptive design was appropriate because it was less expensive and could enable the researcher to examine data from a wider area within a short time.

The population for this study composed of the Nairobi county government staff. The study was on 13 top level managers, 41 middle level managers and 102 low level managers. This was because the management staff deals with the day to day management of the county's operations and therefore could provide relevant information needed in the study. Stratified proportionate random sampling techniques were used to select the sample. According to Cooper and Schindler (2003), stratified random sampling frequently minimizes the sampling error in the population. This in turn increases the precision of any estimation methods used. According to Mugenda and Mugenda (2013), from normal distribution the population proportion can be estimated to be

$$n = \frac{Z^2 PQ}{\alpha^2}$$

Where: Z = is the Z – value = 1.96
  P = Population proportion 0.50
  Q = 1-P
  α = *level of significance* = 5%
  $n = 1.96^2 \times \dfrac{0.5 \times 0.5}{0.5^2}$
  n= 384

Adjusted sample size:
  n'= n/ [1+ (n/N)]
  n.'= 384/ [1+ (384/156)]
  Approx. = 111 respondents

Both primary and secondary data were collected. Primary data was collected through the use of structured questionnaires, because of the nature of the variables where the opinions, perceptions and feeling of the respondents was sought. The respondents to the questionnaires

are also literate. Questionnaires items were closed ended or open ended type. As regards to the former, the questions only allowed specific types of responses while with respect to the open ended type, the respondents were state responses as they wish. Kothari (2004) observed that questionnaires were very economical in terms of time, energy and finances. Similarly, it yields, quantitative data which were easy to collect and analyze. A method of hand delivery and collection on the same day was tried but where it was not possible, the method of hand delivery and collection on the following day was used.

The returned questionnaires were checked for consistency, cleaned, and the useful ones coded and analyzed using the Statistical Package for Social Scientists (SPSS) computer software. Frequency tables and figures were used to present the data for easy comparison. Content analysis was used for the qualitative data and then presented in prose. The study also conducted a Pearson's correlation analysis to establish the relationship between the variables. In addition, the researcher conducted a multiple regression analysis so as to determine the effects of each of the four variables on Organizational Performance. The regression equation was:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where: Y = Organizational Performance

β_0 = Constant

X_1 = Online billing process, X_2 = Online Receipting, X_3 = Online Payment, X_4= Online Response, ε =Error Term

RESEARCH RESULTS

Reliability Analysis

Overall reliability analysis was done using the split half method. This was done by collecting data from a given number of respondents into two halves (often odd-even). A coefficient of 0.7 or more implied that there was a high degree of data reliability.Thus formed the study's benchmark.

Table 1: Reliability Analysis

	Cronbach's Alpha
Online billing process	.933
Online receipting	.871
Online payment	.993
Online response	.758

Multiple relationships among dependent and independent variables

The adjusted R2 was used to establish the predictive power of the model, which showed that all the variables combined explained 87.7% (Adjusted R2 = 0.877) of the variability of performance of Nairobi County.

Table 3: Summary of Regression Model Output

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.940[a]	.883	.877	1.51524

The study found that independent variables selected for the study (i.e. online billing process, Online Response, Online Payment and Online Receipting) accounted for 87.7% of the variations in organizational performance. According to the test model, 12.3% percent of the variation in organizational performance could not be explained by the model.

The established multiple regression equation for predicting organizational performance from the four independent variables was:

$$Y = -5.626 + 0.341 X_1 - 0.148 X_2 + 0.079 X_3 + 0.139 X_4$$

Where, Y represents predicted Organisational Performance

X1 represents online billing process, X2 represents Online Receipting, X3 represents Online Payment and X4 represents Online Response

Table 3: Analysis of variance the four independent variables

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	1330.492	4	332.623	144.873	.000[b]
1	Residual	176.789	77	2.296		
	Total	1507.280	81			

The probability value of 0.000 indicates that the regression relationship was significant in predicting the effects of online billing process, online response, online payment and online receipting on organizational performance. The calculated F (144.873) was significantly larger than the critical value of F= 2.406. This again shows that the overall test model was significant.

Table 4: Pair-wise comparisons of the coefficients of determination using t-test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-5.626	1.177		-4.778	.000
Online billing process	.341	.072	.475	4.727	.000
Online Receipting	.148	.083	.145	1.790	.077
Online Payment	.079	.063	.089	1.261	.211
Online Response	.139	.048	.279	2.899	.005

The regression equation above has established that taking all factors into account (online billing process, online response, online payment and online receipting) constant at zero organizational performance was -5.626.

Online Billing Process

The findings presented also show that taking all other independent variables at zero, a unit increase in the online billing process would lead to a 0.341 increase in the scores of organizational performance. The findings showed that online billing process had very great extent on organisational performance. The study agreed that automation of revenue collection processes enables fairer and less corrupt tax systems. Furthermore, the study found that automation enhances the operations of the municipalities this is in according to IMF (2010a) who noted that the development of quality ICT human resources is a pre-requisite to the development of a viable ICT sector to integrate Revenue collection system. It ensures that ICT development, implementation and exploitation are an integral and sustainable component of development specifically for Kenyan government and more so the county government in Kenya. However the study was neutral that automation of revenue collection processes offers great deal of effective management, the automation of tax collection saves the cost, automation of tax collection also brings about efficiency and effectiveness in the declaration and subsequent payment of tax, automation of tax collection improves tax mobilization, automation of tax collection improves certainty and consistency of tax treatment. This finding supports the study of Gidisu (2012) which found that major usefulness Turkey is enjoying from the adoption of automation tax collection in the operation and management of municipalities: The automation of tax collection saves the cost and enhances the operations of the municipalities.

Online Receipting Process

The study also found that a unit increase in the scores of online receipting would lead to a 0.148 increase in the scores of organization performance. The study deduced that online receipting process significantly affects organizational performance in Nairobi County. This is in correlation with the study of Booze et al (2011) which showed that the adoption of technology on online receipting process has showed a positive impact on organization performance in developed countries. The study further found that aspects of online receipting such as efficiency and effectiveness in the declaration, validity of the origin legitimate and reliable online communication significantly affect organizational performance. The research further established that online receipting makes the electronic communication between two parties easier compared to the physical receipting. The study also doubted whether online payment was legitimate and not an abusive phishing attempt and also online receipting ensured the correctness and the unmodified status of the content. The findings were supported by Booze et al. (2011) who investigated automation of revenue collection in Washington DC.A total of sixty three factories out of the sixty five managed participated in this study.

Online Payment Process

Further, the findings shows that a unit increases in the scores of online payment would lead to a 0.079 increase in the scores of organizational performance. The findings indicate that online payment significantly affected organisational performance in Nairobi County. This agrees

with the Price Waterhouse Coopers (2012) study which indicated that the use electronic tax registry was introduced in June 2014 to ensure that sales are properly recorded by registered taxpayers in the country. The study also found that reduced collection cost and time saving affects organizational performance to a great extent. The study also found that compliance with government rules and leakages in revenue payment channels had a moderate effect on organizational performance. This is in conjunction with Prichard (2010) who conducted a study on taxation and state building. The study aimed to compare none automated systems and automated systems in identifying fraud or rogue revenue collectors in United Kingdom. The results showed that, automation of revenue collection processes controls cross-border flow of goods, ensuring compliance with government rules and regulations. The findings are supported by Kamolo (2014) who conducted an analysis of risks that affect value added tax revenue collection by Kenya Revenue Authority.

Online Responses

The study also found that a unit increase in the scores of online response would lead to a 0.139 increase in the scores of performance of Nairobi County. The study revealed that online responses affect the organisational performance to a very great extent. The study further assessed that enhanced complains handling affected organizational performance to a great extent as well as improved information access. However, the research was neutral that instant feedback and enhanced tax data entry moderately affected performance of organization in Nairobi County. According to Holniker (2012), automation of tax collection includes developing powered computer programs to carry out tax assessments and computations; and to determine tax dues at high levels of speed and accuracy hence ensuring quick response to the recipient. The analysis also showed that automation of revenue collection processes reduces substantially the customs clearance time, and predictability. The study found that automation of revenue collection processes ads payment and accounting, to register and account for payments by importers, automation of revenue collection processes the system increases transparency in the assessment of export and import duties and taxes, automating customs administration leads to increased collection of duties and taxes. The study of Swindley (2011) showed that adds payment and accounting, to register and account for payments by importers and exporters; and risk management, to select those consignments bearing higher risks, concealing duty and tax noncompliance, illegal importation of drugs or materials aimed for terrorist activities.

CONCLUSIONS

Basing on the findings of the study concludes that online billing process affects organisational performance. The study found that automation of revenue collection processes enables fairer and less corrupt tax systems. Furthermore, it was clear that automation enhances the operations of the municipalities. However, it was not clear whether automation of revenue collection processes offers great deal of effective management, saves the cost, brings about efficiency and effectiveness in the declaration and subsequent payment of tax, improves tax mobilization and improvement of certainty and consistency of tax treatment.

The study further concludes that online receipting process affects organizational performance in Nairobi County. Research found that aspects of online receipting such as efficiency and effectiveness in the declaration, validity of the origin legitimate and reliable online communication significantly affect organizational performance. Furthermore, the study deduces that electronic communication between two parties easier compared to the physical receipting. The study concludes that, online receipting was a value-added service that allowed a reliable online communication between two parties easier compared to the physical receipting. It was clear in the study that online payment was legitimate and not an abusive phishing attempt in ensuring the correctness and the unmodified status of the content.

The study finally concludes that online responses affect the organisational performance of Nairobi County. It was noted that proper risk management affected organizational performance in Nairobi County greatly. The study further assessed that enhanced complains handling affected organizational performance as well as improved information access. There was a level of doubt whether instant feedback and enhanced tax data entry affected performance of organization in Nairobi County. The study comes to concludes that automation of revenue collection processes reduces substantially the customs clearance time, and predictability. It was enunciated that automation of revenue collection processes adds payment and accounting, to register and account for payments by importers, increases transparency in the assessment of export and import duties and taxes, increased collection of duties and taxes. However, the study found that automation of revenue collection processes moderately enhances separation of payment of duties and taxes from physical clearance of goods and faster electronic lodgment of customs declarations and that automation of revenue collection processes reduce physical examination of goods.

RECOMMENDATIONS

Basing on the findings of the study and conclusions the study recommends management staff of organizations in Nairobi County should impress online billing process in their organisations. The system will enable fairer and less corrupt tax systems which will lead to improvement of tax collection. The automation of revenue collection processes also will offer great deal of effective management, saving cost, as well as bringing efficiency and effectiveness in the declaration and subsequent payment of tax.

The study further recommends that the management team organisation in Nairobi County should implement and maintain a proper online receipting process such as efficiency and effectiveness in the declaration of tax, validity of the origin legitimate and reliable online communication. The proper managed online receipting process brings efficiency in the organizations and hence improving it, since the study established that the organization with efficient tax receipting process have better performance.

The study again recommends to the management team of the organisations of Nairobi County need to have an efficient that online payment instead of manual collection of tax. This system will contribute to reduction of collection cost and saves time hence increasing the amount of tax collected. The online payment system should base on tracking and identifying fraud or

rogue revenue collectors since they are only compounded by the usage of manual or centralized systems due to the resources and overheads needed to monitor and control such problems.

Online responses are also important aspects that contribute to organisational performance. The system should be properly risk managed by efficient management team of the organization. The organizations should not assume the complaints that are raised by different stakeholders of the organization. The organization should establish a strong committee which will be charged of listening comments of the different people and give instant feedback for decision making.

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