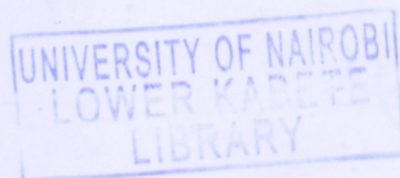


**THE EFFECT OF INFORMATION TECHNOLOGY STRATEGY ON  
SERVICE DELIVERY IN THE ROAD TRANSPORT DEPARTMENT  
OF KENYA REVENUE AUTHORITY**

**BY**

**NORAH YIAPAN**

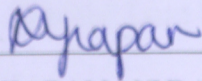


**A Research Project Submitted in Partial Fulfillment of the Requirement  
of the Master of Business Administration Degree, School of Business,  
University of Nairobi**

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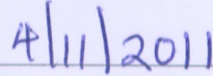
## DECLARATION

This research project is my original work and has not been presented for a degree in any other university



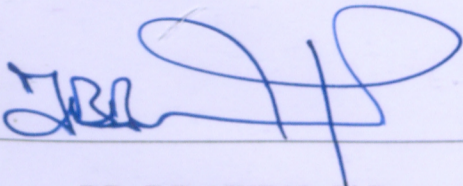
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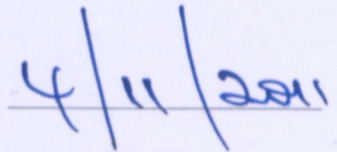


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This research project has been submitted for examination with my approval as the university supervisor.



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## **DEDICATION**

To my husband Wilson Ole Mosiany and my parents Dr and Mrs Yiapan. Your prayers and moral support have been a source of encouragement during the entire program. May the almighty God bless and keep you in good health.

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## ABBREVIATIONS AND ACRONYMS

CCRS	Common Cash Receiving System
CIC	Compliance and Information Centre
CRS	Cash Receiving System
DL	Driving License
DLMS	Driving License Management System
ICT	Information and Communication Technology
IT	Information Technology
KRA	Kenya Revenue Authority
PSV	Public Service Vehicle
RTD	Road Transport Department
TEAMS	The East African Marine System
TLB	Transport Licensing Board
VMS	Vehicle Management System



## ABSTRACT

One of the main challenges faced by organizations is ensuring that services delivered to their customers meet the required customer expectations. An organization can use Information technology (IT) to reduce costs, upgrade product quality, improve customer service or even integrate a customer's operations with its own thus assuring repeat business. This study seeks to establish the effect of the information technology strategy on service delivery in the Road Transport Department of Kenya Revenue Authority. Demand for quality services from Kenya Revenue Authority and the Road Transport Department in particular is growing due to more taxpayer awareness on their rights and growth in the road transport sector. One of the quality objectives of Kenya Revenue Authority is to re-engineer business processes and modernize technology with the ultimate goal of improving taxpayer services. In assessing the effectiveness of information technology on service delivery in the Road Transport Department, the research was conducted using a case study design. With the implementation of information technology, this research established that the Road Transport Department has realized several benefits key among them being faster service delivery and increased revenue collection. The main limitation of the study is the department has not fully computerized its processes and products and it is therefore partially manual hence the effectiveness of IT on service delivery cannot be effectively measured. From the study it is recommended that further research should be done once the integrated online system where all RTD services will be web based is fully functional, then it will be easier to gauge its success and effectiveness on service delivery.

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

All organisations are currently undergoing some type of change. These often involve radical transitions within an organisation that encompass strategy, structure, systems, processes and culture. Haimann and Scott (1985) argues that technological change has had the greatest impact on the nature of management. New applications of science have forced managers to adapt not only to revolutionary products and methods of production but also to the effects these products and methods have had on the work force and organizational structure. Strategic management is a field that deals with the major intended and emergent initiatives taken by managers involving utilization of resources, to enhance the performance of the organization in their external environments. It entails specifying the organization's mission, vision and objectives, developing policies and plans, often in terms of projects and programs, which are designed to achieve these objectives, and then allocating resources to implement the policies and plans, projects and programs.

If change is to be successful it has to link the strategic and the operational and everyday aspects of the organization. This emphasizes the importance not only of translating strategic change into detailed resource plans, key tasks and the way the organization is managed through control processes but also of how change is communicated through the everyday aspects of the organization. The involvement of those who will be affected by strategic change fosters a more positive attitude to change as people see the constraints

the organization faces as less significant and are likely to feel increased ownership of and commitment to a decision or change process. It may therefore be a way of building readiness and capability for change. The principles of taxation include equality, certainty in time of payment, manner of payment and quantity to be paid.; convenient timing for the taxpayer and efficient collection i.e. lowest cost for both the taxpayer and the revenue body. Effective taxpayer services help achieve voluntary compliance by improving taxpayer's understanding of the law and making it easier and less costly to comply

Today's taxpayer is more informed and has often accessed publicly available information before contacting the tax administration. He uses multiple service channels and has internet access. They also expect the same type of service they receive from private sector organizations. He also wants to be consulted and wants to know what to expect in terms of service standards. Tax administrators need to know whether they are delivering the right services, to the right taxpayers and need to have a mechanism to measure whether the services have a positive or negative impact.

### **1.1.1 Concept of Strategy**

According to Johnson & Scholes (2008), strategy is the direction and scope of an organisation over the long term which achieves advantage in a changing environment through its configuration of resources and competencies with the aim of fulfilling stakeholder expectations. A strategy usually begins with a vision of where the organisation intends to be at some future date. The vision might call for continuation of a present strategy or for the development of a new strategy that would require radical

organisational changes. Thompson & Strickland (2007) argue that a company's strategy is management's action plan for running the business and conducting operations. The crafting of a strategy represents a managerial commitment to pursue a particular set of actions in growing the business, attracting and pleasing customers, competing successfully, conducting operations and improving the company's financial and market performance. The tight connection between competitive advantage and profitability means that the quest for sustainable competitive advantage always ranks center stage in crafting a strategy. The best indicators of a company's strategy are its actions in the market place and the statements of senior managers about the company's current business approaches, future plans and efforts to strengthen its competitiveness and performance. Strategy is needed in order for organizations to obtain a viable match between their external environment and their internal capabilities.

### **1.1.2 Information Technology Strategy**

According to Rowe & Mason (1994) today's strategic managers must be prepared to invoke new and flexible approaches to strategic management in order to ensure their company's survival in the turbulent and uncertain business environment. One of the principal changes in the horizon is the role of information as a strategic imperative. The rate of increase in the application of Information technology (IT) is nothing short of outstanding. Information can play 3 key roles in a firm's strategy. Firstly it can be used to report the transaction of the business and secondly it can be used to guide business decision making by informing the decision maker how well the business is functioning, what problems need attention and what alternatives should be considered. The third role

is the information can be an integral part of the product or service the business offers to its customers. A strategy that emphasizes closeness to customers focuses on revenue generation as opposed to cost reduction and requires that a business be obsessed with providing service and quality as distinctive competencies. A company can use IT to reduce costs, upgrade product quality, improve customer service or even integrate a customer's operations with its own thus assuring repeat business.

Hax and Majluf (1996) noted that linking technology and business strategies is a demanding task that has central importance in strategy formation. Now that technology is a critical source to achieve and sustain competitive advantage, the ability to incorporate technology into business strategy can make the difference between a winning or a losing strategic alternative. The role of technology has become so pervasive in the business world that it is appropriate to say there is hardly any significant industry that can be classified as low-tech. In fact technological forces are restructuring industries and defining new ways to compete. Managers are confronted with the demanding task of accelerating the speed at which innovations in new products and processes are translated into profitable commercial ventures. John Tschohl (2001) argues that the internet is growing faster than all the other technologies that have preceded it. With the advent of the internet, small start-up companies began to successfully compete with large corporations in selling their products and services to a global market via the World Wide Web. E-service is speed, technology and price built around service. While technology has been an unprecedented boon to business, it is not a panacea. If not used properly, it can leave customers frustrated and angry.

### 1.1.3 Service delivery

The concepts of strategy and strategic management are just as important in the public sector as in commercial firms. Many parts of the public sector provide services to paying customers in the same way as commercial organisations. For an organisation that competes on the basis of the services it provides, competitive advantage is likely to be much more related to the extent to which customers value less tangible features. This could be, for example, the soundness of advice given, the attitude of staff, the ambience of offices, the swiftness of service and so on. Customers are becoming increasingly demanding of quality services therefore an organisation must make a deliberate effort to keep up with customer expectations. It is important to note that technology will never replace the need for good customer service.

Consumers who contact a business over the internet should be treated just as if they were standing in your office. Response to inquiries should be prompt and courteous. Technology driven changes in providing services to taxpayers include the use of dedicated call centres and the use of modern methods for paying taxes through direct debits via the banking system and online payment via internet. Increasing the range of services offered by internet is currently the way to go for organizations in Kenya Tax administrators have a variety of channels at their disposal for delivering services. These include the operation of physical sites (e.g. office inquiry centres) enabling face to face contact and the provision of phone inquiry services including through use of modern call centre facilities. Communication by written correspondence using postal services and

electronic services through the internet are other channels of service delivery. An advantage of internet is that services can be provided 24 hours/7 days a week. However not all taxpayers have access to internet services and some segments of clients may be reluctant to use them.

#### **1.1.4 Kenya's Public Sector**

The Public sector in Kenya has experienced several reforms aimed at improving performance and service delivery. The reform agenda was enhanced by the government when the Result Based Management (RBM) approach was introduced. This was to ensure that efficient management of the Public service is achieved and acquire the driving force for the broader Public Service. The reform strategies the government has adopted since 2003 in order to improve service delivery in the public service include the rapid results approach, performance contracting, citizen service delivery charter and institutional capacity building. Performance contracting is part of the broader public sector reforms aimed at improving efficiency and effectiveness in the management of the public service. Signing a performance contract commits a public official to perform to, or beyond, the specified levels. This holds public officials accountable for results and therefore helps in converting tax shillings into goods and services effectively and efficiently. It also creates transparency in the management of public resources.

In the context of governance, the charter, variously referred to as "citizen service delivery charter" or "customer service delivery charter", is a written statement prepared by a public institution which outlines the nature, quality and quantity of service that citizens

should expect from the institution. The charter also sets out details of any user charges, how users may seek redress if they are dissatisfied with the service or in the event the institution does not live up to the commitments in the charter. All service-based government institutions are required to develop and implement citizen service delivery charters. The public service must provide support and collaboration to all key sectors of the economy. The public service is at the core of provision of national security, dispensation of justice, promotion of an enabling environment for social and commercial activities necessary for a thriving private sector, and the creation of economic growth. Improved public service efficiency is a catalyst to other sectors of the economy.

### **1.1.5 Kenya Revenue Authority**

The Kenya Revenue Authority was established by an Act of Parliament (Cap. 469) on July 1, 1995 for the purpose of enhancing mobilisation of Government revenue, while providing effective tax administration and sustainability in revenue collection. Before 1995, the revenue collection functions of the Government were distributed among at least five different ministries and/or Departments. Lacking in co-ordination, their performance was characterised by inefficiency and low levels of accountability. The rationale behind the establishment of the Authority arose from the need to enhance efficiency, transparency and accountability in this critical area of the public sector. In particular, the main functions of the Authority are to assess, collect and account for all revenues in accordance with the written laws and the specified provisions of the written laws and to advise on matters relating to the administration of, and collection of revenue under the written laws or the specified provisions of the written laws. A Board of Directors,



consisting of both public and private sector experts, makes policy decisions to be implemented by KRA Management. The Chairman of the Board is appointed by the President of the Republic of Kenya. The Chief Executive of the Authority is the Commissioner General who is appointed by the Minister for Finance.

The Authority is a Government agency that runs its operations in the same way as a private enterprise. In order to offer better single-window services to taxpayers, KRA is divided into five Regions namely Rift Valley Region, Western Region, Southern Region, Northern Region and Central Region. In terms of revenue collection and other support functions, the Authority is divided into five Departments namely:- Customs Services department, Domestic Taxes department, Road Transport department, Investigations & Enforcement department and Support Services department. Each Department is headed by a Commissioner. In addition to the five divisions, the Authority has seven service departments that enhance its operational efficiency. These are Human Resources department, Finance department, Board Corporate Services & Administration department, Internal Audit department, Information & Communication Technology department, Research & Corporate Planning department and Marketing & Communication.

KRA was on 23<sup>rd</sup> September 2007 awarded the ISO 9001:2001 certification by SGS Kenya after meeting the required International Standards. This certification has elevated KRA to the elite group of global institutions that embrace best practices for business efficiency and quality service provision. In the recent past, the government has

encouraged ministries, parastatals and agencies to attain the ISO 9001 certification system standard which would ensure high quality of service delivery and customer satisfaction. On 31<sup>st</sup> March 2011 awarded the ISO 9001:2008 certification system standard for the scope assessment and collection of revenue for the administration and enforcement of the laws relating to revenue and for connected purposes. The ISO 9001:2008 standard is the latest publicly available and internationally recognized set of benchmark standard for customer focused quality management principles. The ISO 9001:2008 standard is based on eight principles that involve all people in the organization and is what helps the organization to continuously exceed customer expectations.

#### **1.1.6 Road Transport Department of KRA**

Road Transport Department (RTD) is one of the revenue departments of the Kenya Revenue Authority with its headquarters in Times Tower Building, Nairobi. Operations of the department are however decentralized in all regional offices in Kenya with RTD personnel spread across all the stations. The Road Transport Department was established by an Act of Parliament (The Traffic Act Cap 403 of 1954), to regulate road transport industry in Kenya under the Ministry of Transport and Manpower. The Department is entrusted with the responsibility of registration of motor vehicles and trailers, licensing of motor vehicles and drivers, safe custody of all motor vehicles and drivers records and collection of licensing fees (with the exemption of road license fee which was transferred to fuel development levy under Ministry of energy) and other levies relating to the administration and enforcement of laws as provided under various Acts including: The Traffic Act Cap 403, The Second Hand Motor Vehicles Purchase Tax Act Cap 484, and

The Transport Licensing Act Cap 404. Administratively, the department falls under the Kenya Revenue Authority and all revenues realized through licensing fees form part of the Authority's revenue collection. The Ministry of Transport, on the other hand, handles all road transport policy issues of the department. To fulfill its legislative roles and mandates the department is divided into the following six sections namely Registration of Motor Vehicles, TLB Licensing, Transfer of vehicle Ownership and Duplicate logbooks, Driving Licenses, Motor vehicles Registry and Dealers License/policy. The key functions and outputs of the road transport department are given in table 1

**Table 1: Functions and output of RTD**

Functions	Output
Registration of motor vehicles and trailers	Number plates and logbook
Licensing of motor vehicles and trailers	TLB licences
Licensing of drivers and conductors	PSV badges and licence for conductors and drivers
Keeping of motor vehicles and drivers records	Copy of motor vehicle and drivers records
Licensing of motor vehicle dealers	Second hand motor vehicle dealers licence General dealers licence New motor vehicle dealers licence
Licensing of driving schools and instructors	Instructors licence
Transfer of motor vehicle ownership	Logbook
Duplicate registration books and driving licenses	Duplicate logbook and driving license
Issuance of motor vehicles copy of records	Copy of records

Source: Kenya Revenue Authority (2007), *Survey on service delivery in RTD*

## 1.2 Research Problem

According to Johnson and Scholes(2002) the starting point for understanding strategic capability is an understanding of what customers value. Customers in any market segment will have threshold requirements on all features of the product or service. Technology is a critical source to achieve and sustain competitive advantage, the ability to incorporate technology into a business strategy can make the difference between a winning or a losing strategy. In the public services the concept of critical success factors is also valid except that it may relate to a stakeholder other than the customer. The registration and licensing of motor vehicles and driver's has in the past being a long and manual process. This had subsequently resulted in numerous customer complaints on delays in service delivery thus creating a loophole for corruption in the market. In response to this KRA embarked on an ambitious plan in the gradual automation of its processes key among them being the electronic capture and storage of motor vehicle records in the Movers system.

In 2006 the Vehicle Management System (VMS) and Simba 2005 System were linked, allowing for payment of motor vehicle registration fees with import duty. The integration process enabled vehicle importers to seamlessly pay for the registration along with other relevant customs duties online through the Simba System. The VMS was also integrated with the PIN database to allow for verification of the PIN numbers for RTD transactions. Several studies and surveys have been carried out on reforms and modernization programmes in Kenya Revenue Authority. Odundo (2007) found out that involvement of staff and key stakeholders at the initial stage of implementation of reforms is important in

order to reduce resistance to change. A study by Matundura (2008) on implementing turnaround strategy at Kenya Revenue Authority found out that with the introduction of modern technology in the organization old employees were replaced with fresh graduates who were better placed to embrace technology than the old guards.

A survey by the research and corporate planning section of KRA (2007) on the level and quality of RTD service delivery and effectiveness of the modernization and taxpayer education programmes concluded that the department achieved an overall customer satisfaction rating of 77%. A study by Owala (2006) on effectiveness of technology as a strategy in motor vehicle registration by KRA concluded that increased registration of motor vehicles was attributed to automation of the vehicle registration process. These studies have looked at several reforms in KRA but not at their effect on service delivery. Bii (2008) conducted a research to find out the effect of business process re-engineering on productivity in the Kenya Tea Development Agency and concluded that there was an increase in productivity due to improved operational efficiencies resulting from the implementation of BPR.

Whereas Kitur (2006) carried out a survey of the strategic role of ICT among insurance companies in Kenya the researcher did not find any study on its role in KRA and more specifically its effect on service delivery in the Road Transport Department. Given the gap in literature on effect of information technology on service delivery in organisations, this research seeks to answer the following question – has there been any effect of information technology strategy on service delivery?

### 1.3 Research objective

The objective of the research is to determine the effect of information technology strategy on service delivery in the Road transport department of Kenya Revenue Authority.

### 1.4 Value of the study

The results of the study have contributed greatly to the understanding of the strategic role of automation not only in government agencies but also in other public and private corporations. The findings of the study contributed to the body of knowledge in the area of strategic management in the public sector in Kenya.

The study was also important to KRA as an organization as it will assist in evaluation of its strategic reforms and ensure that future changes in the organization are managed effectively for the benefit of its internal and external stakeholders. The study also identified challenges faced by organisations in the public sector in implementing strategic reforms and provides recommendations to address these challenges.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter presents and discusses the literature relating to the concept of strategy and an in depth discussion on information technology strategy.

#### 2.2 Strategy Concept

Thompson & Strickland (2007) argue that a company's strategy is management's action plan for running the business and conducting operations. Strategy can also be seen as a multidimensional concept that embraces all the critical activities of the firm, providing it with a sense of unity, direction and purpose as well as facilitating the necessary changes induced by its environment (Hax and Majluf, 1996). Strategy is a way of explicitly shaping the long term goals and objectives of the organization, defining the major action programs needed to achieve those objectives and deploying the necessary resources.

According to Mintzberg (1991) a strategy is the pattern or plan that integrates an organization's major goals, policies and action sequences into a cohesive whole. A well formulated strategy helps to marshal and allocate an organization's resources into a unique and viable posture based on its relative internal competencies and shortcomings anticipated changes in the environment and contingent moves by intelligent opponents. Firstly, effective formal strategies contain goals to be achieved, policies guiding or limiting action and the major action programs that are to accomplish the

defined goals within the limits set. Second, effective strategies develop around a few key concepts and thrusts which give them cohesion, balance and focus. Third strategy deals not only with the predictable but also with the unknowable. Consequently the essence of strategy is to build a posture that is so strong in selective ways that the organization can achieve its goals despite the unforeseeable ways external forces may actually interact when the time comes. Fourth each strategy must be more or less complete in itself, congruent with the level of decentralization intended. Yet each must be shaped as a cohesive element of higher level strategies.

Johnson, Scholes and Whittington.(2006) argue that the concepts of strategy and strategic management are just as important in the public sector as in commercial firms. Many parts of the public sector provide services to paying customers in the same way as commercial organisations. However the role of ideology in the development of strategy in the public sector is probably greater than that in commercial organisations. There is also likely to be a great deal of direct or indirect control or influence exercised from outside the organisation, by government in particular. A commercial enterprise that is state controlled may find planning horizons determined more by political than by market conditions and also constraints on investment capital and sources of finance. It is for this reason that there has been large scale privatisation of previously state-run enterprises over the last twenty years – telecommunications, rail services, power generation, air-transport and many more. Other public service organisations for example health services and many of the amenities run by the local government have near monopoly of provision and the funding is from taxation rather than paying customers. This can put restriction on



strategic choices for example they may not be able to specialise on a few services or customers, they must provide a universal service. Also strategic priorities tend to be dictated by the provider of funds rather than the user of the service so the notion of competition is usually concerned with competition with resource input typically within a political arena. The key first step in defining a formal strategic planning process is effective business segmentation. Segmentation is the key for business analysis, strategic positioning, resource allocation and portfolio management. At the heart of strategy there is a purposeful search for the achievement of competitive advantage in every business in which the firm is engaged (Hax and Majluf, 1996).

Strategy does not just happen it is made by managerial actions and decisions when opening up new opportunities for a sustained profitability in all the businesses of a firm. Also there is a formal recognition that the ultimate objective of strategy should address the stakeholders' benefits thus providing a base for conducting the host of transactions and social contracts among them and the firm. Mintzberg (1991) identifies 5P's for strategy. As plan, strategy deals with how leaders try to establish direction for organizations to set them on predetermined courses of action. As ploy, strategy takes us into the realm of direct competition where threats and various other manoeuvres are employed to gain advantage. As pattern, strategy focuses on action reminding us that the concept is an empty one if it does not take behaviour into account. Strategy as pattern also introduces the motion of convergence, the achievements of consistency in an organization's behaviour.

As position strategy encourages us to look at organizations in their competitive environments – how they find their positions and protect them in order to meet competition, avoid it or subvert it. And finally as perspective, strategy raises the issue of how intentions diffuse through a group of people to become shared as norms and values and how patterns of behaviour become deeply engrained in the group. According to Johnson, Scholes and Whittington (2006) strategies exist at a number of levels in an organisation. The first, corporate-level strategy is concerned in the overall scope of the organisation and how values will be added to the different parts (business units) of the organisation. This could include issues of geographical coverage, diversity of products/services or business units and how resources are to be allocated between the different parts of the organisation.

The second level can be thought of in terms of business-level strategy which is about how to compete successfully in particular markets or how to provide best value services in the public services. This concerns which products or services should be developed in which markets and how advantage over competitors can be achieved in order to achieve the objectives of the organisation. The third level of strategy is at the operating end of the organisation. Here there are operational strategies which are concerned with how the component parts of the organisation deliver effectively the corporate and business level strategies in terms of resources, processes and people. Indeed in most businesses, successful business strategies depend to a large extent on decisions that are taken or activities that occur at the operational level.

According to Thompson and Strickland(1989) the task of generating ,maintaining and otherwise orchestrating organization-wide commitment to strategy implementation and execution has four pieces; firstly motivating organizational units and individuals to execute the strategic plan and achieve the targeted results. secondly building a strategy supportive corporate culture. Third is creating a strong results orientation and a spirit of high performance. lastly is linking the reward structure to actual strategic performance. The range of options for getting people and organizational subunits to push hard for successful strategy implementation involves creatively using the standard reward/punishment mechanisms- salary raises, bonuses, stock options, fringe benefits, promotions, praise ,recognition, constructive criticism, tension, peer pressure and decision making autonomy. The skill is to inspire employees to do their best and to be winners, giving them in the process a sense of ownership in the strategy and a commitment to make it work.

An ability to instill high levels of commitment to strategic success and to create an atmosphere where there is constructive pressure to perform is one of the most valuable strategy-implementing skills. When an organization performs consistently at or near peak capability, the outcome is not only improved strategic success but also an organizational climate where the emphasis is on excellence and achievement-a spirit of high performance pervades. This involves an intense people-orientation that is aimed at getting everybody in the organization involved and emotionally committed.

## 2.3 Information Technology as a Strategy

Jelassi and Enders (2008) point out that it has been argued that the increasing importance of technology reduces the need for clear strategies. Firms should instead focus on getting their technology to work. Yet technology is not, and cannot be, a substitute for strategy. Overlooking strategy and how a firm can create sustainable competitive advantage is a likely recipe for failure. Ultimately IT and the internet should be used not for the sake of using them but instead to create benefit for customers in a cost-effective way. Technology is a critical source to achieve and sustain competitive advantage, the ability to incorporate technology into a business strategy can make the difference between a winning or a losing strategy. Managers are confronted with the demanding task of accelerating the speed at which innovations in new products and processes are translated into profitable commercial ventures (Hax and Majluf, 1996). First top managers have to decide as part of the corporate strategy of the firm, what role is to be played by technology in advancing the firm's competitive capabilities, the amount of resources to be allocated to technology and the aggressiveness the firm will use in the innovative process and in imbedding technology into the firm's products and processes.

During the process of strategy formation we need to define the technological support required to create or reinforce the competitive advantage sustained by each business unit. This is supplied by the mission of the business and their respective strategic action programs. Finally at the technology level resides the task of interpreting all the requirements emerging from corporate and business levels which will become the critical inputs shaping the technology strategy of the firm. According to Johnson, Scholes and

Whittington (2006) an important strategic decision for many organisations is whether technology should be developed in house or acquired externally. This can be a key determinant in the success or failure of strategy. In house development may be favoured if the technology is key to competitive advantage and an organisation has expectations of gaining fast mover advantage.

This will be feasible if the organisation already has a good knowledge of both the technology and the market opportunities and the complexity is not too great – it is within current field of organisational knowledge. Successful organisations would be those where there is a strong commitment to innovation from senior management and business acumen based on an understanding of the business strategy and technology relationship. There needs to be a creative climate where innovation is fostered, communication is extensive and where there is a culture of a learning organisation. Structures and processes must facilitate the creation of this environment and provide a commitment to individual and team development. In particular it must support key individuals who will champion and facilitate the exploitation of technology for strategic success.

A technological breakthrough can have a sudden and dramatic effect on a firm's environment. It may spawn sophisticated new markets and products or significantly shorten the anticipated life of a manufacturing facility. Thus, all firms and most particularly those in turbulent growth industries must strive for an understanding both of the existing technological advances and the probable future advances that can affect their products and services (Pearce II and Robinson, 1991). Information technology (IT) is highly effective in improving the effectiveness and efficiency of tax administration in a

variety of ways. Common current applications of IT in tax administration include online databases and information repositories, communications infrastructure, data mining and management information systems. A key question relates to the sequencing of areas in which to introduce IT systems and how to educate staff unfamiliar with IT and possibly fearful of displacement.

Other important issues are security and the related issue of networking. database security is best achieved by the use of standalone systems with adequate access security and standalone backup copies of databases. Nevertheless there is always the danger of unauthorised access and violation of taxpayer confidentiality. For this issue the adoption of the latest available security technology and strict adherence by staff to security procedures even at the risk of some cost efficiency and effectiveness. Re-engineering business processes and restructuring the organisation are crucial for successful IT introduction. The key is not to automate the paper but to rebalance, redesign and eliminate redundant processes. The major points to keep in mind are that manual operations have a much smaller least-cost scale when compared with IT enabled processes to replace them. This suggests a greater degree of centralization of routine operations is necessary.

Changes in strategy generally call for some changes in how internal activities are conducted and administered. The process of changing from the old ways to the new ways has to be initiated and managed. Asking people to alter actions and practices always upsets the internal order of things. It is normal for pockets of resistance to emerge and questions will be raised about the hows as well as the whys of change. The role of new

and revised policies' is to promulgate standard operating procedures that will facilitate strategy implementation and counteract any tendencies for parts of the organization to resist or reject the chosen strategy. Thus there is a definite role for policies and procedures in the strategy-implementation process.

Curtis and Cobham (2008), note that it has become evident over the last few years that developments in IT can be a driver for business strategy. For organisations in the internet age, new threats and opportunities have emerged. The traditional approach has been one of bringing the IT strategy into line with the business strategy. Creating a business strategy that recognizes the electronic business world also accepts that IT can be an input as well as an output from the strategy formulation process. Changes in IT can lead to new opportunities for business development. A further factor is the pace of change, an almost continuous reassessment of IT and business strategy is needed. The traditional setting of IT strategy to meet business objectives does not recognize the rapid real-time responses necessary in the modern economy.

#### **2.4 Service delivery concept**

According to Lovelock and Wirtz (2007) services are economic activities offered by one party to another most commonly employing time-based performances to bring about desired results in recipients themselves or in objects or other assets. In exchange for their money, time and effort, service customers expect to obtain value from access to goods, labour, professional skills, facilities, networks and systems, but they do not normally take ownership of any of the physical elements involved. Experienced service marketers

recognize the need to take a holistic view of the entire performance that they want customers to experience. The value proposition must address and integrate three components; core product, supplementary services and delivery processes. The core product is the central component that supplies the principal problem solving benefits that customers seek. Supplementary services augment the core product, both facilitating its use and enhancing its value and appeal. The extent and level of supplementary service often play a role in differentiating and positioning the core product against competing services.

Adding more supplementary elements or increasing the level of performance should be done in ways that enhanced the perceived value of the core product for prospective customers and enable the service provider to charge a higher price. The third component concerns the processes used to deliver both the core product and each of the supplementary services. The design of the service offering must address ; how the different service components are delivered to the customer, the nature of the customer's role in those processes, how long delivery lasts and the prescribed level and style of service to be offered. Service process redesign encompasses reconstitution, rearrangement or substitution of service processes.

These can be categorised into a number of types including: eliminating non-value adding steps by streamlining front-end and back-end services with the goal of focusing on the benefit producing part of the service encounter. Secondly, significant productivity and sometimes even service quality gains can be achieved by increasing self-service when redesigning services. Also by delivering direct service, the service is brought to the



customer instead of bringing the customer to the service firm. This is done to improve convenience to the customer. Lastly the physical service redesign focuses on the tangible elements of a service process and includes changes to the service facilities and equipment to improve the service experience. This leads to convenience and productivity and often also enhances the satisfaction and productivity of front-line staff.

According to Johnson and Scholes(2002) the starting point for understanding strategic capability is an understanding of what customers value. Customers in any market segment will have threshold requirements on all features of the product or service. Some customers may be particularly interested in price, others in reliability and yet others in delivery time and so on. In the public services the concept of critical success factors is also valid except that it may relate to a stakeholder other than the customer. Critical success factors are those product features that are particularly valued by a group of customers and, therefore, where the organization must excel to outperform competition.

The concepts of strategy and strategic management are just as important in the public sector as in commercial firms. Many parts of the public sector provide services to paying customers in the same way as commercial organisations. For an organisation that competes on the basis of the services it provides, competitive advantage is likely to be much more related to the extent to which customers value less tangible features. This could be, for example, the soundness of advice given, the attitude of staff, the ambiance of offices, and the swiftness of service and so on. Customers are becoming increasingly demanding of quality services therefore an organisation must make a deliberate effort to keep up with customer expectations. Today's customers are very time sensitive and see

wasted time as a cost to avoid. Another concern for customers is how much time elapses between making a request for service and receiving the finished output. According to Lovelock and Wirtz (2007) a firm can respond to market needs by modifying the time and place of delivery. They identified three basic strategies; firstly no change regardless of the level of demand, the service continues to be offered in the same location at the same time. By contrast a second strategy involves varying the time when the service is available to reflect changes in customer preference by day of week, season and so forth.

A third strategy involves offering the service to customers at a new location through use of mobile units that take the service to customers, rather than requiring them to visit fixed-site service locations. Development of a queuing system that is allocated on the basis of firstly urgency of the job, for example need for a logbook to act as surety for a hospital emergency. Secondly is the duration of service transaction for example express lanes for shorter, less complicated tasks and thirdly payment of a premium price for example airlines offer separate check-in lines for first-class and economy-class passengers. Last but not least is on the basis of the importance of the customer for example a special area may be reserved for members of frequent user clubs.

## **2.5 Information Technology strategy and Service delivery**

According to Zeithaml and Bitner (2003) technology enables both customers and employees to be more effective in getting and providing service. Through self-service technologies, customers can serve themselves more effectively. For example, via online banking customers can access accounts, check balances, apply for loans – all without the

assistance of the bank's employees. For employees, technology can provide tremendous support in making them more effective and efficient in delivering service. Customer relationship management and sales support software are broad categories of technology that can aid front – line employees in providing better service. By having immediate access to information about their product and service offerings as well as about particular customers, employees are better able to serve them. This type of information allows employees to customize services to fit the customer's needs. They can also be much more efficient and timely than in the old days when most customer and product information was in paper files or in the heads of sales and customer service representatives.

An interesting way to look at the influence of technology is to realize that the internet is just 'one big service'. All businesses and organisations that operate on the internet are essentially providing services – whether they are giving information, performing basic customer service functions or facilitating transactions. Although there is great potential for technology to support brand new service concepts, provide new ways of delivering service and enable customers and employees in achieving better quality services, there are potential negative outcomes as well. Technology can assimilate people while isolating them, it can provide a sense of control and at the same time feelings of ineptitude.

Customer concerns about privacy and confidentiality raise major issues for firms as they seek to learn about and interact directly with customers through the internet. Employees can also be reluctant to accept and integrate technology into their work lives especially when they perceive, rightly or wrongly, that the technology will substitute for human labour and perhaps eliminate their jobs. With technology infusion there is a loss of

human contact which many believe is detrimental purely from a quality of life and human relationships perspective. Finally, the payback in technology investments is often uncertain. It may take a long time for an investment to result in productivity or customer satisfaction gains. To avoid obsolescence and promote innovation, a firm must be aware of technological changes that might impact its industry. Creative technological adaptations can suggest possibilities for new products, for improvements in existing products, or in manufacturing and marketing techniques. Since a large part of business activity is concerned with processing and transmitting information within and between organisations, information processing capability can improve an organisation's strategic capability by reducing the direct cost of transactions between an organization and its customers and improving service quality for example the speed and accuracy of data.

According to Johnson, Scholes and Whittington (2006) one of the most important implications of the IT revolution for organisations producing or distributing physical products is that in future competitive advantage is more likely to be achieved through service performance( e.g speed and reliability of delivery or maintenance)than in product features per se.The enhanced capabilities of IT are already enabling organisations to provide product/service features that are valued by customers. They include reduced costs of obtaining the service for example the cost of a customer travelling from Garissa to Nairobi to apply for registration of his motor vehicle from KRA would be reduced if the service was available in his County. Also through IT customers can be able to obtain information about a product or service by website browsing .Easier and faster purchasing processes e.g. online processing of transfer of motor vehicle ownership and delivery can

allow customers to move closer to just-in-time with their business process. Product or service reliability and improved after-sales service can be provided by better information systems e.g. automatic service reminders when a customer needs to renew his driving license and collection of logbooks and licenses. From a customer's perspective the encounter with service staff is probably the most important aspect of a service. From the firm's perspective, the service levels and the way service is delivered by front-line personnel can be an important source of differentiation as well as competitive advantage. Service employees are so important because the service employee is the most visible element of the service and the services they provide are often a core part of the brand. It is employees who determine whether the brand promise is delivered.

However, the tradition of having customers visit the service site for services that don't involve people processing is now being challenged by advances in telecommunication and business logistics. The result is increased availability of services delivered at arm's length. Without a doubt, technology will continue to drive the way we do business. However technology will never replace the need for personal interaction. When IT is combined with highly trained customer service people, the organisation is bound to succeed. In designing tax offices, a number of criteria are important; convenient location, convenient hours of operation that are well advertised, adequate staff to deal with common high-volume client requests, basic amenities (chairs, drinking water), a single first access point who can identify the relevant official to be seen and meeting rooms where the official can meet the taxpayer.

According to Pearce II, Robinson Jr and Mital (2010) incremental innovation refers to simple changes or adjustments in existing products, services or processes. There is growing evidence that companies seeking to increase the payoff from innovation investments best do so by focusing on incremental innovations. Continuous improvement also called kaizen in Japanese, is the process of relentlessly trying to find ways to improve and enhance a company's products and processes from design through assembly, sales and services. This approach seeks to always find slight improvements or refinements in every aspect of what a company does. The internet allows coordination, communication and decision making functions to be accomplished quickly and easily, making traditional organisational structures look slow, inefficient and non-competitive.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter describes the research design, data collection methods and the process used to analyse the results of the data collected.

#### 3.2 Research Design

In assessing the effectiveness of information technology on service delivery in the Road Transport Department, the research was conducted using a case study design. The primary purpose of a case study is to determine factions and relationships among the factors that have resulted and the behavior under study (Mugenda & Mugenda 2003).

According to Matundura (2008) a case study is commonly used when the study involves a single organization with unique characteristics. The main reason why this design was most appropriate is because the research is based on a single and unique organization, Kenya Revenue Authority.

#### 3.3 Data Collection

In this study primary and secondary data was used. Primary data was collected using an interview guide. Three people were interviewed that is the Registrar of motor vehicles, the head of Driving licence section and a taxpayer chosen at random. The interview guide was administered using personal interviews.

Secondary data was collected by reviewing literature on strategic reforms carried out in the organisation and surveys conducted before the implementation of information technology and after the strategy was implemented.

### **3.4 Data Analysis**

Data collected was mainly qualitative. The data was analyzed using content analysis which is a research method for making replicable and valid inferences from data to their context, with the purpose of providing knowledge, new insights, a representation of facts and a practical guide to action (Krippendorff 1980).

The aim was to attain a condensed and broad description of the phenomenon, and the outcome of the analysis was concepts or categories describing the phenomenon. Content analysis as a research tool is used to determine the presence of certain words or concepts within texts or sets of texts. Researchers quantify and analyze the presence, meanings and relationships of such words and concepts, then make inferences about the messages within the texts.



## CHAPTER FOUR

### DATA ANALYSIS AND INTERPRETATION OF RESULTS

#### 4.1 Introduction

This chapter presents an analysis and interpretation of the results of data collected on implementation of IT strategy and its effect on service delivery in the Road. Transport department of Kenya Revenue Authority.

#### 4.2 Implementation of Information Technology strategy

The study established that the old manual system had various challenges namely difficulty in tracing motor vehicle and drivers' records and thus the length of time taken to serve customers extended into months due to loss of documents and the manual writing of logbooks. There was also lack of accurate statistics on vehicles and drivers' due to poor record keeping. However with the introduction of IT, service delivery has been enhanced as taxpayers receive their logbooks and driving licences within ten days of lodgment. Also customers have an avenue for lodging their complaints through the complaints and information centre (CIC) where they receive a response to their complaints within five days. IT has also enabled connectivity between the head office, Times Tower and regional offices countrywide thus enabling taxpayers to receive all services from convenient locations.

In Kenya Revenue Authority's third corporate plan, a key strategic objective was the re-engineering of business processes and modernizing of technology. The goal was to be achieved by modernizing IT systems, improving IT security and modernizing business

processes and infrastructure. During the plan period, IT initiatives included modernizing the Road Transport Department (RTD) Vehicle Management System(VMS) to allow it to communicate seamlessly with the SIMBA 2005 system. The goal of improving and expanding taxpayer services was to be achieved by improving service delivery options to taxpayers, facilitating participation by all sectors and simplifying tax processes. KRA enhanced its IT systems to facilitate increased taxpayer participation. Taxpayer awareness initiatives were undertaken including education seminars and sector-based stakeholder lectures. The taxpayer's charter was revised and uploaded on the KRA website. The technological advances especially in information technology have worked to the advantage of KRA. With Kenya being an implementing party to the TEAMS undersea cable and the laying of fibre optic cables, and with other advances in ICT, communications have declined and with increased use of this medium, KRA's scope for its operations increases. The modernization of RTD operation was done through the linking of the vehicle management system (VMS) and Simba 2005 system allowing for payment of motor vehicle registration fees with import duty. The integration process enabled vehicle importers to seamlessly pay for the registration along with other relevant customs duties online through the Simba System.

The VMS was also integrated with the PIN database to allow for verification of the PIN numbers for RTD transactions. In addition, VMS was integrated with cash receipting system (CRS) to facilitate online calculation and payment of taxes. KRA commenced implementation of the common cash receipting system (CCRS) which has been successfully piloted with payment of transfer of motor vehicles, and copy of records .The

implementation of CCRS ensures prompt update of taxpayers' ledgers and reliability of bank reconciliation. The introduction of the KRA revenue portal, KRAOnline facilitates controlled access to applications by providing a single window for communication with stakeholders. It provides a single view of all KRA online systems. During the period 2006/07 old logbooks were phased out and replaced with computer generated security printed logbooks. All motor vehicles' and drivers' data was scanned and stored electronically. This has fastened transfer of ownership process. Through the use of IT RTD services were decentralized to the regions. These include endorsement of driving licenses, issuance of dealers licenses and replacement of the old motorcycle number plates with unique plates. Other RTD initiatives include development of driving license management system (DLMS), issuance of number plates at container freight stations, mobile licensing and use of wireless technology in collecting revenue in Busia, Bungoma, Narok and Mwingi.

#### **4.3 Challenges of Information technology strategy**

The research established that the implementation of information technology has faced various challenges. At the time of introduction of technology in the department, a company was recruited to capture all vehicle data into the new system, Movers. However it was later discovered that the data capture clerks had not fully captured all the records leading to gaps in vehicle records. This has necessitated continuous data cleaning which impacts negatively on service delivery as officers must retrieve files from the vehicle registry to fully capture vehicle details. This means that the department's processes are

still partially manual. Another challenge experienced was the resistance to change by staff in the department. Technology was seen as a threat to job security and thus at the initial stages work flow was slow and there were numerous customer complaints. From the study it was found out that the high cost of investment in IT has seen a slow pace of full automation of processes, for example TLB and Driving licences therefore the full benefit of technology has not been felt in the department. The ratio of computers to staff is currently 1:2 which is not the ideal situation as some staff do not have access to computers. For example, it was pointed out by one of the interviewees that the number plates unit staff do not have computers and thus are not able to confirm vital vehicle data in the system prior to issuance of number plates. This is a major concern as number plates are the end product of a critical process of registration of a motor vehicle. Also the process of ordering for number plates from the current supplier, Kamiti maximum prison under Ministry of Home Affairs, is still manual hence it lacks a stock monitoring mechanism and is a tedious process.

It was established that the slow rate of computerization in this process can be attributed to lack of funds for investment in a number plates management system and also resistance to change by the officers in the number plates unit who are not conversant with IT. This represents a major corruption loophole which unscrupulous staff and taxpayers may be exploiting as evidenced by the incidences in the local news of two vehicle bearing similar number plates. The frequent system downtimes have also impacted negatively on service delivery and revenue collection. The inadequate skills in IT among staff and limited interface between KRA IT systems with stakeholders has limited the full benefits that can

be enjoyed with information technology as a strategy. The limited security of the IT systems has caused intrusion by unauthorized users on the Vehicle management system which has impacted negatively on data integrity. The various stand alone systems in the department namely VMS, Kovis, Movers and DLMS make it difficult to integrate information as it is not housed in one system. For example if a caveat on transfer of ownership of a motor vehicle is scanned and placed in Kovis , this information will not be available in VMS and thus the vehicle may be transferred and logbook issued. At the time of the study, the scanner for scanning original logbooks had been out of order for the past two months. The cost of repairing the scanner was found to be more expensive than purchasing a new scanner. In the meantime only one scanner is functional in the department and is used for scanning over 10,000 documents per day. This has resulted in delays in processing logbooks. which has affected service delivery.

#### **4.4 Service delivery in RTD**

A review of a survey carried out by the Research and corporate planning section of KRA established that in the performance of its functions, RTD's stakeholders include various organizations and individual taxpayers. These include, Matatu owners association, Ministry of transport, Association of Kenya insurers, Automobile Association of Kenya, Kenya association of tour operators, Kenya police traffic department and Kenya motor industry association .These customers have varied needs that require attention and satisfaction by the RTD staff. RTD was not sufficiently customer focused. In addition, the corporate taxpayer education did not achieve its intended purposes. KRA has entered into a service delivery agreement with taxpayers which describes the service standards

that taxpayer's should expect from RTD. The department's service delivery is deemed to be of high quality when the timeframe Appendix 2 are strictly adhered to. As demand for high quality services from the public grows, there is need for KRA to continue re-examining its operations in terms of its staff, internal processes and relations to its customers in order to achieve greater efficient and effectiveness in service delivery to its customers. The survey conducted by research and corporate planning section of KRA on the methods used by taxpayers to contact the department indicated that 83% made personal visits while 6% and 7% contacted the department using letters and telephones respectively. Communication by fax and e-mail is the least used mode of contact. This shows that there is need to embrace IT based modern technology as opposed to the traditional way of personal visit.

The research established that a recommendation to decentralize RTD services and embracing on-line lodgment of documents will greatly improve service delivery in the department. Other suggestion include enhancing efficiency of dispatching of logbooks and licenses, conducting taxpayer education on reforms carried by the department and use of short message service(SMS) to notify the customers when documents are ready. Finally it was recommended that customer care desks should be manned by technical officers and service counters to be properly labeled. It is imperative that training programs aimed at changing attitude and behaviors and to reinforce basic skills be conducted for staff at least every six months. Employees who are not trained to provide good customer service find themselves frustrated in their attempts to deal with rude, difficult and irate customers.

#### **4.5 Effect of technology on service delivery**

KRA is recognized as the best of the public institutions in the country having achieved most respected public company status as well as winning several awards related to innovation, excellence and service delivery. The computerization of core business functions and availability of good IT infrastructure has led to efficient service delivery. Information on vehicle and drivers is now available at the touch of a button thus ensuring that customers receive fast and reliable service. This has in turn led to reduced customer complaints as evidenced by a 70% customer satisfaction rating during a recent customer survey. Technology has the potential to de-humanize business transactions. As technology has evolved corporations have become more dependent on equipment and most employees lack good communication skills. It is important to address taxpayers specific concerns and comments .

The modernization of IT systems has transformed the department into an efficient and effective organization .customers can now experience interaction with staff from the comfort of their homes through inquiring on RTD products and status of documents through e-mail and mobile phones. This reduces time and costs for the customer due to elimination of manual processes and short turnaround times. With the introduction of a document imaging system known as Kovis in 2006, critical motor vehicle registration and transfer of ownership documents are scanned. This has shortened the process of registration of ex-diplomatic and ex-government vehicles and transfer of motor vehicle ownership as the physical motor vehicle file does not have to be retrieved from the vehicle registry. This previously presented a challenge when motor vehicle files could not

be traced from the registry thus leading to delays that ran into months or even years. However from the study it was realized that the benefits of information technology have not been maximized in the department. The use of outdated computers in the cash office where payments are processed has slowed down service delivery leading to long queues. This opens up an avenue for brokers to lure innocent taxpayers who want to avoid the queues. This has promoted the parallel market for fake driving licences and even fake logbooks. Also in the banking hall the scrolling bill commonly used by banks to provide important information to customers has been underutilized in the RTD banking hall. This can be useful in providing information to customers when the system are down to avoid them queuing when no services are being offered.

#### **4.6 Discussions**

From the data findings and analysis, it is evident that technology has actually had a positive impact on service delivery in Kenya Revenue Authority. It has reduced time taken to process documents by eliminating duplication of work and has increased efficiency. Further the incidence of forgery of documents has greatly reduced as customers are able to receive their logbooks and driving licenses within a predictable and reasonable time frame. The storage and retrieval of vehicle and drivers records has been made not only easier but also the accuracy of the information stored has improved and loss of this data has been reduced. However in-terms of effectiveness, it is not quite clear that technology has reduced time taken to process driving licenses since the process still partially manual. However plans are underway to introduce smart card driving licenses which will be issued electronically. This will greatly enhance service delivery.



Another challenge highlighted from the research is the large number of RTS cases received on a monthly basis. At the time of the research, the department had a total of 8,000 RTS logbooks and 10,000 RTS driving licenses which implies that the dispatch process is not effective thus resulting in a lot of complaints from these customers on delays in receiving their documents. A suggestion to address this problem is to have collection points for documents all over the country. Therefore a customer can indicate he would prefer to collect his logbook from Kericho KRA office and this can be sent directly to the office for onward transmission to the customer.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Summary and Conclusion

The objective of the study was to determine the effect of information technology strategy on service delivery in the Road transport department of Kenya Revenue Authority. In response to increased complaints on poor service delivery, corruption and reduced revenue collection, Kenya revenue authority sought to modernize their processes by embracing information technology. Prior to the year 2006, majority of the processes and products were issued manually, for example, motor vehicle logbooks were written by hand. The staff involved in this task were mainly clerical officers who had little or no training in basic IT tools. The change to modernization of the Road transport department processes involved Kenya revenue authority undertaking to carry out a three month conversion course for the clerks in the department. The officers were trained on the Road transport department functions and procedures and also received training on customer care

The findings indicate that the Road transport department which serves over 50% of the taxpayers who visit KRA, has experienced a several benefits and also challenges with the introduction of IT. The benefits of IT have impacted a great deal on service delivery. Whereas previously customers used to queue for long hours to pay for driving licenses, transfer of ownership and number plates, the process has now been shortened with the use of computers to process payments for the products. The use of manual receipts has

now been replaced with computer generated receipts which has led to increased revenue collection. Additional benefits include a modern channel of communication with taxpayers through the use of the KRA website which houses information on all departments in Kenya revenue authority. Through the complaints information centre (CIC), taxpayers are able to register their complaints, enquiries and even compliments and receive a response within five days. This has helped to give the taxman a human face and has increased the level of goodwill of the Kenyan taxpayer. Additional benefits identified by the interviewees include reduced return to sender (RTS) motor vehicle logbooks and driving licences as the postage process was fully automated in 2007. This has ensured that taxpayers receive their documents on time with only minimal cases of wrong addresses being used. This has also reduced costs as RTS cases previously had to be reposted or customers notified by telephone to collect their documents from KRA. Also the linkage between the customs Simba 2005 system and the vehicle management system (VMS) has made the registration of vehicles faster as only minimal vehicle details such as make, model, location are captured by officers in RTD.

This also ensures that only vehicles which have paid taxes or have valid exemptions from taxes are registered or transferred to new owners. The challenges experienced in the use of IT in the department include lack of systems security. Instances of amendment of vehicle details in the vehicle management system(VMS) by unknown persons has been a source of concern to both management and staff as reliability of data given to taxpayers through the Copy of records is compromised. Another challenge is the frequent systems

downtime which leads to loss of revenue and delays in processing payments and RTD products. In the regional offices, for example Nyeri, Embu and Meru, frequent power outages have the same effect as taxpayers have to be turned away due to lack of power backup in the offices. This challenge is caused by lack of enough funding for KRA reforms and modernization projects. From the foregoing discussions the following conclusions may be made regarding the effect of information technology on service delivery in the Road transport department of KRA.; use of IT in RTD has impacted positively on service delivery as taxpayers are able to receive faster services, predictable service timelines and secure products such as security printed logbooks. Challenges were however experienced due to system downtimes and partially manual processes such as issuance of driving licenses. In conclusion the use of IT has impacted positively on service delivery, accountability, staff motivation and revenue collection.

## **5.2 Limitations of the Study**

There are various limitations of the study that does not make it conclusive on its own. Firstly the number of interviewees chosen were few and are not representative of both KRA and the taxpayers. Also the department has not fully computerized its processes and products and it is therefore partially manual hence the effectiveness of IT on service delivery cannot be effectively measured.

## **5.3 Recommendations for Further Research**

The study recommends that further research could be done on the impact of information technology on service delivery in Kenya revenue authority as an organization. This

should include comprehensive data collection from its key stakeholders. However because the Road transport department is undertaking to have an integrated online system where all RTD services will be web based, there is need to do another research once the project is completed and the system is fully functional, then it will be easier to gauge its success and effectiveness on service delivery.

#### **5.4 Implications on Policy, Practice and Theory**

The study identified that the taxpayer is key in a service delivery department like RTD hence the need to ensure that all processes in the department are automated and can be offered online from the comfort of the customers home or office. This will impact greatly on revenue collection and improve the image of KRA as a tax collecting authority both regionally and globally. There is therefore need to fast track the implementation and roll out of these services. Involvement of stakeholders in the reforms in the organisation is paramount and this should be done at an early stage in order to incorporate their feedback into the projects. This will lead to greater buy-in of reforms being carried out by the organisation and reduce or even completely eliminate resistance to change.

Staff awareness and training are also key to the success of any reform and modernization of processes hence it is imperative that there is frequent communication and skills development so that when reforms are rolled out to the public, the staff are motivated and have the necessary skills to carry out their duties effectively. The development of a customer service strategy that seeks to establish customer satisfaction objectives, identify necessary training tools and includes a system of measuring effectiveness is essential.

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## APPENDIX 1

### Interview Guide

1. What challenges were experienced with the old manual system?
2. What are the challenges experienced in the use of IT to process RTD products?
3. What advantages have been experienced with the introduction of IT in the department?
4. What techniques are used to measure customer satisfaction in the department?
5. How is corrective action on negative customer feedback handled?
6. Please give suggestions on how service delivery can be boosted in the Road Transport Department.
7. Are RTD products delivered using IT aided equipment? Explain
8. Have costs come down due to IT? Explain
9. Have customer complaints reduced since computers were introduced? Explain
10. Do customers inquire about RTD products through e-mail? Explain
11. Has IT helped in making RTD more friendly? Explain
12. Has IT encouraged RTD decentralize services? Explain
13. Are RTD regional offices connected through IT? Explain\
14. Are most of the RTD staff computer literate? Explain
15. Have computers contributed to staff motivation? Explain
16. Has employee productivity been enhanced through IT? Explain
17. Does KRA have many IT training programs? Explain
18. Are customer complaints received through e-mail? Explain

19. Has logbook processing been made faster due to IT? Explain

20. Has Driving licence issuance been made faster due to IT? Explain

21. Are RTD systems secure? Explain

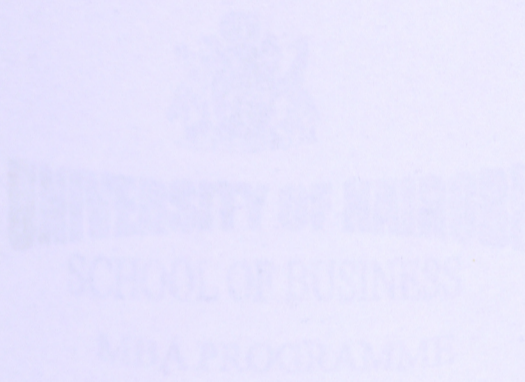
22. What can you attribute to the long queues that we find in the times tower banking hall?

## APPENDIX 2

### Taxpayer rights with respect to motor vehicle registration and licensing

Service	Charter timelines
Registration of motor vehicles	Within 1 day
Processing and dispatch of new logbook	Within 5 days
Processing and dispatch of duplicate logbook	Within 7 days
Processing of replacement number plates	Within 4 days
Processing of transfer of ownership and dispatch of logbook	Within 3 days
Copy of motor vehicle records	Within 1 hour
Issuance of certificate of ownership	Within 1 day
Issuance of foreign vehicle permits	Within 1 hour
Issuance of interim/provisional driving licenses	Within 1 hour
Processing and dispatch of new driving licenses	Within 7 days
Processing and dispatch of duplicate driving license	Within 5 days
Renewal of driving license	Within 1 day
Issuance of PSV and TLB	Within 1 day
Processing of PSV licenses ( for drivers and conductors)	Within 1 day
Processing of PSV badges( for drivers and conductors)	Within 1 day
Issuance of Kenya garage number plates	Within 1 day

Source: Taxpayers charter, 2007



Student Name: \_\_\_\_\_  
Company Name: \_\_\_\_\_  
Date: \_\_\_\_\_

### APPENDIX 3

## LETTER OF INTRODUCTION TO ORGANIZATION

TO WHOM IT MAY CONCERN

The name of the student is \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

UNIVERSITY OF MARYLAND  
SCHOOL OF BUSINESS  
MBA OFFICE  
\_\_\_\_\_

CO-ORDINATOR, MBA PROGRAM



**UNIVERSITY OF NAIROBI**  
**SCHOOL OF BUSINESS**  
**MBA PROGRAMME**

Telephone: 020-2059162  
 Telegrams: "Varsity", Nairobi  
 Telex: 22095 Varsity

P.O. Box 30197  
 Nairobi, Kenya

DATE 19/9/2011

**TO WHOM IT MAY CONCERN**

The bearer of this letter... Norah Yipah

Registration No. 061/7441/2006

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

**UNIVERSITY OF NAIROBI**  
**SCHOOL OF BUSINESS**  
**MBA OFFICE**  
 - P. O. Box 30197  
**NAIROBI**

**DR. W.N. IRAKI**  
**CO-ORDINATOR, MBA PROGRAM**

**UNIVERSITY OF NAIROBI**  
**SCHOOL OF BUSINESS**  
**MBA OFFICE**  
 - P. O. Box 30197  
**NAIROBI**

Handwritten notes and stamps including 'REVENUE AUTHORITY', '20 SEP 2011', 'COMMUNICATIONS', 'ROAD TRANSPORT DEPARTMENT', and 'RMV OPS'.

North Kenya  
Revenue Officer  
ROAD TRANSPORT DEPARTMENT

**APPENDIX 4**

**LETTER OF APPROVAL FROM KRA TO UNDERTAKE  
ACADEMIC RESEARCH**

Letter of approval to the Revenue Officer, September 2011, on the subject of...

We are pleased to submit you list of Authors, working in strict for an approval to undertake research on "Effects of government technology strategy on service delivery in the Road Transport Department" under the name of KRA. However, this can only be approved following the approval of the relevant departments.

The research will be used for academic purposes only and any data or information that should be provided will be kept confidential.



# KENYA REVENUE AUTHORITY

Ref: 6174

20<sup>th</sup> September, 2011

Norah Yiapan  
Revenue Officer I  
ROAD TRANSPORT DEPARTMENT

*Thro' Commissioner- Support Services*

Dear Madam,

**RE: REQUEST TO UNDERTAKE ACADEMIC RESEARCH**

Reference is made to your letter dated 7<sup>th</sup> September, 2011 on the above subject.

We are pleased to inform you that the Authority is willing to offer you an opportunity to undertake research on, *"Effects of information technology strategy on service delivery in the Road Transport Department"*, a case study in KRA. However, this can only be done through distribution of questionnaires.

The research you intend to undertake should only be for academic purposes only and any data or information given should be treated with outmost confidentiality.

Yours faithfully

*Wan*  
V. W. Njera (Mrs.)

For: Senior Deputy Commissioner- Human Resources

*Forwarded*  
*AR/A*  
KENYA REVENUE AUTHORITY  
20 SEP 2011  
COMMISSIONER  
SUPPORT SERVICES  
RECEIVED

*cc: RMV OPS  
DC, OPS  
SAC, R&L*

