

**QUALITY OF SERVICE AND PROCESS EFFICIENCY AT
IMMIGRATION POINTS: A CASE OF BUSIA AND
MALABA BORDER POSTS**

OLOO FELIX OCHIENG

D61/5347/2017

**A RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION,
SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI**

2018

DECLARATION

This research proposal is my original work and to the best of my knowledge has not been presented as a project proposal in any university.

Signature..... Date.....

Oloo Felix Ochieng.

D61/5347/2017

This research proposal has been submitted for approval with my endorsement as university supervisor.

Signature..... Date.....

Mr. Nyamwange O. S

Lecturer

University of Nairobi.

ACKNOWLEDGEMENT

I would first like to thank the Almighty God for having enabled me to go this far in my achievements by granting me strength and good health that has enabled me to do all that I have done.

My sincere appreciation to my supervisor Mr. Onserio Nyamwange for his valuable contributions in guiding me through this project, not forgetting Dr. X.N. Iraki for his contribution in availing time to critic the project hence enabling me to go this far.

The support from all family members and friends both in giving their time when needed and financial support during my entire period of study. To all I say Thank you and God bless.

DEDICATION

I would like to dedicate this project to my dear wife Brenda N., My children Bianca A. and Felisha A., my late parents The Oloo's, Brother Hesbon and family and Cousin Victor and family. It's through their selfless support and dedication that I am able to achieve this. For I will forever be indebted to them

ABSTRACT

Service quality has been recognized as a major ingredient in the success of organizations hence how they manage their service operations would eventually determine how they performs in terms of efficiency. With good quality services offered to the customers the organizations will have satisfied the customer needs hence this will eventually translate to improved consumption of the products offered thus improved revenues would mean that processes are efficient. The general rise in global trade has meant that there is a lot of border movement hence the need of efficient clearance processes is seen as instrumental to the success of this. With no known study that has tried to look at the correlation of the quality of services offered at the border points of Malaba and Busia to the performance of the processes which is efficiency this study was seen relevant to help in finding out this. The study analyzed the services offered and tried to establish their relationship to the efficiency of the processes in terms of the volumes processed and the time used in the processes. The study used a case study and primary and secondary data was collected where by questionnaires were used to collect primary data and the contents were analyzed qualitatively and inferences were drawn to deduce the outcomes. The outcomes were regresses to establish whether there exists a correlation between the variables that were established. The findings gave an insight of the relationships of the quality of services to the performance of the processes at the border points. It shows that improvement in the quality of services in terms of the delivery processes helped to improve the performances in terms of the processes efficiency. Though some challenges were realized in terms of the implementation of the processes which could have affected the way some consumers perceive the services, it was concluded that with proper stakeholder involvement in developing the services the success rate can be improved. Hence the recommendations were that there should be constant improvement of the services by constantly analyzing the needs in the environment and also fully involve stakeholders in the processes of developing the services. Therefore generally it was concluded that quality of service has a positive relationship to the processes efficiency.

TABLE OF CONTENTS

DECLARATION	ii
ACKNOWLEDGEMENT	iii
DEDICATION	iv
ABSTRACT	v
LIST OF FIGURES	viii
LIST OF TABLES	ix
LIST OF ABBREVIATIONS	x
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the study	1
1.1.1 Process efficiency	2
1.1.2 Service quality	3
1.1.3 Busia and Malaba border posts.....	5
1.2 Research problem.....	8
1.3 Objectives of the study.....	11
1.4 Value of the study	11
CHAPTER TWO: LITERATURE REVIEW	13
2.1 Introduction	13
2.2 Theoretical Framework	13
2.2.1 Disconfirmation Theory	13
2.2.2 Equity Theory	14
2.2.3 Theories of Rationality, Effectiveness, Efficiency and Control.....	16
2.3 Service Quality	18
2.4 Process Efficiency.....	20
2.5 Service Quality and Process Efficiency	21
2.6 Empirical Review	22
2.7 Conceptual Framework	24
CHAPTER THREE: RESEARCH METHODOLOGY	25
3.1 Introduction	25
3.2 Research Design.....	25
3.3 Selection of the Case.....	26

3.4 Data Collection.....	26
3.5 Data Analysis	27
3.6 Observation Schedule.....	28
CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS.....	29
4.1: Introduction	29
4.2: General Information	29
4.2.1: Gender Distribution	30
4.2.2: Age Distribution of Respondents	30
4.2.3: Frequency of use of Border services	31
4.2.4: Duration of use of Border services	31
4.3 The Service Quality Response	32
4.3.1 Significance of the OSBP	32
4.3.2 Value of Training.....	33
4.3.3 Significance of automation.....	33
4.3.4 Value of Queue use.....	34
4.4: The Process Efficiency.....	35
4.4.1: Clearance Time.....	35
4.4.2: Clearance output in Volume of Goods	36
4.4.3: Clearance Volume in terms of the Persons cleared	38
4.5: Regression Analysis	39
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION	42
5.1: Introduction	42
5.2: Summary of the findings	42
5.3: Conclusions	45
5.4: Recommendations	46
5.5: Limitation of the study	46
5.6: Suggestions for further studies.....	47
Appendix I: Introduction letter	53
Appendix II: Questionnaire	54

LIST OF FIGURES

Figure 2.1: The service quality gap theory	19
Figure 1.2: Conceptual model.....	24
Figure 4.1: Demographic distribution of respondents	30
Figure 4.2: The frequency chart.....	31
Figure 4.3: Duration of service usage	31

LIST OF TABLES

Table 3.1: Observation schedule table	28
Table 4.1: Gender distribution	30
Table 4.4: Trade with African countries, 2013-2017	37
Table 4.5: Departing visitors by country of residence and purpose of visit, 2015-2017 ...	38

LIST OF ABBREVIATIONS

ASYCUDA	Automated systems for customs data
CMP	Common market protocol
DTI	Direct trade input
EAC	East Africa community
EBTC	Eastern border transportation coalition.
FPY	First pass yield
ICMS	Integrated customs management system
KPI	Key performance indicator of Africa.
OSBP	One stop border post
RIAs	Regional integration arrangements
RISPA	Regional initiative in support of vulnerable (agro-) pastoralist in the horn
TMEA	Trade mark east Africa
TPE	Total process efficiency
TSBP	Two stop border post

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Quality in all sectors has been recognized for a long time as an essential ingredient to business survival. Thus how organizations manages the perception and the expectation of customers will matters. Ultimately the assessment of quality of service, expectation and the needs of the customers will guide on the quality design strategies in service provision. Organizations have adapted the process of quality service provision to mitigate on the challenge of competition hence have an advantage (Warraich, K., Warraich, I. & Asif, 2014). The quality of service has mainly been measured through getting customers feedbacks on their expectation and perception of services rendered by the organizations (Fisk, Brown & Bitner, 1994 as cited by Pitt, 1997). The persistence in the growth of international trade due to globalization has led to increase movements of goods across the border hence increase usage of the border services for the clearance purpose of both the goods and services and the human movement.

On the other hand efficiency of process greatly depend with the execution of the services which in turn is a determinant of how well the services were offered, this could be in relation to the overall system or a component of the system. Thus to ensure efficiency in a process there is need of analyzing the whole value process cycle and eliminated the process that do not add value to the system.

This study was based on three basic theories that tries to guide on the relationship of quality of service and the process efficiency. This were the theory of disconfirmation, which analyses the response a customer gives as a result of the level of satisfaction obtained (Oliver, 1997). The equity theory, agree on the proportionality of once input to

the rewards or expectation. The theories of rationality, effectiveness, efficiency and control which was advance to define organizational structures.

Over the past decade there has been substantial increase in activities at the Kenya-Uganda borders which is served by the two border points of Busia and Malaba Mainly due to increased global trade and also due to the regional cooperation that has ensured the enabling environment for movement.

1.1.1 Process efficiency

Process efficiency is the measure of output per unit of input in the business processes, it's the amount of time, labor and expenses consumed by a process. There are four main types of process efficiency namely, overall efficiency which is generally the overall outputs divided by the overall inputs, throughput efficiency is the output of a process or a machine for a unit of time, labor productivity which is the output for an hour worked, resource efficiency is the measure for any resource consumed by a process.

Organizations have been challenged by the intense competitions coupled by continuous changes in business environment, hence this make them to adapt new ways of operations that help them build capacity and make them more flexible to meet customer demands. Thus implementation of process improvement measures in business come in hand to enhance this (Prachi, 2007).

By implementing business process reforms (BPR) techniques, it's possible to reduce cost, time and human resource hence improvement in efficiency and effectiveness (zaheer, Mushtaq, & Ishaq, 2008). Companies that create favorable environment for their employees for work and growth in terms of training them ultimately emerges successful (Sameer, & Ralph, 2004).

When customers are satisfied organizations will ultimately experience a positive progress thus business leaders appreciate that when customers are satisfied their revenues would probably experience a positive trajectory.

Efficient processes in the case of one stop border post (OSBP) leads to reduction in the lengthy clearance process hence save time, reduction in massive paper works and eliminate duplication of work experienced in the two stop border post thus saves on the cost of operation as well as doing business (east African, 2018).

In the case of Canada-U.S border post, there is an appreciation by the eastern border transport coalition (EBTC) that efficient border processes has ensured improved trade with the Canada-U.S being the biggest trading block in 2003 between two nations with a total of about \$ 500 billion in trade (ebtc-whitepaper, 2014).

In the modern systems, a robust and efficient quality processes will involve technological use hence reduces on the manual operations (Snee, 1993). Thus the usage of information technology (IT) has been instrumental in the improvement of efficiency in business processes (Davenport, 1993; Sethl and King, 2003; Venkatraman, 1994).

1.1.2 Service quality

The analysis of service quality involves assessing the delivery of service against the expectation of the customers, hence a service that is friendly and efficient to the customers is considered good. This basically means comparing perceived expectations (E) of a service against perceived performance (P), which give rise to $SQ = P - E$. (Oliver, 1981) in his conceptualization of satisfaction of customers, he noted that it's a feeling within the individual either pleasure or disappointment which they get from comparing the performance of the product or service to their expectation. This generally are two

conceptual analysis of satisfactions namely transaction specific and cumulative satisfaction (Boulding & William, 1993). Transaction specific satisfaction is the analysis of a specific service offered to a customer in terms of its delivery i.e. the experience and reaction (Cronin and Taylor, 1992; Boshoff and Gray, 2004), the cumulative satisfaction account to the general analysis of the experience realized on the overall services expected (Johnson, Anderson and Fornell, 1995).

A business will meet or exceed the expectation of the customers if it offers high quality of service and still remain competitive. Many researchers have had different definition of quality of service, Bitner, Booms and Mohr (1994) defines it as the overall impression by a customer on the organizations service inferiority or superiority. Improvement of quality of services can be archived by ensuring that the operational processes are streamlined and develop measures of identifying and solving problems in the systems and developing measures to analyses performance and customer's satisfaction.

The five common dimension used to commonly measure quality of service are namely how tangibility is the service, reliability of the service, level of responsiveness, assurance level and empathy it offers (service performance.com, 2018). This dimensions are important to the customers at differing levels hence the service providers need to understand and known which dimension is to the heart of the customers they intend to serve. In the border clearance process the customers are mainly concerned on how effective and faster they can get the services offered hence the need of a more reliable and responsive system to deliver to them an effective service.

Generally when there is improvement in the design of service it will help in the realization of higher level of service quality, therefore the change in the design of service

can be done through designing how the service is delivered and how it appears, the environment and improving how it interact with the actual customers, Stewart (2014).

Therefore to be satisfied that the business is improving in terms of conformance in service quality, there is need to guaranteeing having standard measures of assessing the processes and allowing for customers feedback. Generally with the improvement of processes control hence efficiency in the process management there will be improved service delivery hence quality services which will be appreciated by the customers, Ballantyne, Christopher and Payne (1994).

1.1.3 Busia and Malaba border posts

Busia and Malaba border points are both situated in Busia County of the Kenya side of the border which is the main link between Kenya and Uganda and also they are the main routes that join to the other main eastern Africa nations of Rwanda, Burundi, South Sudan and eastern Democratic republic of Congo.

There are five gazetted border points between Kenya and Uganda namely Busia, Malaba, Lokitanyala, Lwakhakha and Suam. Of this the most commonly used points are the Busia and Malaba border points which are recording thriving activities in terms of trade and human movements across, Daily monitor (2018).

The Kenya-Uganda trade, for a long time known for lengthy procedures, expensive processes, a lot of paperwork and middlemen, has changed considerably. The one stop border post (OSBP) has now allowed customs and other border control agencies from the two countries to sit under one roof, this ensure that they collect revenue with ease and hence facilitate trade. With this simplified and faster systems they have managed to reduce smuggling due to the fact that there is no longer incentive to use illegal channels

and with the reduced time for clearance there is improved business by trading more volume within a specified time, Daily monitor (2018).

The most common border clearance services offered by these agencies are, the customs clearance for goods and services by the revenue authorities, the peoples clearance by the immigration department, health department to monitor standards in terms of diseases in human, plants and animals, this is achieved by the national bureau of standard, drugs control authorities, quarantine inspection services etc. there is also security services offered by the state on the users of the borders to ensure safety, East African (2018).

All this services are effectively consolidated by trying to improve efficiency through development of various systems to automate them or make them faster or user friendly. Some of the systems used are Direct Traders Input (DTI)/automated systems for customs data (ASYCUDA), integrated customs management system (ICMS) etc. Kenya has been implementing the use of ICMS to replace the SIMBA system which is obsolete while Uganda has been trying out the ASYCUDA system to be used in facilitating a faster clearance processes, Daily Monitor (2018).

According to (Daily Monitor, 2018) the Uganda revenue authority said that the Busia joint border post which was constructed to the tune of \$ 11.7 million was expected to lead improve revenue collection by boosting of the economic growth. The OSBP is expected to shorten the clearance time to about two hours from the previous three days, this is to ensure the volume of export passing through the border is increased. Based on trade mark east Africa (TMEA) independent time and traffic survey, it was found that the total weekly traffic count on the Kenya side of the border is 3324 vehicles and 1784 on the

Uganda side. The Busia border was found to be handling the largest number of informal trade across the border in EAC.

The OSBP launched in 2012 through the one stop border post bill 2012 and funded by World Bank and (TMEA) has improved service delivery by simplifying the process, this process ensured that one only need to deal with the border agencies of the destination country by completing the whole process through visiting only two desks. This saw upgrade of system to make them online hence reducing a lot of paper works and eliminating middlemen.

The OSBP is meant to ensure effective mechanisms on border control are in place hence trade will be boosted by increasing efficiency of service delivery, the construction of the post includes immigration center, police station, custom booths, clearance block, animal house, dog kennels, gate house and a furnace for burning waste.

According to (crown agents, 2010) the Busia border post has been blamed for delays consequently resulting to congestion at the port of Mombasa. These delays have in the past lead to strikes and go slows by transporters and clearing agents. With this trackers and traders were forced to bribe their ways to be able to jump queues or facilitate faster clearance of their goods. This delays at the border posts and with lack of means to settle disputes hindered the opening up of the East Africa, even after the launch of East Africa community market (EAC).

In other border posts, the case of Kenya-Ethiopian border post at Moyale has been aimed at improving trade and promote peace between the two nations by the establishment of efficient border services which will improve service delivery processes (capital business, 2017).

According to Regional initiative in support of vulnerable (agro-) pastoralist in the horn of Africa(RISPA) report of IGAD field assessment, it was found that informal livestock trade that exist between the Kenya and Somali border is the largest live animal export movement in the world hence it has been shown to cost the two nations losses in revenue. Hence with the border services which are efficient this trade can be tapped to the benefit of the two nations in terms of revenue and improved trade volumes. Thus IGAD with its policy dialogue is working on prioritizing border facilitation which will eventually improve the livelihood of the pastoral communities living across the border, (IGAD field assessment report).

1.2 Research problem

Studies conducted in the field of service quality and operational efficiency to try and give the significance of this factors/ parameters in the way some organizations perform their operational works, (Samyak, 2013) in measuring the efficiency of service delivery process in hospitality industry, found that the efficiency of service delivery depends on several factors like, service speed, service visibility, service attentiveness and courtesy & friendliness. Thus the study conclude that the gaps which sometimes exists should be rectified by measuring efficiency in process delivery using the listed factors hence the say “ do it right the first time”.

Larson (1998) on” Customer First: using process improvement to improve service quality and efficiency” in the framework of a library project when process improvement in the improving of work tasks and systems(processes) there was improved productivity, reduced costs and increased customer satisfaction.

Lee, Wilson, Valencia, Parra, Van Schok, Soberano, Olson & Salee (2013) on the state of the border report; a comprehensive analysis of the U.S- Mexico border , quite a number of factors come to play in the significance of border clearance. In that despite improved quality of services at the border, still the environmental challenges like security issues and quality of life across the two nations affects how people use the borders hence with the huge populations along the boundaries still there is increased rate of smuggling of people and goods.

Sokolova (2017) on the challenges with features of customs clearance at the Russian-Finnish border found that the update and usage of technology affects time of clearance by reducing the time and make the process more efficient though there was a realization that still more factors could still delay the process like the port services which may be slow.

Lu (2015) in her qualitative research analysis of service quality and customer satisfaction: on the implications for luxury hotels, where she tried to understand whether managers of hotels and customers both groups have the same analysis of service quality and satisfaction and whether there is a variation between the service offered by luxury hotels and the way customers actually experience them. Her findings was that there exists no disconnect though the two group understand in different language on description of service quality, luxury and satisfaction. While guest analyzed the level of satisfaction in terms of value received for the prices managers evaluated in terms of services provided. Hence close relationship of service quality and satisfaction.

Global trade has increased tremendously in the past few years which in effect has an impact on the movement of goods across the borders. Regional integration arrangements (RIAs) composes of larger percentage of trade systems in the world, thus Africa and east

Africa is not an exception to this phenomenon, with estimates showing that more than half of the total world trade occurs through regional blocs/agreements (Sangeeta, Kato, Nicolas, 2009). Hence this has led to pressure on the partner states to develop systems on how to facilitate this process so as to ensure that it's seamless and efficient to support growth.

With the signing of the East Africa community common market (the common market protocol, CMP) there has been improvement in economic growth and development due to the achievement of goods moving freely with ease, free movement of person, labor movement, the right of establishment, the right of residence, free services movement and the free capital movement (Kamau & Wanyama,2017). This ensures that there is need of efficiency in the processes that will deliver this activities on a timely manner.

Though CMP may have led to liberalized trade and investment policies, they may not do a lot in facilitating flows of services across the boundary and actually increase the proper works and processes needed for bilateral trade (Zuckerman, 1995). The transportation literature reorganize the importance of dependable borders and possible border cost impacts on trader's logistics systems (Heavor, 1992). This fact explain the importance of developing system which will support the established policies in ensuring that the intended goals are achieved.

The study is significant because whereas some studies have been conducted in the fields of service quality and process efficiency, little or no specific study have been done to try and determine the correlation of service quality and process efficiency at immigration points, hence the researcher has concluded the need to conduct the study to determine the

relationship of this on the performance at the posts which could help in influencing future policy decisions.

1.3 Objectives of the study

The objectives of this study were,

- I. To determine the relationship of the quality of service offered at the border posts to the efficiency of the clearance process in terms of the volumes of goods.
- II. To analyze the relationship of the quality of service in immigration point to the efficiency of clearing the people across the border.

1.4 Value of the study

The study offer useful insight to the policy makers like the government and the intergovernmental agencies in charge of regional cooperation's like EAC in formulation of the right policies which will in effect ensure proper implementing of procedures that can be helpful in delivering a progressive border services across the two nations and also help them to identify the potential challenges that may be realized in the implementations of some of this processes.

The findings of the study forms a future reference to researchers, scholars and students who might desire to carry out research on similar interrelated field. It will also support scholars and researchers in additional extent of research identification on other correlated studies through emphasizing interconnected matters requiring further studies and reading the empirical literature to launch research areas. The theoretical information on the service quality and efficiency of services will also be useful for those who would like to get informed on matters service delivery standards and implementation at different levels.

The value of this study is to the various managers who are tasked with managing this process or systems as it provides useful information's and recommendations to assist them in making more informed management decisions leading to good service delivery and efficiency, and it also offers them a pool of knowledge on how to handle related cases.

To the users of border services the study gives them an opportunity to share information of what they may feel would be of importance in contributing to the improvement of the quality of services to be offered, how well implementation could be conducted and the benefits that both could get from the system.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The study reviewed the literature in line with the objective to be achieved, of which first we looked at the theoretical frame work applicable in this case pertaining to the service quality and process efficiency. We then analyzed process efficiency and service quality in context to the study, empirical review of the process from other areas that have done the same and finally we analyzed the conceptual frame work.

2.2 Theoretical Framework

This present a review of the various theories that explain the relationship of quality of service to the efficiency of the processes on which it's rendered. The theories that explain this are, disconfirmation theory, equity theory and theories of rationality, effectiveness, efficiency and control.

2.2.1 Disconfirmation Theory

The expectancy disconfirmation theory argue that consumer's judgment on satisfaction is based on the evaluation of the product/services. Mattila & O'Neill, (2003) argue that disconfirmation theory is among the most popular satisfaction theories, which explains that satisfaction is related to the size and direction of the disconfirmation experience that occurs as a result of varying the service performance against expectations. Basically, satisfaction is the outcome of direct experiences with products or services, and it occurs by comparing perceptions against a standard (e.g. expectations). This is an indicator that the satisfaction which is driven by the quality of service is a contributor to the efficiency

of the processes in that consumers would always appreciate and use the service that they are satisfied with its outcome.

Another way performance can help in explaining satisfaction is through comparing relationship between two opposite sides that implies difference between positive and negative perceptions. Expectation disconfirmation theory (EDT) has been traditionally been used to develop major marketing changes by studying customer satisfaction behaviors (Tse, Nicosia, & Wilton, 1990)

In the case of service quality at the border clearance process, the lack of satisfaction on the processes may be the main cause of slow processes hence the changes in the systems and mode of service delivery could have improved the efficiency of delivery. (Mattila et al., 2003) in the research analyzed that the delivery of the service has proved to be significant than the outcome since dissatisfaction to a service will occur when what a customer perceive is not meet in the expected product or service.

2.2.2 Equity Theory

This theory argue that what a man expect as a reward should be equivalent to the level of his input. The concept suggest that in the analysis, the ratio of output to input should be constant to all people consuming the same service or participating in the same course of action. Thus satisfaction will be believed to have occurred if the customers appreciate that his input to output is equal to that of the fellow participant.

When people realized positive inequities they may experience dissatisfaction from a judgmental perspective, thus making them feel uncomfortable with the outcome when it

deviate from an equitable position. But from a hedonic perspective people will tend to be comfortable with outcomes which favors them (Liu & Brockner, 2015).

Equity theory state that “people will want to maintain their psychological balance by striving to achieve a state of equity and fairness” (Adams, 1965) therefore when they realize that an imbalance may exist they will try and bring back the balance to avoid mental discomfort.

In the relationship of a group behavior in equity can be brought about by ensuring equity in resource distribution among members while at interpersonal relationship perspective each person will struggle to maximize his or her outcome (where $\text{Outcome} = \text{Reward} - \text{Cost}$). According to (Adams, 1965) a feeling of injustice will lead to dissatisfaction, anger, and guilt. Equity has been found to have moderate effect on customer satisfaction and communication behaviors of customers after purchase.

In appreciating that the processes of border services involves human contact, the delivery of services may have been affected by several factors of which some of them being biasness in service delivery. Hence the need to create equity in service delivery my involve changes in the mode of delivery to reduce these contacts by development of more transparent systems with little human contacts.

The concept of equity in service delivery is described by the mare fact that in service delivery fairness in delivery of services will improve the level of satisfaction on the users of the service hence improve the performance of the service in process delivery. In the context of clearance services Initially there was a number of middlemen involved in the clearance process hence the delays may have been occasioned by inexperience and

corruption in the process of clearance as some middlemen lacked the expertise to do the job faster while other customers lacked the finances to facilitate their faster processes.

The improvement of service delivery processes and services in general can be argued to lead to improvement in efficiency since all the customers are given an equal opportunity to be served by a standard system that would not be bias and also increase efficiency by eliminating inexperience by having a standard speed of the delivery process.

2.2.3 Theories of Rationality, Effectiveness, Efficiency and Control

In the concept of theories on rationality, efficiency, effectiveness and control in organizations it gives a claim of how organizations works and their effects on the individual behavior. With the most prevalent organizations having bureaucratic structures, thus this are maintained by officials and systems.

Rationality involves making decisions based on the content of the problems, taking into consideration the alternatives and the preferences and also the careful selections of the criteria's which fits the contexts. In public administration organizations the presence of several decisions makers ensure more rational decisions and value which leads to competition (Androniceanu, 2005).

Since organizations comprises of individuals from different backgrounds and cultures who come together in the same work environment, their success in achieving their goal will be determined by the organization structures, thus with proper structures they have good chances of success. Hence rationality, effectiveness, efficiency and control are related to the structure of the organization.

Rationality is how individuals in an organizations behave thus their behaviors is affected by the organization structures. The organization effectiveness is the ability of the organization in achieving the desired goal while efficiency is the extent to which resources are minimized and output maximized in order to achieve the goal. The consistency of individual rationality, efficiency and effectiveness of an organization is determined by the control systems developed in the organization.

The systems of control are built into organizational structure to influence individual rationality, ensure consistency is maintained and enhance the efficiency and effectiveness of an organization (Taylor, 1970).

Several studies since the 1950s have had a focus on the understanding of the concept of effectiveness in organization (Jean, 2003). Thus organization performance/ effectiveness hugely reflects a construct perspective in which the focus is on the definition of the concept in terms of assessment and conceptualizing (Goodman, Penning and associates, 1977).

Zeithaml, Berry & Parasuraman (1988) stated that effectiveness of the process control influence positively the quality of service, thus the general process control of the work flow and utilization of capacity resource in order to meet performance standards will ensure continuous improvement of service delivery and upgrade of quality of service provided to the customers. Due to pressure of globalization, increase competitiveness and the volatility in the business environment, organizations come up with innovative ways of value additions in their service provisions to improve the quality of service and make them more efficient in terms of operations.

2.3 Service Quality

Service quality measurements can be both subjective and objective processes, in the subjective model the service quality is measured using the SERVQUAL model while in the objective model it can be through primary process where customers' episodes are used to measure while secondary procedures with quantifiable factors like the number of customer complaints or goods returned are used to measure.

The assessment of customer include expectation and perception across the five SERVQUAL dimensions, the providers of the services need to work on all the five but Need to emphasize them in order of importance. The providers of the services can use this guides to determine specific customer needs by asking questions around them.

service quality was based on disconfirmation model (Gronroos, 1984), that put persieved service against expected service hence the modern analysis of determining the gaps between persieved service and expected service as sdvanced by (parasuraman, et al., 1985) is critical in analysing service quality.

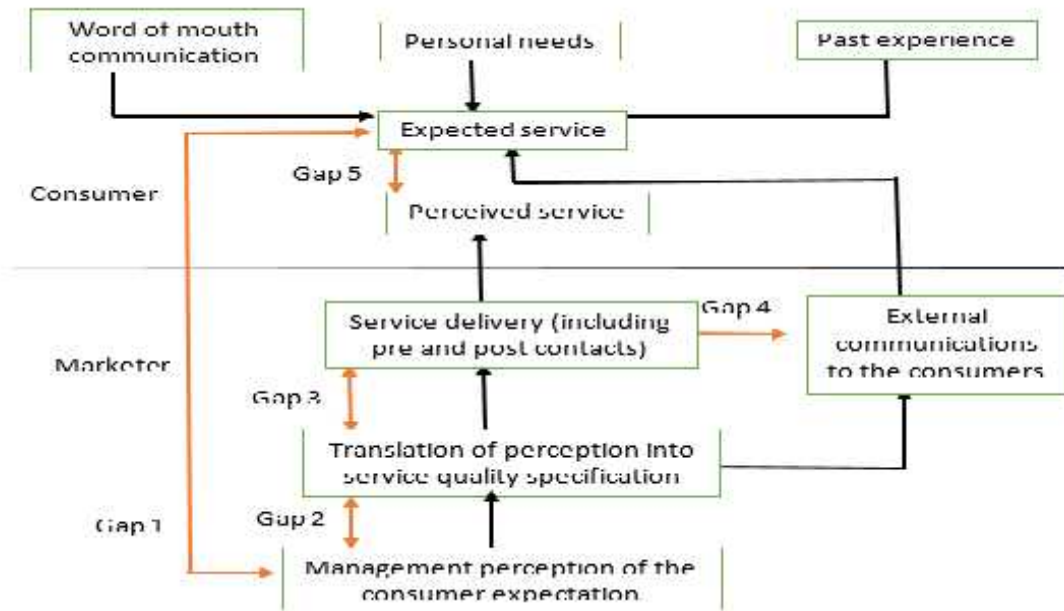


Figure 2.1: The service quality gap theory

The figure shows the gaps to be measured in the analysis of the service quality, these are,

Gap 1: The variation existing between consumer expectation and the perceptions of management on the customer's expectations.

Gap 2: The variation between the management perception of consumer's expectation and the specifications of service provided.

Gap 3: The variation between service quality specification and the provided service.

Gap 4: The variation between service provided and communication in the external environment to the customer.

Gap 5: The variation between the expectation of customers and their perception of the service. This gap will rely on the other four gaps associated with service quality delivery on the market side. $Gap5 = (gap\ 1, gap\ 2, gap\ 3, gap\ 4)$.

Thus with this gaps analysis in the provision of services still reserch has shown that the use of persived service on the performance in mind known as SERVPERF would still be effectively used in measuring service in a public organisation just as per (cronin and Taylor, 1992) who still measured performance based on RATER model of reliability,assurance,tangible, empathy and responsiveness. Hence the need of understanding the gaps in the design of developing a proper service delivery system.

2.4 Process Efficiency

Process efficiency in organization is seen as a way of aligning processes in order to eliminate waste, this systems are in essence carried out in several principles applicable to different organisations like lean manufacturing, six sigma and kaizen, all this analyzes the wastage levels and try to control to improve the performance or efficiency.

Process efficiency in organisations set up can be measured through the use of total time of processing, utilization of resources per unit of total output, non value added cost, nonvalue added time, cost of quality e.t.c. the total process efficiency measure provide a single indicator that measures the level to which a process performs relates to its full potentials.

The Total Process Efficiency (TPE) is used as a measure of key performance indicator (KPI) that drives continuous efforts of improvement.

$$\text{TPE} = \text{Utilization} / \text{Reliability}$$

$$\text{Utilization} = \text{Scheduled Hours} / \text{Total Available Hours},$$

where utilization is the measure of the process workload, based on 24hrs/ 7days a week availability. The factors that hinders utilization are downtime due to closure,holidays,weekends etc.

Reliability=(Uptime)(Dependability)(First Pass Yield)

Uptime=(Actual run time)/(Schedule run time), the uptime losses can be caused by unplanned breakdown, support related downtime, change overs and time for setting ups.

Dependability=(Actual run rate)/(Design run rate), dependability is affected by unplanned equipment stoppage which is not planned, when production speed is adjusted and jam on the production line of materials and products.

First pass yield=(Goods outputs first)/(Total input), fpy can be affected by scrap, rework, losses in yield in the process, quality rejects, material losses.

In measuring total process efficiency the organisation is able to align its processes and ensure efficient operation, hence a driving force when prioritizing improvement opportunities.

2.5 Service Quality and Process Efficiency

The ability of an organization to perform will be determined by its cost cutting measures by streamlining the data management processes and improving its communication processes, hence this can determine the difference in improvement of the incremental cost in different processes and improved financial performance in the enterprise in general thus decides the best in class practices. (Ahire and Dreyfus, 2000), reported that process management will positively affect the performance of organizations

Benner and Tushman (2003) argued that effective management process practices stabilize organizational process and establish an environment focused on searching for easy opportunities to gain efficiency. To this there are environmental variables that need to be included in analyzing the effect of process management on the efficiency.

To be efficient organizations need to be quick and effective in producing products or services with little waste, therefore gain in efficiency occurs by consistently producing products which meet specifications by identification of areas causing defects and variations and eliminating (Juran, 1992). Process improvement ideas also come from incremental learning as the employees become more proficient in their tasks more and more ideas are generated on how to change the processes and make them more efficient.

The service quality on the other hand has been reestablished to be principally defined by the servqual model which has 5 main component. In each of them the consumer anticipation and what they perceive on the final outcome determine their measure.

Though the model has had criticism because of its poor validity and reliability, Syed (1998) argued that despite the enthusiasm in pursuing a research utilizing this model, there were still need of using empirical framework while (Rowley,1976) raised an issue about the ability of an instrument that neither being reliable nor unreliable. The model is still widely been recommended for measuring service quality.

With this assessment the interrelation of process efficiency to the service quality in an organization has a significant contribution on the performance of an organization as per studies done to determine whether they are tangled together or are different components. Thus the researcher in this case is out to analyses the relationship that exist in the process efficiency and the service quality in regards to the performance in the immigration control points.

2.6 Empirical Review

The review was based on studies which had been conducted in various organizations and institutions on service quality and process efficiency. According to (Antreas,1997) on the

quality of services and synergies in operating efficiency for management control in the provision of financial services: Evidence from the Greek bank branches, where he analyzed and found that bank branches operations are characterized by the efforts made by managements to pursue the banks corporate objectives.

Sokolova (2017) on immigration services intimated the four customs clearance components of revenue collection, regulatory compliance, trade facilitation and security of which she stated that the success of how this activities are carried out will determine the efficiency of the border services.

According to Abdirahman (2016) on quality of service practices and satisfaction of customers in Nairobi's taxi companies the researcher found that based on the servqual model the customers were found to be uncertain of the reliability of the service but agreed on the essence of providing individual attention. They strongly agree on empathy and assurance by the taxis companies to build confidence on their customers. With general summary agreeing on the existence of relationship between quality of service and customer satisfaction.

Nabila (2016) exploring the dimensions of mobile banking service quality: implication for the banking sector, she found that customer being critical of quality such alternative financial delivery services providers hence the need of finding the underlying factors and service quality that can influence the behaviors of the customers.

Asya (2013) on service quality and customer satisfaction. Found that since customer attitudes helps to drive their loyalty to a product or service, there is need to manage loyalty by satisfying them rather than directly emphasizing the importance of producing actionable outcomes.

2.7 Conceptual Framework

In this study, the framework comprises of service quality as the independent variable which in essence is made up of the services offered at the immigration posts including the OSBP, vehicle and human flow management, the management of the waiting bay, service delivery processes and the staffs who are expected to carry out the work. This services are expected to provide a level of satisfaction to be able to create a level of efficiency in the process which will be the dependent variable. The factors determining the efficiency of the processes include level of clearance by volume of both the goods and the people and clearance time.

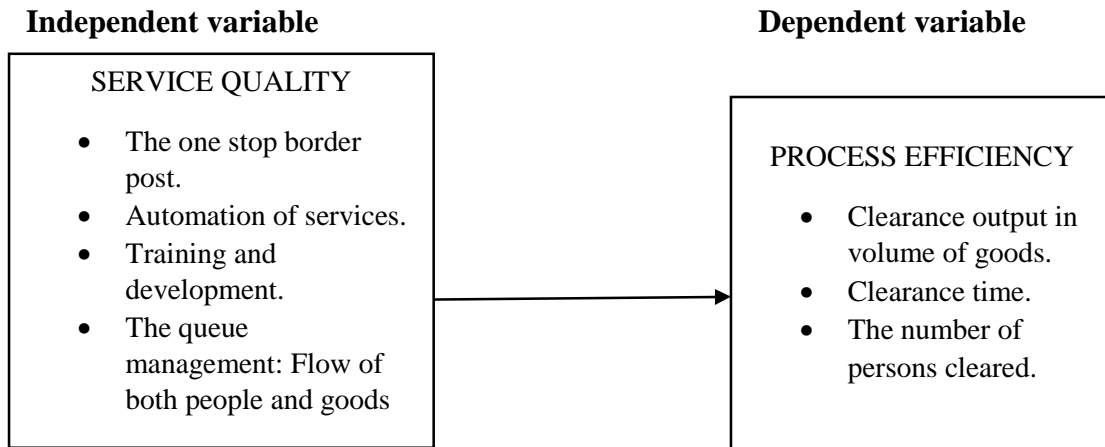


Figure 1.2: conceptual model

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter represent the research methodology on the process efficiency and service quality at immigration points with the main aim of establishing the correlation of the process efficiency and quality of service. It will therefore presents the research design, selection of the case, data collection and data analysis to help come up with findings.

3.2 Research Design

The study adopted a descriptive approach to determine the relationship that exist among the variables that had been identified during the literature review: service quality parameters to contribute to satisfaction and then determine the outcome of the whole process which is the efficiency of the process. The research was conducted through a case study since the focus was on two organization and not a cross section of all immigration points. A case study is an in-depth investigation of an individual, institution or phenomenon, thus this will help in in-depth analysis of the factors under the study.

Since the study hopes to analyze the relationship of the process efficiency and service quality, the case will help to determine the level of satisfaction with the services offered and hence analyze the outcome over a stated time of occurrences to establish the correlation.

3.3 Selection of the Case

The study was conducted at the Busia and Malaba border posts. The targeted population were the clearing agents and the people using the borders who involves businesspeople and individuals who pass through. There was also the involvement of the border management personnel's who helped in giving insight on the processes and services offered and the data collection, this was conducted through purposive sampling where respondent among the management personnel were selected as stated by (Oso and Onen, 2005), purposive sampling starts with a purpose in mind and hence the sample is selected to include people of interest while excluding one not interested.

3.4 Data Collection

Primary and secondary data was used in this study. The primary data was gathered in a way of survey by use of self-administered questionnaire on the respondents who were believed to be using the border services. The respondents comprised the travelers, the business men, the clearing agents, truck and bus drivers and the borders officers. Surveys was appropriate in getting first hand populace data with users who can read and compose freely. Therefore every respondent got similar arrangement of inquiries in the very same way. The researcher was mindful of the respondent confidentiality hence they were made aware of the reasons for the exploration.

Secondary data was gathered from the economic surveys of 2016 and 2018 where extracts on the trade between Kenya and African countries was used mainly the trade between Kenya and Uganda, Rwanda, Burundi, D.R. Congo and South Sudan. And also on the departing visitors from Kenya through Uganda which were believed to be the data affecting the two border points.

3.5 Data Analysis

The data collected using interview guides which was qualitative in nature was analyzed conceptually, Bogdan and Bilken (1982) the process of analyzing data qualitative involved organization of the data to develop it into manageable contents, synthesizing it and identifying the pattern to determine what was important and what need to be learned, hence make conclusion on what to tell people.

The analysis of the quality of service was done to determine whether they give satisfaction which would create the right level of efficiency to the processes in a comparative manner over different periods of applications. Multiple regression statistics was employed to establish a relationship which is statistically significant between the quality of service and the efficiency of the processes at the immigration points at Malaba and Busia posts on the regression model.

$$Y = 0 + 1X_1 + 2X_2 + 3X_3 + 4X_4 +$$

Where;

Y = Process efficiency (Time taken and Volume cleared of goods and people)

X₁ = OSBP

X₂ = Training & Development

X₃ = Automation of services

X₄ = Queue management of goods and people

0, 1, 2, 3, 4, are the coefficient of the variables

is the error term.

Tables were used to represent the data diagrammatically and descriptive data was provided in form of exploratory notes. Analysis was done with assistance of statistical packages or methods to analyze the data.

3.6 Observation Schedule

The survey was conducted in five days targeting various groups using the border posts at different time as indicated by the schedule to capture the general view.

Table 3.1: Observation schedule table

Population surveyed	Day 1	Day 2	Day 3	Day 4	Day 5
People crossing the border on foot	7am to 11am	12 noon to 2pm	3pm to 6pm	7pm to 11pm	5am to 6am
People crossing using public means i.e. Buses	4am to 6am	10 am to 11am	3pm to 6pm	11pm to midnight	7am to 8am
People crossing using private means i.e. cars	6am to 8am	10am to 12 noon	3pm to 6pm	7pm to 9pm	Midnight to 2am
Truck drivers, Bus drivers and business men	5am to 7am	8am to 10am	11am to 2pm	3pm to 6pm	7pm to midnight
Clearing agents and border officers	Agents	Immigration officers	Quality standards officers	Revenue officers	Health officers

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1: Introduction

This chapter presents analysis and finding of the study. The correlation of quality of service to the process efficiency in relation to the services offered at the border points of Busia and Malaba. Analysis was done by way of questionnaire as the research instruments which was administered to the respondents who are the border service users and the data relating to the border clearance activities. The design of the questioner was in line with the objectives of the study.

4.2: General Information

The study targeted a population of about 105 respondent to be interviewed using the questionnaire, 95 respondents filled in and returned the questioner contributing to about 90%. This was a commendable response as stated by various researchers (Mugenda and Mugenda, 2003 and Kothari, 2004) who rated a response rate of above 70% very good. This was made possible by the support accorded by the border security team and managements who showed their willingness to support the course and assisted in distribution of the questionnaire.

The survey was conducted as a way of case study and hence two border points were selected for the study, this was in recognition of the active nature of the two border posts and the realization that they are actively used for both goods clearance and clearance of people making them one of the most active border posts in Kenya. With the success of administration of the questionnaire being as follows,

4.2.1: Gender Distribution

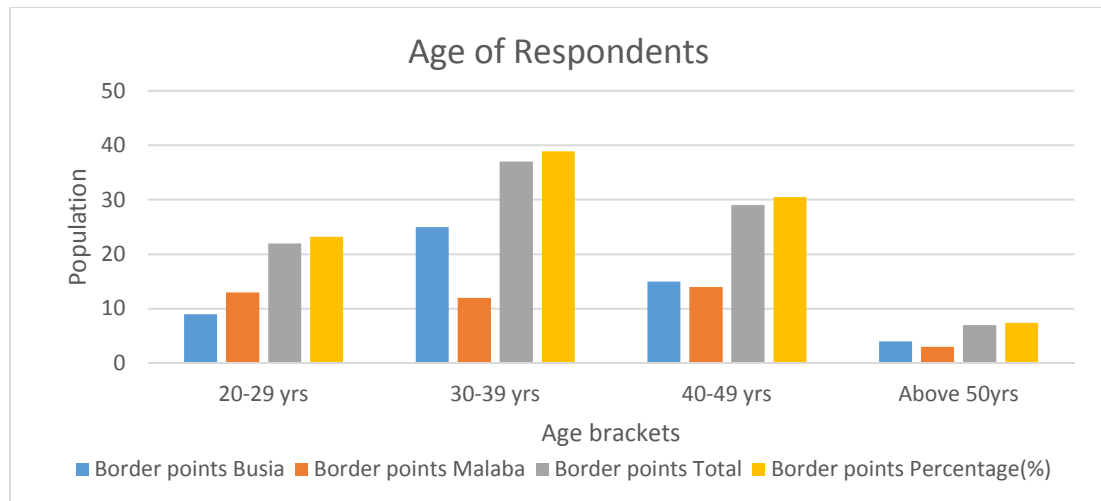
Table 4.1: Gender distribution

Gender	Border Points		Total	% percentage
	Busia	Malaba		
Male	35	25	60	63.2
Female	18	17	35	36.8

Source: Survey data (2018)

This shows a fair distribution of the questionnaire between the genders.

4.2.2: Age Distribution of Respondents

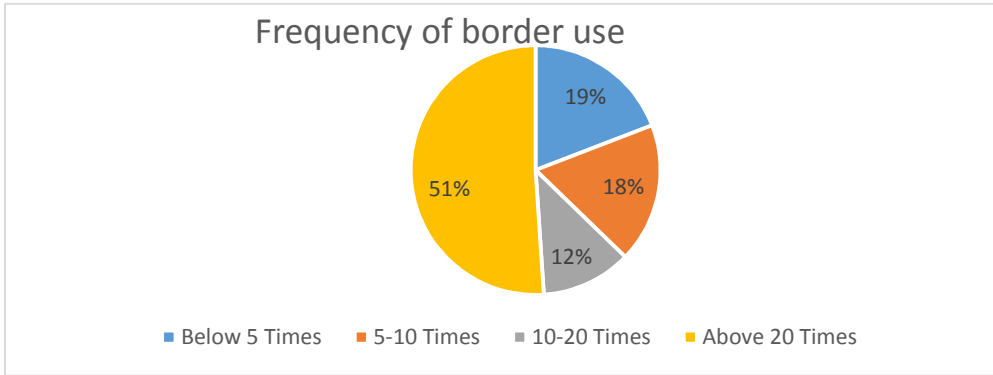


Source: survey (2018)

Figure 4.1: Demographic distribution of respondents

This was an indication of the fact that most of the border users were the active populations who are involved in the day to day activities hence represent true picture of the border users.

4.2.3: Frequency of use of Border services

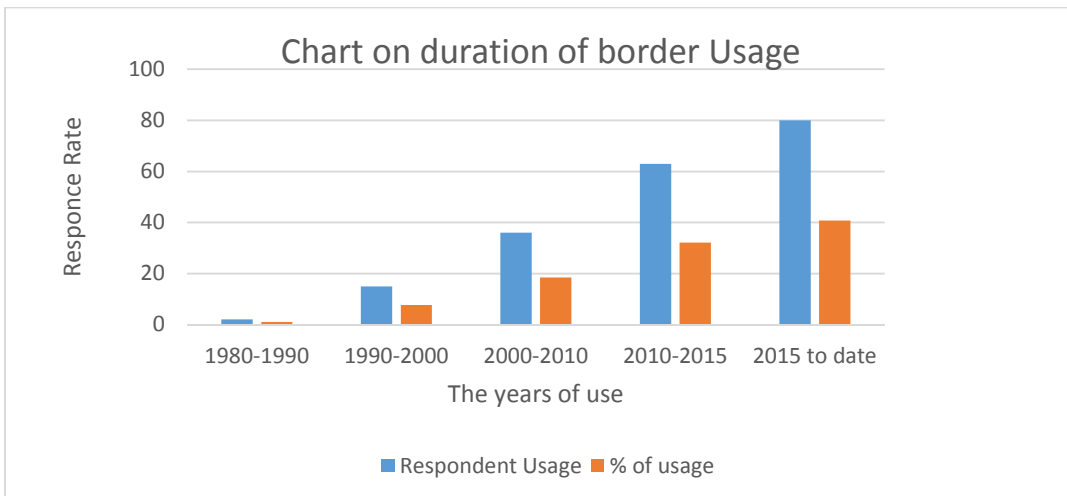


Source: survey (2018)

Figure 4.2: The frequency chart

This was a clear indication that these border users majority of them had clear understanding and experience of the border services due to their continuous use of the border services.

4.2.4: Duration of use of Border services



Source: Survey (2018)

Figure 4.3: Duration of service usage

This shows that most of the respondents experienced changes which were happening at the border points which have occurred since the revival of the EAC and the operationalization of the OSBP. This is due to the fact that most of them utilized the services between this periods from 2000 and 2015.

4.3 The Service Quality Response

These gives the summary of the response to the different service quality questions presented to respondents in the questionnaires, with the breakdown on the independent variables as follows.

4.3.1 Significance of the OSBP

The respondents were asked whether they have used both the OSBP and the old system of the two stop border post (TSBP) and give a comparison of both the two systems on their level of satisfaction by rating them on a scale of 1-4 from worst, bad, good and very good. With 85 respondents responding to this question meaning they have used both systems, a mean of 2.48 and a standard deviation of 1.191 was obtained.

With those who said OSBP was worst being 29.5%, bad 9.5%, good 28.4% and very good 22.1%. We can say that a slight majority either considers it good or very good hence in acceptance of the fact that they are satisfied with the service. This can be attributed to the satisfaction of services due to improvement of the general systems of service delivery in an institution as stated by Filardo (2005) on what is continuous improvement where satisfaction to improved services was quoted as the main factor.

4.3.2 Value of Training

On this the respondents were asked whether they have gone through a training process in relation to their jobs at the border points, of which the question was targeting the clearing agents and the border officers who are responsible for offering the services. To enhance the relevance of the question to the study, the period when the training was conducted was also inquired in comparison between training done before 2012 and done after 2012.

A total of 35 respondents responded to this question with the question inquiring whether it was not helpful, helpful and very helpful on a scale of 1-3 respectively. The findings was a mean of 2.4 and a standard deviation of 0.736, which showed majority agreeing that it was helpful and that they had obtained their relevant training after 2012.

With about 54.3% of the respondent accepting that training was very helpful and 31.4% agreeing that it's helpful we can also accept the significance of the service to the user as having a positive impact on their level of satisfaction. According to Mantey (2012) satisfaction by the service providers from the training they received lead to improved service delivery and subsequently customer satisfaction. Also as found by Cheng Fan Fah & Cheng Seow Voon (2016) that there is a relation between customer satisfaction and employee training where successful training Programme has a relation to improved satisfaction levels among employees.

4.3.3 Significance of automation

The respondents were then asked whether they have used both the old manual processes and the improved automated systems of clearance of goods and people. They were required to give a detailed comparison on their level of satisfaction between the two systems on how they feel the system is working for them. A total of 69 respondents

responded to this question, with some describing it as slow, others were average on the service while others saying it was faster. This was then scaled on a scale of 1-3 from slow to faster.

System automation having been accepted as being faster at 60.9% of the respondents with a mean of 2.26 and a standard deviation of 0.949 we can say that the majority of the respondents considers the service to have a significant level of satisfaction to them. According to Emma (2017) automation helps in improvement of response time, resolution time and system update hence enabling customers to be satisfied through quick service delivery processes.

4.3.4 Value of Queue use

On the value of the queue, the respondents were asked to compare the queue between the old system and the OSBP system in terms of its significance to the flow of the clearance processes whether it was very slow, slow, average, fast and very fast on a scale of 1-5.

A total of 85 respondents responded to this question with a mean of 3.07 and a standard deviation of 1.361, The fact that the improvement of the service in the queue usage for both the clearance of people and goods was considered either fast at 43.5% and very fast at 10.6% of the respondents it can be generally concluded that the respondents considers it to have a positive impact to their satisfaction level. Munirat (2015), found that queue management helped in delivering customer satisfaction through ensuring procedural customer service and eliminating unfair practices with Thande (2014), agreeing that most customers accepted that scheduling and queuing helped to save them time money and ensure consistency and security in the way they conducted their duties.

4.4: The Process Efficiency

The process efficiency was analyzed on the level of outputs which was realized by the respondents in the two set of conditions of one stop border post services and the old two stop border posts in terms of time of clearance and volumes processed of goods and people.

4.4.1: Clearance Time

The clearance time was analyzed by the respondents required to compare the amount of time they took to procure services between the two systems, this question was comparing their experience when they used to use the TSBP or the old system and the current new system of OSBP in terms of time consumed at the process. A total of 85 respondents responded to this question were they were asked to rate the speed from below 10 minutes, 10-20 minutes, 20-30minutes, 30min-1hrs and above 1hrs on a scale of 1-5. A mean of 2.99 and a standard deviation of 1.585 in relation to the service at the OSBP was obtained and mean of 3.16 and standard deviation of 1.254 in relation to TSBP.

The analysis of the clearance time shows a mixed reaction on the speed of clearance with majority feeling that the two systems takes probably less than 30 minutes to clear.

		Speed of clearance at OSBP	Speed of clearance at TSBP
N	Valid	85	83
	Missing	10	12
Mean		2.99	3.16
Std. Deviation		1.585	1.254
Skewness		.093	.153
Std. Error of Skewness		.261	.264

When we analyze on the time brackets individually, it can be seen that where us 23.5% feel that OSBP takes less than 10 min only 8.4% feel the same of TSBP, whereas 25.9% feel OSBP takes between 10-20min only 22.9% feel the same of TSBP. This gives to about 49.4% feeling that OSBP takes less than 20min and 31.3% feeling the same for TSBP. Alternatively 50.6% cumulatively feels that OSBP takes more than 30 minutes whereas 68.6% cumulatively feels the same. This shows that majority of the respondents were skewed towards the feeling that the OSBP has improved the clearance time by shortening it, Hence we can say that generally the feeling among the respondent was that the OSBP is slightly faster compared to the TSBP in terms of the speed of clearance. Therefore we can agree that customer satisfaction has to some extent been achieved from this feeling according to (Anderson & Sohal, 1999).

4.4.2: Clearance output in Volume of Goods

On this data was sourced to help and give the trends of the goods that have been procured through this systems to help and analyze if there is correlation in terms of the changes in volumes processed in relations to changes in activities. The data sourced was of goods processed to countries like Uganda, Rwanda, South Sudan, D.R. Congo and Burundi which are seen mainly to use the two border points as their points of exits of goods from Kenya.

According to data extract on the volume of exports and import through Uganda from the economic survey 2016 by the Kenya national bureau of statistics as shown by the table;

Table 4.4: Trade with African countries, 2013-2017

Countries	TOTAL EXPORTS (000)				
	2013	2014	2015	2016	2017
Uganda	65,361,907	60,782,664	68,573,904	62,163,383	61,814,032
Rwanda	13,499,695	14,440,844	17,949,831	17,499,630	17,124,028
Burundi	5,598,956	7,849,463	6,594,983	7,242,223	7,381,994
Congo, D.R	18,436,875	21,052,099	20,673,353	20,035,483	18,879,330
South Sudan	16,680,368	19,822,572	17,065,487	16,326,135	16,752,051
TOTAL	119,577,801	123,947,642	130,857,558	123,266,854	121,951,435
Percentage	19.3	20.0	21.1	19.9	19.7
Countries	IMPORTS (000)				
	2013	2014	2015	2016	2017
Uganda	16,085,806	17,549,421	22,283,692	19,275,753	42,041,347
Rwanda	1,005,755	715,591	789,704	774,593	1,683,596
Burundi	52,577	29,446	223,663	68,353	59,481
Congo, D.R	561,648	259,805	127,763	208,300	504,619
South Sudan	21,304	1,210,699	8,709	6,200	25,204
TOTAL	17,727,090	19,764,962	23,433,531	20,333,199	44,314,247
Percentage	14.1	15.7	18.7	16.2	35.3

Source: Kenya National Bureau of Statistics/Kenya Revenue Authority
Economic survey 2018(Extract)

From the data it can be seen that there is some slight improvement in the volume of goods cleared, with a consistent increase of export from 19.3% to 20% and 21.1% from 2013 to 2015, While import moved from 14.1% to 15.7% and 18.7% in the same period. Though this may not be an indication of the effect of service changes at the border services, it can be a contributing factor towards the same. Thus this can help in

supporting the idea that service delivery is significant to customer satisfaction as stated by Alexander P. et al., 2014.

4.4.3: Clearance Volume in terms of the Persons cleared

The clearance of person's data was obtained to help and analyze the trends in the changes in the number of persons who use the borders during this periods when effective changes were believed to have occurred to establish if there is any significant changes in the numbers of people cleared.

The data is also an extract of the economic survey 2016/2018 by the Kenya national bureau of statistics on the immigration data at the Kenya Ugandan border points in millions ('000).

Table 4.5: Departing visitors by country of residence and purpose of visit, 2015-2017

Country of Residence	Holiday				
	2013	2014	2015	2016	2017
Uganda	36.1	34.7	37.5	39.3	39.9
Country of Residence	Business				
	2013	2014	2015	2016	2017
Uganda	9.4	7.1	9.4	9.6	9.8
Country of Residence	Transit				
	2013	2014	2015	2016	2017
Uganda	4.0	3.9	3.0	4.0	6.1
Country of Residence	Total				
	2013	2014	2015	2016	2017
Uganda	49.5	45.7	49.8	53.0	55.8

Extract of Economic survey 2016/18

By Kenya National Bureau of statistics

From the extract there can be seen a general improvement in the number of persons being cleared to Uganda over the five years of the survey. This shows a positive improvement in numbers over the periods which is considered to be the time when the changes were effected. Despite the fact that this improvement cannot be fully attributed to the changes in the service delivery at the border post, it may have been one of the contributing factor, as stated by Jayaraman M., et al. (2010) a business that caters for its customer needs will ensure repeated business and referrals due to the loyalty created.

4.5: Regression Analysis

The regression analysis was conducted on the variables to determine the correlations of the independent variable which is the OSBP, significance of training and development, automation of services and the management of queues which are the services offered against the efficiency of the process which is the dependent variable determined by clearance time, volume of goods and persons cleared.

Independent variable against Clearance time

Model Summary

Model	R	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Sig. F Change
				R Square	F Change	df1	df2	
1	.800 ^a	.639	1.005	.639	11.521	4	26	.000

a. Predictors: (Constant), Value of queue use, Value of training, Significance of automation, Significance of OSBP

b. Dependent Variable: Speed of clearance

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	46.566	4	11.642	11.521	.000 ^b
	Residual	26.273	26	1.010		
	Total	72.839	30			

a. Dependent Variable: Speed of clearance

b. Predictors: (Constant), Value of queue use, Value of training, Significance of automation, Significance of OSBP

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		95.0% Confidence Interval for B		
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	6.687	.831		8.050	.000	4.979	8.394
	Significance of OSBP	-.377	.349	-.312	-1.083	.289	-1.094	.339
	Value of training	-.620	.330	-.269	-1.878	.072	-1.298	.059
	Significance of auto.	-.494	.331	-.297	-1.491	.148	-1.174	.187
	Value of queue use	-.096	.306	-.085	-.314	.756	-.726	.534

a. Dependent Variable: Speed of clearance

With Pearson's coefficient of 0.8, a coefficient of determinant of 0.639 and an adjusted R square of 0.584 there is a significant correlation between the independent variables and the dependent variable of clearance time. This in effect means that about 63.9% of the variable correlate to the dependent variable and only 36.1% don't show significant correlation.

Despite this individually the independent variables don't show correlation to the dependent variable in that they have negative effect to variable as shown, the significance

of the OSBP having -0.377, Value of training having -0.620, Significance of automation having -0.494 and value of queue use having -0.096. This in effect means for the variables to have a significant correlation they have to be considered all together. This was conducted at a significance level of 95%.

Thus we can conclude that there is a relationship between OSBP, Automation of services, Training and development and Queue management to the process efficiency as can be expressed by the equation,

$Y=6.687+(-0.377X1)+(-0.620X2)+(-0.494X3)+(-0.096X4)$ where X1 is OSBP, X2 is training significance, X3 is the significance of automation and X4 is the Queue management on the dependent variable Y which is the clearance time.

The analysis means that the clearance time improvement (for shorter clearance time) there is need to consider the improvement of the services which involves the establishment of the OSBP, the automation of the services used in border clearance, the proper management of the queue system to make flow of both people and goods smooth and proper training of the service providers at the border post.

Therefore for significance effect on the improvement that will bring some level of satisfaction to the users of the service at the border, there is need to ensure that all this improvements are done concurrently so as to have an effect on customer satisfaction which in effect would create efficiency in the system through checking the level of service delivery as stated by (Ebrahimpour, 2007).

Though it's important to improve service delivery by improving the service quality it would not have meaningful impact to the users of the service if the improvement were to be done on a piecemeal basis, rather should be wholesomely implemented in all areas.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION

5.1: Introduction

This chapter presents the study in a summary with the conclusion and recommendations deduced in this research study. It gives the answer to the research questions through the conclusion and the recommendations deduced on the objectives of the research which was to analyze the quality of service and process efficiency at the immigration points by looking at the correlation of the quality of services offered to the process efficiency in terms of the clearance time and volumes cleared of both goods and people.

5.2: Summary of the findings

In the research study a sizable population was used which is believed to have given adequate findings for proper conclusion on the effects of the variables, this is explained by the over 90% response rate which is quite significant for a recommended population as per (Mugenda and Mugenda, 2003). The sample of the population also contain at least a third of the population of both gender which can be considered balanced by a number of standards. The fact that the variability of the choice of the testing time was considered in a range of a period of over 30 years also enable the respondents to give a clear view of the changes they experienced in the deferent time periods due to the fact that quite a number of activities happened between the two nations and at the border points that could have affected the outcome.

The population of the respondents consisted of different groups of people who are users of border services, and who helped to bring a varied view of the feelings of the effects of the quality of service to the efficiency of the processes. The groups includes the travelers and the pedestrians crossing the borders, the businessmen clearing goods and services,

the drivers involved in the transport business across, the clearing agents and the officers who were performing various functions at the border in terms of service delivery by the state agencies. Of all this groups we obtained varied response which depicted their feelings of the effects of the variables studied with some of them mostly appreciating while others having mixed feeling to others who were dissatisfied depending on the services they sought.

On the One Stop Border Point (OSBP) service, despite majority of the respondent agreeing that it had a positive significant, some of the respondent who were mainly clearing agents and the drivers had some level of dissatisfaction due to the fact that they felt that the new system had simplified the processes and was putting them out of business. This can be seen from the 43.5% of the respondents who felt the system was either bad or worse hence dissatisfied. Hence this brings the need of total stockholders involvements in the bringing about the changes even if they seems obviously positive.

On the effect of training of the staffs and the agents involved in the processes, it was generally agreed by the respondents that it had a positive impact on the performance with over 85% of them accepting that it was either helpful or very helpful. This shows the importance of considering employees as an asset hence help them develop in their career by constantly training them as established by (Anjard, 1998). These also helps the organization to be able to tackle the challenges which are continuously developing in the environment by continuously analyzing the environment and develop systems that have positive impact to the organizations growth as stated by (Wind & Mahajan, 1997).

The system automation which was also considered to have brought a positive impact to the users of the border services at 60.9% acceptance rate was also considered not fast by

some users at 24% who saw the challenges experienced in the system with the network of the systems service providers as the main factor they consider to causes the delays. This in effect brought the concept of managing customer expectation by ensuring stockholders are fully involved in the processes for them to fully appreciate the service.

Just as the general system was appreciated due to physical and system changes experienced, management of the queue was equally considered to have positive impact at a slightly below average acceptance of 48.4% with 33.7% citing it not to have positive impact while the rest felt it was average. This was due to the fact that although other border user felt that the flow were moving faster, the clearing agents and the drivers still felt the effects of the slow systems from the automated clearance processes had an impact on how the queue was moving hence their appreciation was only on the structural construction of the parking yard but not on the speed of the movement. Hence the need to ensure customer satisfaction by understanding their needs as stated by (Anderson et al, 1994).

With the improved systems which lead to improved quality of services the border services experienced improved efficiency in delivery of services as described by the respondents on how they feel the processes is serving them and on the general implication felt on the usage of the border services. Though the respondents were mainly responding on the efficiency of the processes in terms of the time they spend to procure the service in comparison to what happened earlier, there was also a significant trend on the improved volumes of goods and persons which were being procured by the systems which can also be attributed to have been partly contributed by the changes experienced.

This can be noted by the over 44% of the respondents who felt that the improved system was taking shorter time to procure services as compared to the old system.

5.3: Conclusions

The study shows that quality of service has a positive impact on the process efficiency in that when the improvement of services is done in a way that it encompasses all the needs of the customers and the involvement of all the stakeholders in the sector is done, it most probably will have a positive impact in the organizations performances especially on its efficiency on how it delivers the outcomes.

Thus the border management which is a multiagency managed organization with Kenya Revenue Authority (KRA) being the lead agency, involves other agency like immigration department, Health department, Kenya Bureau of Standards (KEBS), National Environmental Management Authority (NEMA), National Security, and many more other department have to work together to develop services which will improve the delivery processes so as to be able to satisfy the needs of their customers.

The study has significance contributions on the way border management can be conducted in that it gives significant insights on the importance of stakeholder's involvements especially in policy issues. The need to always appreciate the users' needs in developing a service for them to be able to satisfy them.

It also brings out the complexity of the border management which involves the multiagency structure with various issues to be considered in developing system in addition to the cultural complexity of the users of the service who are a diverse population whose needs must be meet by the services.

The implication of structural establishment of the border services and management also brings out the appreciation of the theories of rationality, efficiency, effectiveness and control in the management of the systems.

5.4: Recommendations

The study makes recommendation on the importance of the management always being abreast of the facts in the environment by constantly scanning the environment to realize the trends and make necessary improvements which will ensure that service delivery is always not affected hence maintain an efficient system. There is also need to ensure that whenever changes are made there is thorough need of analyzing their impact on the systems to ensure that service improvement made always has a positive impact on the operational efficiency of the system.

The need to constantly involve all the stakeholders in the systems whenever organizations are making changes to the systems, as this will help create a level of appreciation of the changes hence its successful implementation without others feeling left out.

5.5: Limitation of the study

Although the study was successful, there were some limitations which were experienced in the course of the study. This were the time and financial resource constrains which limited the study to only the two border points and could not allow us to extend the study to all the other border points to establish the general implication of the factors analyzed.

Lack of précised and adequate data on the specific volumes cleared through the specific border points also meant that we could not get the clear picture of the performance especially on the volumes cleared since most of the information's kept at the border points are confidential and could not be released to be broken down and analyzed.

5.6: Suggestions for further studies

The objective of the study was to determine service quality and process efficiency at the immigration points, hence focused on only the two immigration points. Thus there is need to extend the study to other sectors or even other immigration points to determine if there is still a relationship between the two.

The study can also be extended by analyzing the relationship of service quality to other parameters to determine whether there is more relationships of service quality to other factors of the organizations operations.

REFERENCE

- Abdirahman, A. H., (2016). Service quality practices and customer satisfaction in Taxi companies in Nairobi. University of Nairobi.
- Adams, J.S. (1965). Inequality in social Exchange.
- Alexander P., Samuel K.A. & Mawuli Feglo, (2014).Service delivery, customer satisfaction and customer delight in the real estate business. Evidence from elite, kingdom investment and consulting company of Ghana. University of professional studies, Accra Ghana.
- Anastasia Sokolova (2017) challenges with features of customs clearance at the Russian-Finnish borders: A case of GW Europe OY, Kyamk University of applied science.
- Anderson, M. & Sohal, A.S. (1999) A study of the relationship between quality management practices and performance in small business, international journal of quality reliability management.
- Anjard, R.P. (1998), Total quality management: key concepts, work study, 47(7), pp 238-247.
- Antreas, D., A., (1997), service quality and operation efficiency synergies for management control in the provision of financial services: Evidence from Greek bank branches, European journal of operational research, vol 98, issue 2.
- Arshad Z., Kashif, U.R., M. Iqbal, S., (2008), Foundation University, Development and testing of business process efficiency scale.
- Arshad Zaheer, (Nov 2008), Development and testing of a business process efficiency scale, research gate.
- Asya, A. (2013), Service quality and customer satisfaction. Case study: company X.
- Ballantyne, Christopher & Payne (1994), improving quality in service marketing, Monash University.

- Bitner, M.J. Booms B.H., and Mohr, L. A. (1994). Critical Service Encounters: The Employee viewpoint. *Journal of marketing*, 58(4), 95-106.
- Boulding, William, et al. (1993) A dynamic process model of service quality from expectation to behavioral intentions. *Journal of marketing research*, vol 30.
- Carol Lu, (2015), "Service quality and customer satisfaction: Qualitative research implication for luxury hotels," *international journal of culture, tourism and hospitality research*, vol. 9, issue.2.
- Caroline K. and Wanyama M., (2017) pp.345-353, *J STOR journal*.
- Catherine A., Larson, (1998), "Customer first: Using process improvement to improve service quality and efficiency," *Reference service review*, vol 26, issue 1.
- Cheng F. & Cheng S. (2016) impact of employee training on guest satisfaction a survey on 5 star hotels in Kuala Lumpur. *Australian journal of basic & applied science*.
- Cronin, J.J., & Taylor, S.A., (1992), Measuring service quality- A reexamination and extension *journal of marketing*, 56(3).
- Crown agents (2000), Report on Trade corridors retrieved on May 2013 from www.crownagents.com.
- Davenport, T.H. (1993) Need radical innovation and continuous improvement? Integrated process reengineering and TQM," *Planning review*, 21(3), 6-12.
- Dawar, N. & Parker, P. (1994). Marketing universals: consumers' use of brand name, price, physical appearance, and retailer reputation as signals of product quality. *Journal of marketing*, 58, 81-95.
- Douglas M. Stewart (2014), *Designing robust service encounter*, Michigan state university.
- Ekinci Y. & Sirakaya E. (2004). An examination of the Antecedents and consequences of customer satisfaction: In: Crouch G.I, Perdue R.R., Timmermans H.J.P., & Uysal M. *consumer psychology of tourism, Hospitality and leisure*. Cambridge, MA: CABI Publishing, p 190.

- Erik Lee, Christopher E. Wilson, Francisco Lara-Valencia, Carlos A. Dela Parra, Rick Van Schok, Kristofer patron- Soberano, Erick L. Olson, Andrew Selee (2013) the state of the border report; A comprehensive analysis of the U.S-Mexico border, Mexico institute.
- Fisk, R.P., Brown, S.W. and Bitner, M.J., "Tracking the evolution of the marketing service literature", *Journal of retailing*, 1994, vol 69 No.1, spring, pp. 61-103.
- Filardo A. (2015) what is continuous improvement? Training material from the understanding continuous process improvement training Programme. Arizona state university, Tempe, AZ.
- Goodman, P.S., J.M. Penning & Associates (1997). *New perspective and organizational effectiveness*. San Francisco- London, Jasssey-Bass Publishers.
- Jayaraman M., Shankar C. & Hor W. (2010) Service quality delivery and its impact on customer satisfaction in the banking sector in Malaysia, *international journal of innovation, management and technology* vol. 1, no.4
- Jean, F.H, (2003), *performance measurement and organizational effectiveness: Bridging the gap*, University of Laval.
- Juran, J.M. (1988). *On planning for quality*. London: Collier Macmillan.
- Nabila, N. (2016), *Exploring the dimension of mobile banking service quality: implication for the banking sector*. Research gate.
- Liu, Z., & Brockner, J. (2015). The interactive effect of positive inequality and regulatory focus on work performance. *Journal of experimental social Psychology*, 57, 111-116.
- Mantey G. P.(2012) *An assessment of the effect of staff training on customer service delivery*, Kwame Nkrumah University of science and Technology.
- Mattila A. & O' Neill J.W. (2003) *Relationships between hotel room pricing, occupancy and guest satisfaction: A Longitudinal case of a midscale hotel in the united*

states, *Journal of Hospitality & tourism research*, 27 (3), pp.328-341, sage publications.

Munirat O. Y., Nwaiwu B.A. & Olalekan K. (2015) *Queuing theory and customer satisfaction: a review of performance, trends and application in banking practice*, University of Abuja.

Oliver, R. (1980). *Theoretical bases of consumer satisfaction research: Review, critique, and future direction*. In C. Lamb & P.Dunne (Eds), *Theoretical developments in marketing* (pp. 206-210). Chicago: American Marketing Association.

Oliver, R.L. (1997) *Satisfaction: A behavioral perspective on the consumer*. New York, NK: Mc Graw-Hill.

Olson, J. (1972). *Cue utilization in the quality perception process: A cognitive model and an empirical test*. Doctoral dissertation, Purdue University.

Pitt, A.C.L, "INTQUAL- An internal measure of service quality and the link between service quality and business performance, "European journal of marketing, 1997, vol 31 Iss 8pp 604-616.

Prachi Juneja, *Management study guide.com*, retrieved on 7th Aug. 2018.

Purohit, D. & Srivastava, D. (2001). *Effect of Manufacturer reputation, retailer reputation, and product warranty on consumer judgements of product quality: A cue diagnosticity framework*. *Journal of consumer psychology*, 10(3), 123-134.

Rao, A.R. & Monroe, K.B. (1998). *The moderating effect of prior knowledge on cue utilization in product evaluations*. *Journal of consumer research*, 15, 253-264.

Sameer K., Ralph Harms, 2004," *Improving business process for increased operational efficiency: A case study*, "Journal of manufacturing technology management, vol. 15 issue 7, pp662-674.

Samyak, S.S., (2003), *measuring the efficiency of service delivery process in hospitality industry*. Institute of management, Christ University, Bangalore.

- Sangeeta K., Kato K., Nicolas P., *Journal of economic integration*, vol 24, No.4 (Dec 2009) pp.686.
- Sethl V., & King W.R., (2003), *Organizational transformation through business process reengineering*. Singapore Pearson education, 2003.
- Snee R. D., 1993."Creating robust work process", *quality progress* 26(2), 37-41.
- Taylor, F. (1970), "scientific management". Pp. 56-66 in *the sociology of organizations: Basic studies by Oscar Grusky and George miller* (Eds). The free press: New York, NY.
- Thande J. T. (2014) *Service delivery systems design and customer satisfaction in the public sector transport*, University of Nairobi.
- Tse, D. K., Nicosia, M., & Witton, P.C. (1990) consumer satisfaction as a process. *Psychology & Marketing*, 7(3), 177-193.
- Venkatraman, N., (1994), *IT-Enable business transformation from automation to business scope redefinition*, "Sloan management review, 359(2), 73-87.
- Warraich, K.M., Warraich, I.A. & Asif, M. (2014), "Achieving sustainable competitive advantage through service quality: An Analysis of Pakistan Telecommunication sector", *Global Journal of Management and Business Research*, 2014, vol 13.
- Wind, J & Mahajan, V. (1997) *Issues and opportunities in new product development: an introduction to the special issues*, *journal of marketing research*, 34(1), pp. 1-12.
- Zaheer, A., Mushtaq, K. & Ishaq, M. (2008). *Reengineering the procurement process in a public sector organization: A case study*. *International bulleting of business administration*.
- Zeithaml, V.A., Berry, L.L., and Parasuraman, A., (1988),"communication and control processes in the delivery of service quality" *journal of marketing*, vol. 52, no.2.
- Zuckerman, A. (1995) "NAFTA and the paper chase inbound logistics," vol 15 No.4 P.18.

APPENDICES

Appendix I: Introduction letter

The Manager

Malaba and Busia immigration points

P.o.Box

Busia

Dear Sir/ Madam,

RE: REQUEST FOR RESEARCH.

I am Oloo Felix Ochieng a post graduate student at the University of Nairobi undertaking research in the topic; **“QUALITY OF SERVICE AND PROCESS EFFICIENCY AT IMMIGRATION POINTS: A CASE OF BUSIA AND MALABA BORDER POSTS”**.

With this I would like to request for your assistance in obtaining the relevant information that would assist me in this study at the earliest convenience. I would also like to request for your permission in conducting interviews in the organization pertaining the above.

Therefore I would like to appreciate in advance for your assistance and guarantee that the information provided would be treated confidentially and only used for research purpose.

Thanks.

Yours sincerely,

Oloo Felix Ochieng.

Appendix II: Questionnaire

SECTION A: GENERAL INFORMATION

BORDER POST: BUSIA

MALABA

- 1. Gender: Male ()
 Female ()

- 2. Age : 20-29yrs ()
 30-39yrs ()
 40-49yrs ()
 Above 50yrs ()

- 3. How many times have you use the border services for either clearing goods or personal clearance?
Below 5 times ()
5 to 10 times ()
10 to 20 times ()
Above20 times ()

- 4. Have you use the border services between the following periods?
1980 and 1990 ()
1990 and 2000 ()
2000 and 2010 ()
2010 and 2015 ()
2015 to date () tick all the boxes that are applicable to you.

- 5. Describe briefly what services have you use in the border.

.....
.....
.....
.....
.....
.....

SECTION B: SERVICE RESPONSE.

1. What changes in services have you noticed at the border point? Briefly describe.
.....
.....
.....

2. If you have noticed changes in the delivery of services, between which time did you noticed the changes.
1980 to 1990 ()
1990 to 2000 ()
2000 to 2010 ()
2010 to 2015 ()
2015 to date ()

3. Have you used both one stop border post and the old clearance process before?
Yes () No ()

4. If yes how would you compare them?
Old system : worst () bad () good () very good ()

One stop border post : worst () bad () good () very good ()

5. On average how long were you taking to do clearance in,
Old system : below 10min () 10 to 20min () 20 to 30min ()
30 to 1hrs () Above 1hrs ()
One stop border post: below 10min () 10 to 20min () 20 to 30min ()
30to1hrs () Above 1hrs ()

6. How would you compare the flow of que in both systems?
Old system : very slow () slow () average () fast () very fast ()
One stop border post: very slow () slow () average () fast () very fast ()

7. Have you use the automated system of clearance and the manual system?
Yes () No ()

8. If yes how do they compare? Describe briefly.
.....
.....
.....

9. Do you think there has been changes in the parking yard for the vehicles?
Yes () No. ()

10. If yes what changes have you realized?
.....
.....
.....

11. Are you a staff/agent at the border?
Yes () No. ()

12. If yes have you undergone training on how to handle you job of recent?
Yes () No. ()

13. When was the training done?
Before 2012 () After 2012 ()

14. How would you gauge the significance of the training to your job?
Not helpful ()
Helpful ()
Very helpful ()

15. What do you think should be improved in the process of clearance?
.....
.....
.....
.....

16. In general how would you rank border services in scale for both the old and new system (osbp)?
Before 2015 : Bad () Better () Good () Best ()

After 2015 to date : Bad () Better () Good () Best ()