EFFECT OF E-GOVERNMENT PRACTICES/STRATEGY ON SERVICE DELIVERY IN THE PUBLIC SECTOR: CASE OF HUDUMA CENTER NAKURU COUNTY

SAMUEL NJERI KAMANU

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DECLARATION AND RECOMMENDATION

Declaration

This project is my original work and has not been submitted to any other institution of higher learning.

Signature ..... Date: 8/2/2022

Samuel Kamanu Njeri

CM11/62548/15

Recommendation

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

Signature  Date: 8/2/2022

Professor Daniel Auka O. (PhD)

Department of Business Administration

Egerton University

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DEDICATION

I dedicate this project to the Almighty God for giving me the strength to finish this project on time

ACKNOWLEDGMENTS

I wish to acknowledge the lecturers at Egerton University, and I also wish to thank the staff members of Egerton University.

ABSTRACT

The term e-government refers to the use of new Information and Communication Technologies (ICTs) by governments in carrying out government functions through the application of networking potential offered by the internet and related technologies that can transform the structures and operations of government. In Kenya, the government has adopted initiatives to enhance e-government. These include the Huduma centre, where services are provided by different departments jointly from a one-stop-shop and e-citizen, e-visa and e-business portals where citizens can access government services at the comfort of their homes. The purpose of this study was to establish the effect of e-government practices/strategies on service delivery in the Huduma centre in Nakuru County. The study was guided by the following specific objectives; to determine the effect of e-citizen adoption on service delivery, to establish the effect of e-business adoption strategy on service delivery, to determine the effect of e-visa adoption strategy on service delivery and to establish the combined effect of e-citizen, e-business, and e-visa Adoption on service delivery in the Huduma centre in Nakuru County. The study focused on the individual and joint effect of e-citizen, e-business and e-visa practices on service delivery in the Huduma centre in Nakuru County. The study was guided by the theory of technology acceptance and the theory of planned behaviour and employed a case study research design. The target population was the citizens receiving the services at the Huduma centre in Nakuru County. A sample of 378 respondents was sampled by using systematic sampling. Data was collected through a structured questionnaire and analysed using a statistical package for social sciences (SPSS) version 20. A response rate of 78% was obtained for this study. Descriptive analysis was used to describe e-government and service delivery, while regression analysis was used to test for the hypothesis and to determine the effect of e-government on service delivery. The study findings revealed that e-citizen, e-business, and e-visa adoption strategies independently and jointly have a significant effect on service delivery. From the research findings, the study recommends that more counters at the Huduma centres should be created to ease congestion and better innovation to access the services remotely to avoid citizens having to visit Huduma centres themselves.

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LIST OF ABBREVIATIONS AND ACRONYMS

ICT	Information and communication technologies
KRA	Kenya Revenue Authority
NHIF	National Insurance Hospital Fund
NSSF	National Social Security Fund
NTSA	National Transport and Safety Authority
IFMIS	Integrated Financial Management System
GHRIS	Government Human Resource Information System
UN	United Nations
ASPA	American Society for Public Administration
IPRS	Integrated Population Registration Service
G2B	Government to Business
G2C	Government to Citizen
G2G	Government to Government
HELB	Higher Education Loans Board

CHAPTER ONE

INTRODUCTION

1.0 Background of the Study

Kumar and Best (2006) defined e-government as the use of information and communication technologies in the public sector to improve service delivery and improve government operations. Arora and Gupta (2017) considered Information and Communication Technology (ICT) to play a dominant role in all business undertaken by the government. Curtin et al. (2003) consider e-government as making the information available to citizens through the web.

Tolbert and Mossberger (2006) considered that e-government could increase trust with the government and its citizens. All government functions can be conducted or done in a single counter, without lines at the leisure of the house that will be highly convenient to all citizens.

Yadav and Tiwari (2014) explained that E-Governance or electronic Governance refers to the use of Information and Communication Technologies (ICTs) to provide citizens and organisations with more convenient access to the government's services and information. In other words, e-Governance involves Information Communication Technologies, especially the internet, to improve the delivery of government services to citizens, businesses and government agencies. It is not limited to the public sector only but also includes the management and administration of policies and procedures in private sector as well.

The use of the internet not only delivers the services faster but also brings more transparency between the government and the citizens. But in developing countries like India, where the literacy level is very low, and most of the people are living below the poverty line, it is very much difficult for the government to provide its services to such citizens via means of the internet. The technology and the methods used in the E-Governance project provide a roadmap for the efficient delivery of services at the doorstep. In today's time, the development of any country depends on the uses of e-Governance and also their penetration. The development of any country can be judged by the scope of e-Governance in that country. Monga (2008) demonstrated that Public administration, governed by bureaucratic structures built on rational principles that dominated the twentieth century, has failed to respond to the changing requirements of the present times. E-governance, which is a paradigm shift over the traditional approaches in public administration, meant rendering government services and

information to the public using electronic means. This new paradigm has brought about a revolution in the quality of service delivered to the citizens. It has ushered in transparency in the governing process, saving time due to provision of services through the single window; simplification of procedures; better office and record management; reduction in corruption; and improved attitude, behaviour and job handling capacity of the dealing personnel India. While the "content" of operations strategy may be related to key resource-based concepts, some more interesting relationships may be found in the "process" of strategy formulation. One of the most practical contributions of the resource-based view of the strategy was to reframe the whole "SWOT" analysis towards developing and leveraging resources. For example, it is interesting to note that the model presented by stands out as a more "behavioural" view of what happens in the more "structural" models of operations strategy formulation. That is, we can see through the resource-based view those aspects which are difficult to conceptualise within current operation strategy models. As designed by and much in the same way as has been put it, the resource-based model starts with an extensive analysis of those operating capabilities and competencies existing within the firm. Second, the management team selects a few core capabilities according to their "superior returns" potential (or what is called their "rent generating" capacity). These are further analysed through extensive "market tests" to ensure they can provide effective and sustainable competitive advantages.

Finally, business diversification and capability development strategies are formulated to ensure operations are rebuilt according to the strengths-opportunities relationship identified through strategic analysis. This is a two-way integration, where operating capabilities dictate where strategy should go, with feedback from operation imperatives as to what operations could do to sustain competitiveness. However, this "rational" strategy formulation process may encounter key problems, which are common to both resource-based and operations strategic planning. For example, the identification of core competencies and capabilities may not be as easy as expected in theory, since the management team may not reach a consensus as to what is really A highly proficient management team is necessary to overcome this "strategic ambiguity" and to take advantage of blurred market rules to impose new rules based on the firm's operations. Consequently, the process of operations strategy may become much more emergent, where the continuous "crafting" of innovative strategies would make the firm both strategically and operationally stronger in the face of uncertainty. The strength of this emergent process should come from a strong managerial commitment to operating priorities. The use of a resource-based view to reinvent operations strategy may lead to far-reaching consequences for management practice. For example, it may imply Resource-based competition 129 that

operations managers could become the best people to effectively "grasp" what a resource-based strategy should be. Being the closest to action throughout any business enterprise, the future operations manager knows best how far to set stretch goals and "strategic intents". Therefore, an emergent strategic planning process may allow operations to effectively enhance their role within the strategy, leading more firms into the fourth stage proposed by One hopes that such a drive may lead far beyond, into a form of "competing for the future". Another interesting contribution of the resource-based view relates to the issue of "trade-offs" in operations strategy.

Using a "market-based" view of strategy, such decisions as "factory focus" used to help firms select one or two key competitive dimensions, and then ask operations management to meet the appropriate order winners and qualifiers, assuming a fairly stable competitive environment (Da Silveira & Slack, 2001). However, it has shown that this kind of trade-off cannot be sustained for a long time since as soon as a firm has mastered some focus, changes in the environment can reduce its relevance rapidly.

Lapré and Scudder (2004) argued the only way to keep operations strategy relevant under hyper-competition is to forget trade-offs. Operations strategy as the driver of competitive agility Essentially, there is a need to find the various coherent systems that can be built out of many competitive dimensions and create organisational processes which embody them all in the right proportions needed to face hyper-competitive markets. The build-up of such processes would be made with especially one key resource that is knowledge worker, which would form the basis for the long-term sustainability of processes. In a world where nurturing markets would be increasingly difficult, this perspective would call instead for creative strategies to nurture competencies and capabilities (Pagell et al., 2000). Operations strategy would be a matter of "shifting gears" or effectively switching across competitive dimensions as made necessary by hyper-competition and as made possible through dynamic organizational processes to face the future (Sarmiento et al., 2018). This is where a resource-based view comes in with strong support for operations strategy. Trade-offs were the foundation of this research area for many years, and now it must be drawn back to more fundamental decisions regarding long-term resource build-up. Akbar et al. (2020) argue that hyper-competition required that competencies and capabilities be dependent on organisational change processes, which allow for flexibility. This goes beyond mere operational flexibility since it entails total "organisational agility", one which increasingly depends on dynamic capabilities to face future

competition (Mapes et al., 1997). Following this line of thought, if a firm continues with a "market-based" view of strategy under hyper-

Competition, it runs the risk of leaving its overall business strategy with fundamental inconsistencies. That is, failure may emerge as a firm tries to fight hyper-competition with "static" organisational processes, which fail to embody the required agility and "dynamic" features to build up capabilities as needed. It simply means that competitive conditions no longer allow marketing to set priorities and then let operations adjust. This is why resource-based competitive strategies would be required for changes in operations strategy to take effect. Otherwise, the various components of business strategy could be left out of the phase, leading to dramatic consequences.

Essien (2015) contemporary studies on public administration in Nigeria have revealed two dramatic findings. First, despite the moderate achievements in democratic governance and being rich in natural and human resources, there remain many politico-administrative challenges to be addressed in Nigeria. Second, ailing public administration has resulted in disturbing socio-economic indicators, which are among the worst in the world. This paper examines the challenges of public administration for effective service delivery and good governance in Nigeria. The paper employs a descriptive method of research and content analysis which is anchored on 'efficiency theory 'to examine the subject matter. Findings reveal that, notwithstanding the dramatic administrative reforms, citizens' confidence in government service is near a historical low because of poor service delivery and exclusionary policies. The paper submits that the label of poor performance and absence of excellence in the public service has the tendency to undermine development and good governance in Nigeria (Nayak & Samanta, 2014). The present study, using household-level data of the East Midnapore district of West Bengal, India, examines the role of people's participation in public service delivery. It considers four dimensions of participation, namely attending meetings, raising voice, lodging complaints, and making contributions. The study confirms the role of participation in public service delivery. Apart from participation, households' socioeconomic and political positions also exert significant impacts. There is, however, a likelihood of "elite capture" and "clientelism" in the delivery of public services. Effective service delivery presupposes that while attending meetings, people must raise their voices and make contributions. Santos (2003) considered that e-service was recognised as a leader to facilitate the movement of resources within the organisation. E-government aims at helping government agencies in rising operational efficiencies, scaling back project costs and becoming citizen-friendly across a range

of domains, that include transport, municipal records, education, healthcare, ports and shipping, disaster management, crime, and criminal tracking system, public distribution and agricultural sector.

Gregory et al. (2001) demonstrated that e-government comprises alignment of Information Technology infrastructures, business processes, and service content towards the provision of high-quality and value-added e-services to citizens and businesses. E-government services require relaxation of time, place, and other accessibility constraints and compliance to architectural principles such as true-one-stop services and life-event orientation. Lues (2016) Contemporary studies on public administration in Nigeria have revealed two dramatic findings. First, despite the moderate achievements in democratic governance and being rich in natural and human resources, there remain many politico-administrative challenges to be addressed in Nigeria. Second, ailing public administration has resulted in disturbing socio-economic indicators, which are among the worst in the world. This paper examines the challenges of public administration for effective service delivery and good governance in Nigeria. The paper employs a descriptive method of research and content analysis, which is anchored on 'efficiency theory' to examine the subject matter. Findings reveal that, notwithstanding the dramatic administrative reforms, citizens' confidence in government service is near a historical low because of poor service delivery and exclusionary policies. The paper submits that the label of poor performance and absence of excellence in the public service has the tendency to undermine development and good governance in Nigeria. Waruhia (2018) considered e-citizen as an online platform for online access and payment for government services. It is a central portal through which all key government services can be accessed under one roof. E-citizen offers a convenient and cost-effective way of accessing government services remotely and at any time; through e-citizen, the access to public services has significantly increased. Similarly, the level of service provision has enhanced greatly (Ondego & Moturi, 2016). Papazoglou (2006) viewed e-business to involve the online exchange of information relating to buying and selling as well as information on customer service and collaborations with other business partners, distributors, and suppliers involve automation of business transactions through the application of end-to-end electronic communications networks.

This article argues that social innovation (SI) for delivering and improving local government services is already used with much success in European and Asian countries as well as in the United States of America. However, it appears as if in South Africa, the use of SI for improving service delivery is not receiving the attention policymakers have hoped for. This statement is

based on the fact that although SI is addressed in many policy documents, it is still not sufficiently integrated into the National System of Innovation. Against the backdrop of a decline in key economic indicators and inadequate basic service delivery by local government, there has been a concomitant rise in municipal and labour protests and unnecessary turbulence in South Africa. The aim of this article is, therefore, to elucidate the role that local government could (and needs to) play when using SI for improved service delivery in the public sector. Through e-business, the government is able to offer 24 hours and seven days a week service to the public (Sharp, 2006). E-business is a broader term than e-commerce, as e-commerce is a particular form of e-business. In the last years, quality of service in the public sector has become an issue of great concern. Many organizations try to self-assess and measure the quality of service delivered. The above is the Quality Conference for Public Administration in the European Union, started in 2001. At the same time, significant progress has been made in the development of e-government services and e-participation systems. A variety of public services are now delivered online, with many benefits for e-citizens. Although various initiatives investigate the application of quality management principles to the delivery of electronic public services, manifold problems related to the quality of public e-services still exist; according to Top of the Web survey, e-business refers not only to exchanging information related to buying and selling but also to servicing customers and collaborating with business partners, distributors, and suppliers (Papazoglou, 2006).

Huduma Kenya is a program by the Government of Kenya that aims to transform Public service Delivery by providing citizens access to various public services and information through a one-stop-shop approach. These one-stop shops called Huduma centres provide government services by amalgamating related services within one building, increasing the efficiency of service access to the public. This ease of convenience in accessing government services is made possible through integrated technology platforms. Tenders and vacancies in the public service are accessible through the Huduma centre/Kenya platform, thereby helping eradicate graft in the tendering and hiring process. Public participation is encouraged as users can directly post comments and complaints regarding government services (this promotes democracy).

Service quality is a measure of how well a delivered service matches the customer's expectations (Lewis, 1983). Satisfying customers' needs is very important as it requires understanding and improving operational processes. Identifying problems quickly, establishing valid and reliable service performance measures and measuring customer satisfaction. This means service delivery is a continuous process aimed at delivering user-focused services. The

move by the Kenyan Government to introduce the Huduma platform was to effectively boost E-government service delivery to the citizens. According to the GoK (2013), E-government is not only meant to bring public service online but is also focused on reducing overall operational costs by transforming the e-government into an organisation that generates both social and economic value effectively. E-government is not only a tool that enhances the delivery of public service but also has the potential to reform the way policies are formulated and implemented in terms of efficiency, accountability, transparency and citizens participation in the Kenyan Government.

Njuru (2011) highlighted no evidence that any of the Kenyan e-governments objectives, enhancing delivery of public services, improving information flow to citizens, promoting productivity among public servants and encouraging citizens participation has been achieved. E-business is the conduction of automated business transactions utilising end-to-end electronic communications networks. Governments have realised the importance of information sharing this enabled e-government to be implemented by many developing nations, regulations, legislations, cultural and social factors were found to be related to the success of e-government-Business operations systems are usually more complex than the traditional operations systems as it involves an operation on 24 hours and seven days a week and opening up new markets for customer segments to which traditional methods were unattractive (Sharp, 2006). E-visa is the process of applying for a visa online. Since the introduction of e-visa, citizens have been able to apply for visas from the comfort of their homes. Similarly, e-visa has reduced the bureaucracies and corruption witnessed earlier in the ministry of emigration and visa processing in general (Riany et al., 2018

1.1.1 E-Government

E-government is divided into four categories depending on the service it aims to deliver (Table 1.1). To start with is the government to citizens, whose main objective is to provide services to the citizens. The government to business caters to the exchange business between the business organisations and the government. The government-to-government refers to the exchange of services between government agencies and different governments. Lastly is the government-to-employee, which brings the sharing of information between employees whenever possible.

Table 1.1: Subcategories of e-government

Parties of communication	Parties of Content	Dominant Characteristics	Definition	Example
Government-to-Government (G2G)	Information and Services	Communication, coordination, Standardisation of knowledge and service	E-administration	Establishing and using a common data warehouse
Government to Citizen (G2C)		Communication, transparency, accountability, effectiveness, efficiency, Standardisation of Information and services, productivity Communication, collaboration, Commerce	E-government	Government Organisation websites, e-mail Communication, between The citizen and government officials
Government-to- Business (G2B)		Communication, Coordination, Transparency, Accountability, Coordination	E-government, e-Commerce, e-collaboration,	Posting government, bids on the web, e- procurement, e-partnerships
Government to Civil society organisations		Communication Coordination, Transparency, Accountability	E-governance	Electrnic communication and coordination efforts after a disaster discussion groups on civic issues.
Citizen-to-Citizen(C2C)		Coordination, Transparency, Accountability Grassroots Organisation		

Source: Arora and Gupta (2017)

E-government development is studied by building models of its stages; the first model by Layne and Lee (2001) from the United States of America (USA) argues that e-government projects evolve through four stages of development as their integration, technological and organisational complexity increase. The first stage is cataloguing, providing government information by creating government agency websites. At this stage, only one-way

communication between the government and the governed is possible. The second stage is the transaction; agencies can provide online transactions with other government agencies. Horizontal integration led to the evolution of a one-stop-shop or joined-up e-government. This makes two-way communication possible: the cataloguing and transaction stage focus on creating an electronic interface for government information and services. The third stage is the integration of government operations within functional areas in government. Agencies working in the same functional area integrate their online transactions. The final step is horizontal integration.

Different functional areas are embedded within the same electronic system and put to use through a central portal. The last two stages focus on the inclusion of the provision of e-government activities within the existing governmental structure (Layne & Lee, 2001). The second model of e-government development was introduced in a study conducted by the United Nations and the American Society for Public Administration [UN-ASPA] (2002). It proposed a five-stage model of development. The first stage is the emerging stage, in which an official online government presence is established. Second, the number of government sites increases in the number and becomes dynamic in this enhanced stage. The third interactive stage enables users to download forms and interact with officials through the web. In the fourth transactional stage, users can make online payments for transactions. The final seamless stage makes the integration of electronic services across government agencies possible (Layne & Lee, 2001).

Garvin (1988) provides different perspectives on the definition of quality, i.e., Transcendent, product-based, User-based, operation based and value-based. Service quality is a model that determines the degree of quality variability in service within a corporation. It's rated within certain dimensions of quality, namely serviceability, Empathy, Reliability, Responsiveness, Quality, Attainability, variability. And therefore, in any organisation that would like to ensure that the quality of services provided is up to standards, these models helps to understand the service gap in an organisation; service is defined as a product or activity that meets the needs of a user or can be applied by a user. Mutali (2008) listed five determinants of service quality, including reliability, responsiveness and the ability to convey trust and individualised attention to customers. Services should be: available and timely; Dependable and reliable they need to be delivered to the required user specification); Usable; Useful, meaning that they should respond appropriately to user needs; Credible and flexible to the evolving user needs. It, therefore, stands to reason that, in order to have successful e-government, these ICT solutions have to be reachable by all citizens (Reffat, 2006)

Table 1.2: E-government Typology

Stage	Orientation	Services	Technology	Citizen
Stage 1: Emerging Web presence	Administrative	Few, if any	Only web	Going it alone
Stage2: Enhanced web presence	Administrative, Information	Few forms, transactions	The web, e-mail	Links to local agencies
Stage 3 Interactive presence	Information, users, Administrative	Number forms, submissions	Portal email,	Some links to state and federal sites
Stage4: Transactional web presence	Information Users	Many forms and transactions	The web, e-mail, Digital, signatures portals, SSL	
Stage 5: Seamless presence	Web	Mirror Services Provided person, by mail, telephone	The Web, e-mail, digital PKI, in signatures, portal,	Crosses departments and layers of government

Source: American Society for Public Administration-United Nations [ASPA-UN], (2002)

1.1.2 E-government and Service Delivery

Chatfield and Alhujran (2009) suggest that e-governance has become an important political tool for evaluating government performances in developed nations. In the United States, it poses as a mechanism that brought reforms in the public sector. The argument is that through e-governance, autonomous local e governments and decentralised political decision-making have contributed to this (Kassen, 2015).

European states have also embraced e-government under the guideline of the EU, Estonia being the role model with 99% online public services. Developing countries are also catching up with digitalisation. Countries like Ghana, Tunisia, South Africa, and Mauritius have a high e-government development. Meaning the public services available by the year 2018 were more than in other African countries. In east Africa, Rwanda was the first to engage in government initiatives in 2010, becoming a pacesetter for East Africa. The other countries have followed Kenya, developing one-stop shops for the citizens. There is a digital divide between Arab countries and leading developed countries. Qatar, Bahrain, and the United Arab Emirates have a single entry point national e-government portal and provide payment transaction capabilities to users of e-government services.

E-government projects have helped the support of service delivery through electronic means that give the citizens fundamental rights and protection in a connected world (Nkwe, 2001). Earlier, before the introduction of e-government platforms such as e-citizen, e-visa and e-business, service delivery was characterised by demotivated staff, inefficient systems, bureaucracy and a high level of corruption (Hassan et al., 2017). While the government invested in reforms to enhance service delivery in the public sector, the sector was characterised by a high level of relaxation among the staff. Important to note, while most public service organisations have tried to adopt international practices such as international quality standards on service delivery and quality management, the level of service delivery has still been lower than expected.

Digitalised governance was introduced in Kenya as early as 2003 though they did not fill the gaps on delivery well. In the year 2014, the government introduced a citizen to government and business to government model of service delivery. The services introduction was to Streamline the complex processes the government and citizens undertook to achieve delivery. It was highly supported by the mobile money existence, opening up of the Huduma centres, internet access, and opening up government policies. In Kenya, citizens can access e-Visa, e-Citizen, and e-Business services. The Huduma Kenya program has contributed immensely to the improvement of doing Business Index through the devolution of services like search and reservation of business names and certificate of ethical conduct. One good example is the e-citizen platform launched in 2014 by the ICT Authority of Kenya and gave citizens access to essential services without having to visit a government office. Through the e-citizen platform, Kenyans can key in their information, and the data is populated using the Integrated Population Registration Service. Visitors from other countries can apply for visas through the e-Visa portal, and business owners can apply and pay for their licenses on the E-business portal. In 2015 the government of Kenya collected 2.3 billion shillings in payments for services rendered through the portal; this is from the 1.2m registered from the portal. Ordinary citizens also benefited from the service. Financial institutions such as banks and insurance companies would check and verify whether the information and identification documents given to them by their clients are legitimate. But as is the case with most government programs, the Huduma Kenya initiative faces many challenges. Question: if it is true that the United States may be lagging behind in e-government, why are Singapore and Canada now making such progress in trying to maximise its benefits? To get the full answer, we asked key persons responsible in both countries to provide research assessments and analyses.

1.2 Statement of the Problem

Service delivery has been and remains a major problem for most public sectors across the globe. In response to the challenges associated with poor service delivery, governments across the globe have adopted various citizen-centred strategies and reforms. Among these initiatives and reforms is the adoption of Information and Communications Technology (ICT) based service delivery solutions e-government is emerging as a sustainable solution to service delivery challenges, especially in the public sector. Empirical literature indicates that e-government can lead to simplification of procedures and operations, empower gathering of information, make information available, and ensure transparency and revenue growth (Hassan et al., 2017).

In Kenya, the government is increasingly adopted e-government since 2013. The notable e-government initiatives include e-citizen, e-business and e-visa. To enhance access to online public services, the government has also developed one-stop public service delivery centres in every county, the Huduma centres. While some improvement has been reported in public service delivery as a result of e-government, there have also been complaints of poor service delivery, especially with respect to accessibility. While the government started adoption of e-government in 2013, limited studies have been done on e-government, especially relating e-citizen, e-business and e-visa with service delivery.

Mutuku (2018) on the effects of the strategic use of information technology (IT) on the performance of Machakos Huduma centre showed a substantial connection between the strategic use of information technology and the performance of the Huduma centre. The majority of studies that have been done have focused on other e-services such as e-procurement, adoption of Integrated Financial Management Information System. It is therefore evident that there is a research gap. The few studies that have been done on e-government have reported a positive association between e-government and service delivery (United Nations Department of Economic and Social Affairs [UNDES], 2014). The study actually recommends that further studies be conducted on e-government, especially in developing countries. This research attempts to fill this research gap by determining the effect of e-government on service delivery by looking at the determinants of service delivery; quality, cost, time, and convenience and reliability (Hassan et al., 2017).

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study was to determine the effect of e-government practices on service delivery in the public sector in the Huduma centre in Nakuru County.

1.3.2 Specific Objectives

i. To determine the effect of e-citizen adoption on service delivery in the Huduma centre in Nakuru county

ii. To establish the E-business Adoption strategy on service delivery in the Huduma Centre in Nakuru County

iii. To determine the effect of E-visa Adoption on service delivery in the Huduma Centre in Nakuru County

iv. To establish the combined effect of E-citizen, E-business, and E-visa Adoption on service delivery in the Huduma centre in Nakuru County

1.4 Hypotheses of the Study

H_{o1}: E-citizen Adoption has no significant effect on service delivery in the Huduma Center in Nakuru County.

H_{o2}: E-business Adoption has no significant effect on service delivery in the Huduma Center in Nakuru County**.**

H_{o3}: E-visa Adoption has no significant effect on service delivery in the Huduma Center in Nakuru County.

H_{o4}: E-citizen, E-business, and E-visa Adoption have no significant effect on service delivery in the Huduma Center in Nakuru County.

1.5 Significance of the Study

The study was important since individuals, organisations, and corporate leaders will be able to access the document and understand how the E-government strategy and Huduma works. The study is essential since it will fill a gap currently and provide a new insight for further research since it's an eye-opener to the government and upcoming private institutions who would want to implement the same. This study seeks to enhance knowledge and literature in the fields of management science and operations management: it might be useful to academicians and researchers. It might enrich the existing experience on service delivery applied in the public service and private sector and invite further research in this field. The study will guide the management of Huduma Centers in the assessment of service delivery outcomes and inform on

decisions towards the improvement of customer service in the service sector. Lastly, the findings and recommendations in this study will guide the government in policy formulation relating to the development of Huduma Centers, e-government and service delivery in general.

1.6 Scope of the Study

The study focused on the Huduma centre in Nakuru County, and it's a study only on Huduma Kenya. The study only looked at e-citizen, e-business, e-visa, the scope of e-government. The theories that were addressed in the study were technology acceptance theory and the theory of planned behaviour. The study population was the customers who visit the Huduma centre; the study focused on service delivery measures such as and convenience, cost, time, quality, reliability, dependability, and flexibility. The study only focused on e-government systems

Implemented by the Kenyan government; e-citizen, e-business and e-visa, leaving out other e-government systems. The research was done during the month of January 2019.

1.7 Limitations of the Study

The study data was collected within a short time that was available for this study; the researcher had to design and disseminate research instruments within the short time that was available. The congestion of customers, family interference at the Huduma centre, citizens complained of nepotism at the Huduma centre as low group individuals have been nepotised. The study only focused on e-citizen, e-business and e-visa aspects of e-government, leaving out other e-government systems. The study was only done in Nakuru town. There is only one Huduma centre in Nakuru town; not all Huduma centres across the county were sampled due to limitations of time, resource, budget and innate abilities with the respondents. The design of t the questionnaire was also a limiting factor like age, gender, and education level was the design structure - general structural design issues. Some respondents had insufficient time to complete the questionnaire due to limited time available; Huduma Kenya is an innovation, so not much research has been done on the area. Therefore, the researcher took the time to explain the purpose of the study and reassure the respondents that the information provided would not be divulged to third parties.

1.8 Operational Definition of Terms

E-Business Portal: A digital portal where and individual can create a login account and access business registration information like business search name and registration.

E-Citizen Portal: E-citizen is a portal used by citizens when they do not actually want to visit the Huduma centre physically or Refers to a person utilising information technology (IT) in order to engage in society, politics, and government.

E-Visa Portal: A digital portal where an individual can create a login account and get access to immigration services. A user can be able to access visa processing and application straight from the palm of their hands.

E-Government: E-government is the use of electronic communications devices and the internet to provide public services to citizens and other persons in a country or region. E-government has been used in the Huduma centre to improve workflow and bring together all the business processes together.

Huduma Center: A Huduma Center is a central point where government-related services are offered at a central location to ease movement; Huduma is a Swahili name that means "service." Therefore a Huduma centre is a central location where services are offered.

One-stop-shop: a one-stop-shop is a company or location that offers a multitude of services to a client or a customer. The idea is to provide convenient and efficient service and also to create the opportunity for the company to sell more products to clients and customers; the Huduma centres are examples of a one-stop shop across the country.

Service Delivery: Service delivery is the activity of providing a task to a particular group of people; efficient and effective service delivery is measured by the speed at which it is provided. Other measures of service delivery include quality, responsiveness, flexibility, dependability, reliability, and cost at which the service is provided.

E-service: A service received or provided through Information Technology Platforms, customers from home, or at the Huduma can use their phones or computers to access government services using access to the internet

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This section reviews related literature on the topic of e-government and service delivery; the theoretical and empirical studies have been reviewed in detail from their applicability.

2.2 Theoretical Framework

The study was anchored on two theories, one is the theory of planned behaviour, and two is Technology acceptance Theory.

2.2.1 Theory of Planned Behavior

This model explains the behaviours of people exerting self-control. It comprises six constructs that attribute to an individual's control of reactions. They include altitude, behavioural intention, subjective norms, social norms, perceived power, and perceived behavioural control. He further explained that altitude is assessed as a personal consequence of the behavior. Behavioural control has an individual difficulty in executing a response. The theory bases its argument on that individuals make reasonable behaviours by assessing and evaluating the information available to them. It links personal beliefs and behaviour.

The execution of the action is determined by the intention of participation and perceived individual control (Ajzen, 1991).In recent years, global governments have been using e-government to deliver information and services to their citizens. Nripendra et al. (2012) study on the use of the theoretical approach to the utilisation of e-governments established some of the gaps not explored by scholars. The research focused on the conditions in which the e-government gets accepted by the citizens. In Kenya, with a survey of service, citizens'" perception is a vital model to use (Ozkan & Kanat, 2011).

In the study, it will be used to establish how citizens accessed the services from a one-stop-shop. The theory also helped in the formulation of research items such as perception lead, service dependability and reliability, perception of cost, perceived flexibility, and price of the services. While the theory of planned behaviours has been widely used in research involving human behaviour, it has been criticised because it does not incorporate behavioural intention and motivation. The theory does not consider emotional imbalance and past experience. Similarly, the theory does not consider emotional factors such as fear and threat.

These limitations make the theory not as effective in explaining behaviour in an environment of innovation adoption. The relevance of the theory in this study is its explanation of how the application of e-government has enhanced access to services from the one-stop-shop, huduma number. Since the introduction of huduma centres, there has been perceived improvement in service delivery in the public sector. The theory has relevance in the understanding of a variety of behaviour; users at the Huduma centres have no control of the activities or operations of service delivery; the theory proponents of this theory are (Ajzen,1991). Lastly, the theory explains how citizens were able to access services in the government through huduma centres.

2.2.2 Technology Acceptance Theory

Davis proposed it in the year 1989. It is based on the perception of its usefulness and ease of use and the ways they combine to influence the altitude of the technology. The model proposes that the perceived ease of use and versatility are dictated by external factors and how behavioural decisions affect technology use. Davis went further to explain that perceived usefulness was the degree to which a person believes using a particular system would enhance his performance. Besides, the perceived use believes that using technology needs little effort Mutuku (2018); Davis et al. (1989) further expressed that the model postulates that the use of an information technology system is determined by an individual's perception of its utility.

In the study to assess the degree of service delivery in the Huduma Centers in Kenya, it plays a vital role. In the context of this study's focus on the Huduma Center, the staff's use of technology becomes possible when they perceive its usefulness. Since its introduction, TAM has been used significantly to evaluate several technologies like e-mail, voice mail. The attribute asses in most studies revolve around perceived usefulness, ease of use, user satisfaction, and usability of the technology and also suitability for extending it to another area in education. One of the theoretical utilisation is exploring the adoption of technology with a group of users in an organisation and individual users. With this study model, the staff's use of technology becomes possible when they perceive its usefulness. It will explore if the perceived value of the technology and use enhance the performance in the use of technology (Latip, 2017)

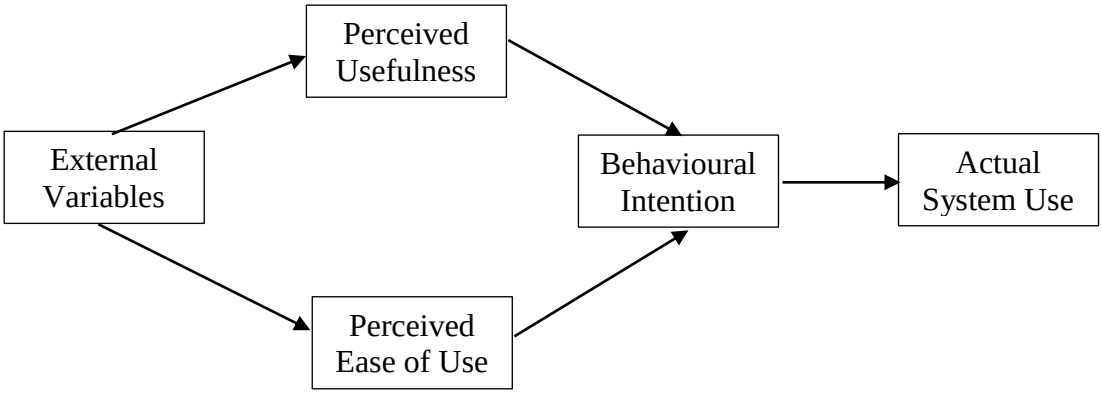

Figure 2.1: Technology Acceptance Theory

Source: Davis et al. (1989)

Perceived usefulness is defined as the degree to which a person believes that using a system will improve his performance. Perceived ease of use refers to the degree to which a person believes that the use of an order will be effortless. Technology Acceptance Model postulates that behavioural intention determines the use of an information system. Still, on the other hand, behavioural intention is determined by the personal attitude towards the use of the system and also by his perception of its utility (Davis et al., 1989).

Rytter et al. (2007) argued that operations strategy research should integrate recent theories from the resource-based view of strategic management. Going beyond the model of Hayes and Wheelwright, this would call for the end of the market-based view, where operations strategy merely follows the directions set by the marketing function. It would emphasise the dynamic development and leverage of competencies and capabilities in order to set new business diversification strategies. A new paradigm of operations strategy could emerge, where "management fundamentals" such as learning and culture would be actively integrated within operations in order to become key sources of competitive advantage. Accordingly, the operations function could progressively: take the leadership of strategy formulation, create "portfolios" of optional capabilities for strategies of organisational agility, and implement world-class practices more effectively through strategic evolutionary frameworks. The individual is not the only factor determining his use of a system but also based on the impact it may have on its performance. Gilbert and Balestrini (2004) revealed that trust, financial security, information quality, time, and money predict potential usage. While the theory was considered relevant in explaining technology acceptance, the technology acceptance theory has been criticised for not being effective in explaining individual behaviours towards technology adoption. This theory is relevant in this study as it explains the adoption and use

of technology by individuals and organisations (Gilbert & Balestrini, 2004). It explains the importance of confidence and trust in the system among individuals in assuring them of security of financial details and providing relevant, accurate, and up-to-date information. From empirical evidence, the Kenyan public has generally accepted and embraced e-government services.

2.3 E-government

A report by World Bank indicates that e-government is seen as using Information Communication Technology to improve business processes and delivery of services in government-owned departments and entities. Kuye et al. (2002) pointed out that e-government could handle all government scenarios, government to citizen, government to business, and government to government; these sometimes may be referred to as the primary delivery model of e-government (Demirgüç-Kunt et al., 2017).

This paper uses new survey data to measure the government's capacity to deliver goods and services in a manner that includes: high coverage of the population; equal access; and high quality of service delivery. The paper finds variation in these indicators across and within Indian states. Overall: (i) access to government-provided goods and services is low—about 60 per cent of the surveyed population are unable to apply for goods and services they self-report needing; (ii) inequality in access is high—women, and poor adults are more likely to report an inability to apply for goods and services they need; and (iii) less than a third of the respondents who did manage to apply for a government delivered good, or service found the application process to be easy. Access can be improved by reducing application costs and processing times, simplifying the application process, and providing alternative channels to receive applications. Kitaw (2006) reported that e-governance improved efficiency, better accessibility to public service, and better processes for democratic governance. Arora and Gupta (2017) government websites and portals are examples of government to citizen models. Information Communication Technologies enhances and speeds the utilisation of service delivery within government departments in the sense of utilising technology to save time and effort by collaborating with departments and agencies; for e-government to work well, other technologies like network readiness should be made available, other resources like hardware, software and data centres were supposed to be available.

The internet was crucial in these projects as it allowed access to government information and services from anywhere, anytime (Schneider & Perry, 2000). Servers enhance communication

in the back office across government networks and information transmission, which provides high-speed access to government data and services (Ebrahim & Irani, 2004). Kassen (2015) found that there was no single national e-government platform, e-government platforms were not limited to universities, and research centres, non-governmental bodies, counties and municipalities, e-government was used as a platform to enhance business processes, and democracy, an electronic document management system has also been developed to handle matters to do with public administration, other initiatives in the American e-government platforms included; participation, Open- data and collaboration, e-government in Europe was seen as a measure for a better government as it focuses on more quality and effectiveness, e-government was placed at the core of public management, modernisation, and reform, technology implemented as a strategic tool to modernise processes, structures, regulatory frameworks, human resources and culture of public administration to provide better government and increased public value, e-government needs to be more knowledge-based and networked (Budding et al., 2018

In Netherlands, e-service has become a pressing issue as it is seen as an essential element of e-government. E-service has strengthened the education system by cutting down on the cost to provide primary and elementary education; although there was no close effect of e-service on income, the Netherlands was ranked fourth in the adoption of e-government by the European Union., the study also noted that individuals would create passwords on the portal and apply for digital documents to the municipality (Twinomurinzi & Visser, 2004)

2.4 Service Delivery

Service delivery can be defined as any contact with the public administration during which customers, citizens, residents or enterprises, seek or provide data, handle their affairs or fulfil their duties; these services should be delivered in a practical, predictable, reliable and customer friendly manner, electronic service delivery is an effective means that reduces costs, both in time and money for the customer as well as government, Good service delivery requires that the government understands the need to promote citizen-oriented administration. Service delivery is the direct counterpart of service provisioning. They provide together a customer-to-provider relationship and how operational applications can be specified in terms of requirements and consequently provisioned as communication (Samitier, 2017).

There are five performance objectives of service delivery: Cost; ability to compete on low price, Quality; Ability to compete on high quality, quality features such as performance, features, aesthetics, and durability: Speed; Ability to compete on fast delivery, Dependability; Ability to compete on reliable delivery, Flexibility; Ability to compete with new products or services, wide selection, and timing.

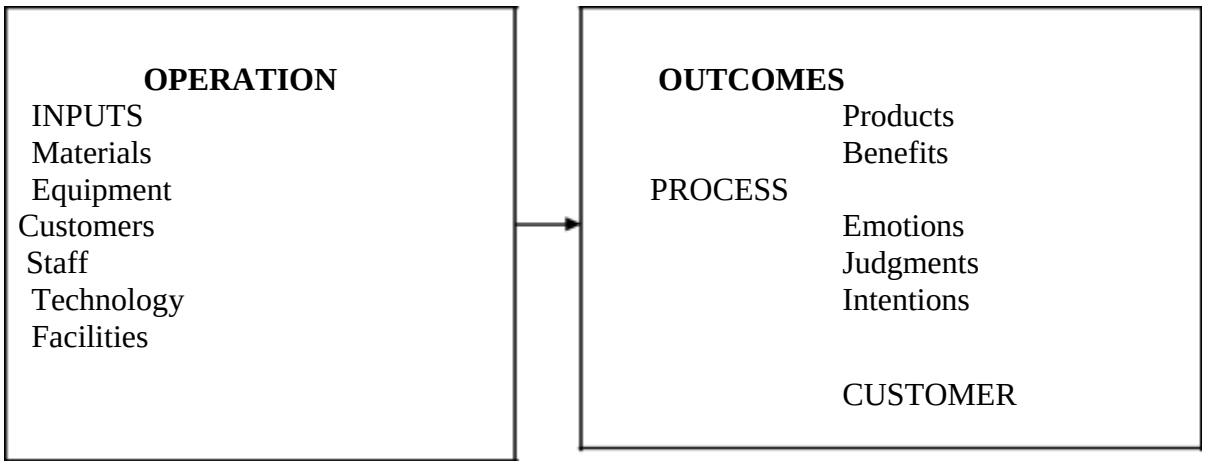

Figure 2. 2: Service Provided and Received

Source: Johnston and Clark (2008)

A service could be defined from a customer's point of view and an operations point of view. From an operations point of view, a service is the service process and its outputs which have been designed, created and enacted by the operation using its many input resources, including the customer, where else from the customers perspective, the service received is their experience of the service provided which results in outcomes such as products, benefits, emotions, judgments and intentions, service operations management is the term used to cover the activities, decisions, and responsibilities of operations managers in service organisations. It is concerned with providing services and value to customers, ensuring they get the right experiences and desired outcomes (Mutuku, 2018).

It involves understanding the needs of the customers, managing the service processes, and ensuring the organisation's objectives are met while paying attention to the service's‟ continual improvement (Johnston & Clark, 2008). On the other dimension of service quality, it is measured by ten dimensions which are not limited to; reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding, and tangibles as a means of measuring the gap between customer expectation and experience (Parasuraman & Berry, 1985).

2.5 Past Studies

This section reviews related literature on the topic of e-government and service delivery; the objectives have been reviewed explained in detail from its applicability from different countries regionally, globally and locally.

2.5.1 E-Government Practices/Strategies

Boyer and Lewis (2002) studies showed that the strategy processes provide an outlay of the path to be taken by the firm in the determination of its objectives. It was also applied by these firms to drive up performance through the selection of the most appropriate strategy that can sustain the firm's activities in the environment. The strategy was also linked to the choices of the most appropriate basis for competition within the marketplace. This conclusion raised a fundamental question of how strategic manufacturing configuration mediated or moderated the operational strategies/processes financial performance relationship. E-government has been researched extensively; most studies have indicated that e-government is practised not only by government organisations but also in the private sector (Imbamba & Kimile, 2017). Examined a review of e-government status in Kenya, the findings implied that Kenya had made significant progress in e-government implementation. The study also discovered that e-participation, accountability, planning, information sharing, and monitoring are the benefits derived from the strategy.

Mungai (2017) did a study on "e-government implementation and performance of the public sector in Kenya"; the study confirmed that there exists a relationship between Information Communication Technology and Public Sector Performance in Kenya. The study recommended that management teams responsible for the implementation of e-government strategy at the ministries should ensure the process leads to promoting access to facilities by the user at the points of delivery.

Mutuku (2018) conducted a study on the strategic use of Information Technology and Performance of Machakos Huduma Center; two objectives guided the research, one is to determine the extent of use of Information Technology in Machakos Huduma Center and to find out the effects of strategic use of Information technology on the performance of Huduma centres in Machakos county, the results showed there is a connection between service delivery and information technology, the study recommended that information technology be aligned with the vision of the organisation. The study also suggested that the number of Information

Technology officers at the centre be added and resolve the frequent network failures (Twinomurinzi & Visser, 2004).

Maina and Ombui (2018) revealed that the critical success factors in implementing public service projects in Kenya were the Huduma centre initiative, which determined how operational strategy and financing impact the success of a project. The study found out that the need to improve civil servants'‟ utility and faster service delivery were critical drivers during the design stage of the project. Researched Transformational leadership practices on performance of Huduma centres in Nairobi City County, the study found out that there exists a relationship that is positive on transformational leadership and performance of Huduma centres operating in Nairobi County, Kenya (Kahuari et al., 2019).In a related study, Karithi and Ragui (2018) sought to determine the performance of the Huduma centre in Nairobi County. The study's objectives were to assess the effect of training employees on technology, communication, and leadership.

The study showed a relationship between strategy implementation and performance of Huduma Centers, which is positive and significant between employee training, transmission, and production of Huduma centres despite a few challenges. Similarly, Kipchumba (2015) sought to establish on the challenges towards e-government adoption in Kenyan public administration a survey of the provincial administration, Uasingishu County. This study recommended that there should be massive sensitisation of e-government, a policy should be carried out, information communication technology infrastructure should be equally built especially in government offices, electricity connection should be facilitated to have all government offices powered, and that information communication technology training program for public administration officers should be put in place for the officers to be able to handle information communication technology. With the new administration in Kenya that supports information communication technology adoption, public administration should be at the forefront of e-government. The benefits drawn from the use of online platforms to run government business are enormous ranging from cost-saving, increasing efficiency and productivity, encouraging citizen participation as well as increasing accessibility to government services to even remote places on a 24-7 basis. The study also found that several transactions can be done online, ranging from basic applications, payment of legal and other fees or fine, availing of up-to-date information, among others. This aside, many factors hinder the target consumers of e-government from accessing, using, or affording the services. Most governments do not involve them as they develop and roll out this initiative. Absorption of the services is hence low, and

the government often has to go the extra mile in ensuring full implementation to e-government systems if they have to realise the benefits of investing in such ventures (Samitier, 2017).

Magara and Muturi (2019) determined the effect of reengineering strategies on organisational performance: a case of Huduma centre Kisii town, Kenya. The study aimed at assessing the effect of reengineering strategies on organisational performance of public organisations, the reengineering strategies in view were benchmarking, radical transformation, process rationalisation, and process integration; it was concluded that expansion and alteration of plan pertain to a particular service to be offered. It was recommended that customer service should not be individualised for best marks but incorporated for service.

2.5.5.1 E-citizen Strategy

E-citizen, as a component of e-government, has not been researched much. Still, few local studies that have been done on this area suggest that challenges have flawed its implementation; the studies indicate that the government needs to create more awareness about the e-citizen portal, the stakeholder needs to be included during the entire life of the project and campaigns to create awareness about the e-citizen portal to be increased (Riany et al., 2018).

Ondego and Moturi (2016) conducted a study on an assessment of the implementation of the Kenya e-citizen Information Communication Technology project; he argued that Information Communication Technology could make a valuable contribution

towards the operation of and services offered to citizens by the government, the study proposed the Delone and McLean of information systems success model be adopted and hence used to assess the implementation of the e-citizen Kenya Information Communication Technology project, stakeholder engagement model which consists of six dimensions: systems quality, information quality, service quality, intention to use, user satisfaction and net benefits, the research proposed that stakeholder engagement be incorporated in the Delone and Mclean model, the study also revealed that stakeholder issue needs to be addressed through public awareness, which is an attribute that determines stakeholder engagement.

Wasunna (2018) assessed the impact of mobile payments on the adoption of e-government services in Kenya. The study's findings revealed that the platform has over 4 million unique registered citizens making 9 in every ten payments through mobile money, which has nearly

eight times as many registered accounts. The study also established that citizens do not look to mobile money payments as a reason to register onto e-citizen and use it to get government services digitally.

However, mobile money was perceived to provide a positive user experience compared to other payment methods as its speed, efficiency influence this, and affordability with the 25 further positive impact created by aggressive marketing by mobile payment provides for a service that was already mandated by the government. The study further found out that mobile money plays an essential part in enhancing users"‘ experience while using the e-Citizen platform. It provides convenience and ease of access when making payments remotely compared to other channels of payment.

Finally, the study found a weak statistically significant correlation between access to mobile payments and the adoption and continuous usage of citizens for government services and that although mobile money is widely used for the majority of the cash on the e-citizen platform, it is not the key driver for citizens to register on e-citizen to get personal accounts which subsequently use to access government services directly.

Komer (2016) study on the perception of customers towards e-citizen in city square Huduma centre Nairobi was guided by the following research objectives; To determine how service quality affect customers perception towards e-citizen, to assess the effect of culture on customers perception towards e-citizen, to assess the effect of privacy and security towards customers perception on e-citizen. The findings revealed that most of the respondents agree that e-citizen provided services as promised and appealing in appearance and visual design. Similarly, e-citizen was found to focus on meeting users' needs. In addition, it was also revealed that the government website is easy to navigate. On analysis of the effects of culture on customers"‘ perception towards e-citizen, the majority of respondents preferred face-to-face interaction over online though they agree that access to government service is a good idea; despite this, the study also reveals that the majority use e-citizen to access government services. On issues of geographical location, people in rural areas have knowledge and skills of accessing e-citizen, although English and location posed a challenge to rural customers.

On analysis of the effects of privacy and security on customers towards e-citizen , the findings reveal that the e-citizen platform can be trusted as it is very secure.

2.5.1.2 E-Business Strategy

Aranda (2003) studies revealed the relationship between operations strategy and performance through flexibility as a moderating variable and were analysed within the service setting of engineering consulting firms in Spain. A framework for service strategy dimensions was suggested while manufacturing flexibility dimensions are applied to service operations considering necessary adaptations. A path analysis model was applied in order to enhance the understanding of interactions. This research proved that service operations strategy has a significant positive and direct effect on service delivery performance. The fact especially relevant was that flexibility played a more intense moderating role for efficiency performance measures than for customer satisfaction performance measures. E-business contributed to the more efficient business, the use of e-business contributed to a better and more intimate relationship with customers, the application of e-commerce implied significant changes in business strategy, e-business contributed to more efficient organisational marketing, well organised internal electronic network has a substantial impact on the exchange of knowledge and information among employees, internet technologies can be relevant mediators in the education of employees in e-business, the role of an intranet was equally essential as the role of an extranet. On the second objective to determine the extent of the present efficiency of e-business functioning within public companies in Serbia, the study found that previous application of e-business has made the operation of public companies in Serbia more efficient and that the relations with the users have improved, the study revealed that e-technologies create necessary information about users, the study further indicated that technology improves marketing of products and services, the study also found that use of e-technologies to process business request and application improves companies operation and processes (Samitier, 2017).

Matopoulos et al. (2007) explored the impact of e-business adoption of logistics processes: empirical evidence from the food industry." The findings suggested that e-business adoption is more affected by supply chain and sector factors rather than intra-enterprise factors; on the impact of e-business on logistics processes, it seems that it is affected by the frequency of its use. It is higher in processes occurring at the company-customer interface. Finally, e-business impact is more related to the dimensions of time and quality rather than cost improvements. The study showed that although the application of e-business has many benefits, it has many challenges. A fundamental problem noted relates to building a web portal. As such, the study examined the evaluation criteria of web portals. The web portal community is the degree to which the web portal sends e-mails to its users to tell them about the portal's new products and services based on their interests. The web portal business issue was described as the degree by

which the web portal offers products and services with economical price and with suitable performance compared to other competitors, the degree by which the web portal responds to the user problems (Riege, 2003)

2.5.1.3 E-Visa Strategy

E-Visa facilitation is considered one of the main strategies in removing barriers associated with travel. It provides travellers with the luxury of acquiring permission to enter destinations they intend to visit at their home's comfort. Despite its criticality, e-Visa is an issue that has not been studied extensively by scholars. Hence, this study is an attempt to bridge the gap by integrating it with the concept of e-government. This literature section contains several studies that have addressed the issue of e-Visa. Cakar et al. (2018) assessed the impacts of e-Visa on the tourism sector in Turkey.

The study findings showed that some of the positive effects of visa facilitation include building a destination's image and increasing the level of travellers'" intention to revisit a goal compared to traditional visa-obtaining processes. The research findings further presented suitable data for destination managers and policymakers regarding visa facilitation. The researchers averred that potential travellers to the country need to obtain visas, for which they must apply at embassies and consulates. This process implies dealing with costs and waiting in queues, sometimes for hours. Agarwal (2017) examined the limitations of the e-Visa application in India. E-Visa facilitation in India allows travellers intending to go to India for recreational escapades, casual visits, business visits, or short-duration medical treatment to acquire visas online. In an attempt to fast-track and ease the process of e-Visa facilitation, the Indian government introduced three subcategories of e-Visa, namely, e-medical, e-business, as well as e-tourist.

The Indian government extended the e-visa validity to 60 days while also allowing for double entry on e-business and e-tourist visas and triple entry in the case of e-medical visa applicants. The researchers noted that these measures were critical as they set the right tone for Information Communication Technology deployment in the delivery of government services. Additionally, the study found that the Indian visa online application was practical and cost-effective, particularly for travellers with limited interactions with the general public. As long as the merits of e-visa outdo its costs, then e-visa facilitation is a more attractive option compared to conventional visa applications through embassies.

2.5.2 Service Delivery

Various studies have examined the meaning and significance of efficient service delivery. Waruhia (2018) on the Effect of service quality dimensions on customer Satisfaction among government Huduma centres in rift Valley region Kenya, the study established that queue management, ease of application of government services, integrated service provision and issuance of government documents were related to public service delivery, the study recommends that policymakers prioritize policies geared towards application of government services, followed by policies geared toward issuance of government documents and lastly, policies geared towards queue management.

Wambugu (2018) determined the effect of service quality dimensions on customer satisfaction among government Huduma centres in the rift valley region of Kenya. He demonstrated that service efficiency, service accessibility, customer responsiveness, and service reliability have a significant influence on customer satisfaction in Huduma Centers. The study concluded that service efficiency, service accessibility, customer responsiveness, and service reliability have a significant role in determining customer satisfaction in Huduma Centers. A related study by Abdalla et al. (2015) on the effect of Huduma Centers in-service Delivery in Mombasa found out that majority of the customers were pleased with the level of transparency, with slightly low levels of service awareness, most customers were satisfied with the reliability of service delivery at the Huduma Center.

Murithii (2018) evaluated operational strategies employed at the Huduma Centre in Mombasa County and their effect on service delivery. These operational strategies were customer-centricity, interconnected government, capacity building, and continuous innovation; the study found out that customers were highly valued at Huduma centre, the study found out that the linking of government services through a strategy known as interconnected government, the government had enhanced service delivery to its citizens.

The study also found out that capacity building and service delivery has a positive correlation; the study found out that the Huduma Centre relied heavily on the use of Information Technology, the idea of getting all government services under one roof is an excellent innovation by itself, the feedback provided by customers contributed significantly in coming up with changes to improve service delivery, and the Huduma card had enhanced the delivery of services. The study found out that there exists a strong positive correlation between continuous innovation and public service delivery. This indicates that an enhanced and

comprehensive continuous innovation can significantly influence public service delivery. Agwaro (2017) did a study on Service design and service quality in the public sector case of Huduma Centers; the role of service design is to overcome difficulties in the process of service acquisition; Huduma centre is an initiative of the Government of Kenya that is based on the concept of service delivery transformation, he analysed the effect of service design on service quality in Nairobi county, the study sought to find out how different service design strategies; automated queuing, process automation and self-service as adopted by various Huduma centres had an effect of the performance of Huduma Centers.

In another study, Chukwuemeka et al. (2017) noted that the internet has forthwith brought a host of possibilities that have had a significant effect on society. Arguably, there has been no other innovation in human life that has had much more impact within a short period. E-government services are a direct product of the internet. IT technologies have enabled the implementation of e-government, and thus creating improvements in service delivery through innovation, stimulating inclusivity and openness when it comes to administration. On the other hand, perceive service delivery as the attainment of the targets/tasks assigned to an organisation or workers within a stipulated time frame. It entails the execution of duties and responsibilities allocated by constituted authorities, which one has committed to undertake to attain organisational goals.

Nyaboke (2018) did a study on transparency and accountability. She indicated that service provision should entail better and effective service delivery. Findings revealed that services provided at the Huduma Center were reliable and that customers were satisfied with how they were served, suggestions for further studies were that the current research focused on integrated services on the enhancement of public service delivery, but a similar study can be done using other state corporations which are using Huduma Centers. Darma and Ali (2014) assessed the public sector service delivery in Nigeria, a case study of federal capital territory area councils. The study's findings showed that there was a very noticeable difference between what is officially expected of the public service and the perception of the quality of service actually delivered.

The study also found a noticeable difference in perceptions of the efficiency of public service relative to services provided by private agents. Wasunna (2018) assessed challenges in public service delivery and established that innovation is critical. According to the study, innovative ways are required to make improvements. Information services have a lot to learn from the

experience of Huduma Kenya. Huduma Kenya was established to transform public service delivery, which had been considered inefficient for a long time, riddled with corruption, and costly to the Kenyan citizens. This kind of transformation is reflective of the paradigm shift in information service provision, where user orientation and technological advancements are ushering in revolutionised approaches. Information professionals can reflect on these experiences while working towards taking information services in the country to another level. Makanyeza et al. (2013) conducted a study on strategies to improve service delivery in local authorities. The study's findings showed that the major causes of poor service delivery are councillor interference, political manipulation, corruption, lack of accountability and transparency, inadequate citizen participation, weak human resources policy, failure to manage change, lack of employee capacity, insufficient monitoring and evaluation.

2.5.3 E-Government Practices and Service Delivery

Scholars have established that Huduma centres work in tandem with e-government to improve service delivery in the public sector. The literature on e-government in developing nations towards boosting public service delivery mainly focuses on failure stories. Notwithstanding, the botches have not stopped governments in these nations from adopting Information and Communication Technology as the appropriate channel for public-centred service delivery.

Wambugu et al. (2017) assessed the effect of innovation on service delivery in the public service sector in Kenya. Service innovation was operationalized by the fact that processes in public had been automated, the findings rated technology innovations to have significant positive effects on increasing the number of people served, reducing the time of service delivery, increasing accountability and transparency, results implied that Huduma centre innovations face lack of adequate resources during implementation, the study recommended that staff give feedback on service delivery.

Twinomurinzi and Visser (2004) carried out a study on the effectiveness of e-government and public service delivery in South Africa. According to the survey, e-government as a service delivery tool led to improvements in service delivery because it mainly puts the general public first. The study also noted that for e-governance to be effective, e-government initiatives in the country must be integrated.

Imbamba and Kimile (2017) conducted a study on the effects of e-government strategy on service delivery in the government ministries in Kenya. The study found out that

implementation of e-government was not effective in all ministries; the study further found out that e-government enabled database sharing, lowered the costs of delivering services, reduced the time taken to process a transaction, led to improved management of records, eased working procedures and improved staff productivity. On the other hand, Norris and Curtice (2006) averred that the internet also serves as an aid to good governance and transparency. Effective service delivery is one of the critical issues in aspects of proper management. There are positive governance impacts from the internet, which can be used to link e-government, citizens, and the government. This relationship can be traced out on issues related to service delivery: like the method of requesting services, citizens making suggestions, and useful information about services from governmental institutions.

Odhiambo and Okello (2019) studied the influence of automation systems on service delivery in selected Huduma Centers in Kenya and concluded that Automation systems have a statistically significant influence on service delivery in Huduma Centers in Kenya. Additionally, the study found that unit increase in Automation systems leads to an increase in Service delivery at Huduma Centers in Kenya. The study recommended that automation systems should be enhanced in the Huduma Centers to ensure more exceptional service delivery. This study's findings would help the government in policy formulation, the Summit of Huduma Kenya, in knowing the contribution of automated systems in improving public service delivery through Huduma Centers and to academicians who would use this study as a source of reference.

Kiprop et al. (2017), in their study on the Relationship between Customer Arrival Practices and Customer Satisfaction in the Huduma Centre in Nakuru County, showed that the customers believed that the management avoids congestion or bottleneck in the counter by managing the arrival rate of the customers and that the arriving customers are required to join in a line that promotes justice and fairness in waiting. Customer's capacity adjustment, queue order, arrival management, and customer awareness affect customer satisfaction. The management should make more effort to ensure that the capacity is adjusted for single customer arrival and batch customer arrival and offer time-based promotions or discounts to alter or shift the customer's appearance. The arriving customers are made aware of how long they will have to wait before they get served.

Riany et al. (2018) studied the influence of e-government strategy implementation on the performance of public service delivery in Kenya. They found out that the implementation of

an e-government strategy leads to a significant improvement in the performance of the public sector in Kenya. The study further revealed that the significant e-government services offered in the public sector are I-tax by the Kenya Revenue Authority, Integrated Financial Management System (IFMIS) by the national treasury, Ministry of Devolution and planning for the Huduma centres and Government Human Resource Information System (GHRIS) initiative a Ministry of Finance for the e-citizen portal, the study further revealed that the measures of e-government strategy implementation are implementation or realisation of plans, resource allocation to initiatives, change management as well as strategic leadership styles, performance measures of public service delivery are customer satisfaction, accountability, cost efficiency and return on investment. Gakii (2018) on technology in Government service delivery through Huduma Centers in Kenya found out that the Huduma Centers project was a critical component of Vision 2030.

The Huduma Kenya project has been a success because each Kenyan citizen has experienced efficiency in terms of government services access. The availability of mobile money transfer, the trained human resources in information technology, and the installation of fiber optic across the country by the government have been significant catalysts for the success of the Huduma program. Another critical aspect that cannot be ignored is the existing Post office infrastructure that made it possible for the program to access even remote areas. There are many successful information technology projects in developed countries. Based on the efficiency and quality delivery of the services accessed by Kenyans through the Huduma program, this can be said to be one of Kenya's most successful digital projects that impact her citizens.

Mutinda (2018) conducted a study on E-government strategy and service delivery in Nairobi city county Kenya found out that through e-government online transactions were secured, revenue was timely collected, and back-office operations were automated; the study concluded that Nairobi city-county had information communication technology partnership pieces of training for information communication technology users on service delivery.

A separate study by Mutuku (2018) on the effects of the strategic use of information technology (IT) on the performance of Machakos Huduma centre showed a substantial connection between the strategic use of information technology and the performance of the Huduma Center. The study indicated positive effects on the performance of the Huduma centre due to the strategic use of information technology; these effects include customer

satisfaction, efficient and effective service delivery, transparency, and cost-effectiveness. The study recommended that organisations should invest in Information Technology resources wisely, focusing on how to use them strategically; for the strategic use of information technology, IT should be aligned to the vision of the organisation. Also, strategic use of information Technology necessitates that it be used in the formulation, implementation, and achievement of the organisation's strategy; the study also recommended that investment should be made on regular training of the staff on Information Communication Technology skills to add more Information Technology officers and resolve to the frequent system and network failures.

2.6 Summary of the Literature Review and the Knowledge Gap

Research on e-government and service delivery has generally been conducted by scholars, focusing on ministries Huduma Centers (Wambugu, 2018). The studies have focused on various aspects of service delivery such as speed, cost, customer satisfaction (Kiprop, 2017). Most of the studies have tended to determine ways of achieving better customer service, achieving reduced service costs and enhancing customer satisfaction (Makanyeza et al., 2013). However, not many studies have considered e-citizen, e-business, and e-visa in the Kenya context. Therefore, research needs to be done on the effect of e-government strategies on service delivery and measure the level of service delivery.

Table 2.3: Table of Related Studies

Author / Year	Topic	Study Variables
Mugabe (2013)	Effects of e-government on service delivery in the government ministries	The focus was on database sharing, Online access of facilities, cord Management and transaction processes
Kipchumba (2015)	Challenges towards e-government adoption In Kenyan public administration: A survey of the Provincial administration, Uasin Gishu county	The focus was on Public Administration
Ondego and Moturi (2016)	An assessment of implementation of the Kenya e- Citizen ICT Project Information Communication Technology (ICT)	The focus was on E-citizen
Kiprop et al. (2017)	The Relationship between Customer Arrival Practices and Customer Satisfaction in the Huduma Centre in Nakuru County	The focus was On Customer Arrival Practices
Komer (2016)	Perception of customers towards e-citizen a case of Citi-square Huduma Center Nairobi	Focus is on Perception of Customers
Ngalu and Wafula (2015)	Factors influencing the choice of Huduma centres	The focus was on the Choice of Huduma Center
Wambugu (2018)	Effect of service quality dimensions on customer satisfaction among Service Quality government Huduma centres in Rift Valley Region Kenya	The focus was on service quality
Darma and Ali (2014)	An assessment of the public sector service delivery in Nigeria; a case study of federal capital territory area councils.	The focus was on the Public Sector
Rutto and Yuddah (2015)	Challenges in public service delivery and established that innovation is critical	Focus was on public service
Wasunna (2018)	An assessment on the impact of mobile payments on the adoption of e-government services in Kenya	The focus was on mobile payments and e-government
Cakar et al. (2018)	Assessed the impacts of e-Visa on The tourism sector in Turkey.	The focus was on the impact of e-visa on the tourism Sector

2.7 Conceptual Framework

In this study, the researcher seeks to bring out the relationship that exists between three variables. These are; the independent variable, the dependent variable, and the Intervening variable. This research specifically seeks to find out the effect of e-government on service delivery in the Public sector, the case of Huduma Center Nakuru County. The independent variable in this study is E-government, which is operationalised by E-citizen, E-business, and E-visa. The dependent variable is service delivery, which is operationalized by Cost, Time,

Quality, Dependability, Flexibility, and Reliability. The hypothesis to be tested using regression models are H_{o1}: E-citizen Adoption has no significant effect on service delivery in the Huduma Center in Nakuru County.H_{o2}: E-business Adoption has no significant effect on service delivery in the Huduma Center in Nakuru County, H_{o3}: E-visa Adoption has no significant effect on service delivery in the Huduma Center in Nakuru County.H_{o4}: E-citizen, E-business, and E-visa Adoption have no significant effect on service delivery in the Huduma Center in Nakuru County. The Intervening variables in the study are; good governance, transparency and accountability, which will be held constant for this study. The study predicts that e-government is a determinant of service delivery in the public sector. The relationship between the research variables is presented in figure 2.1

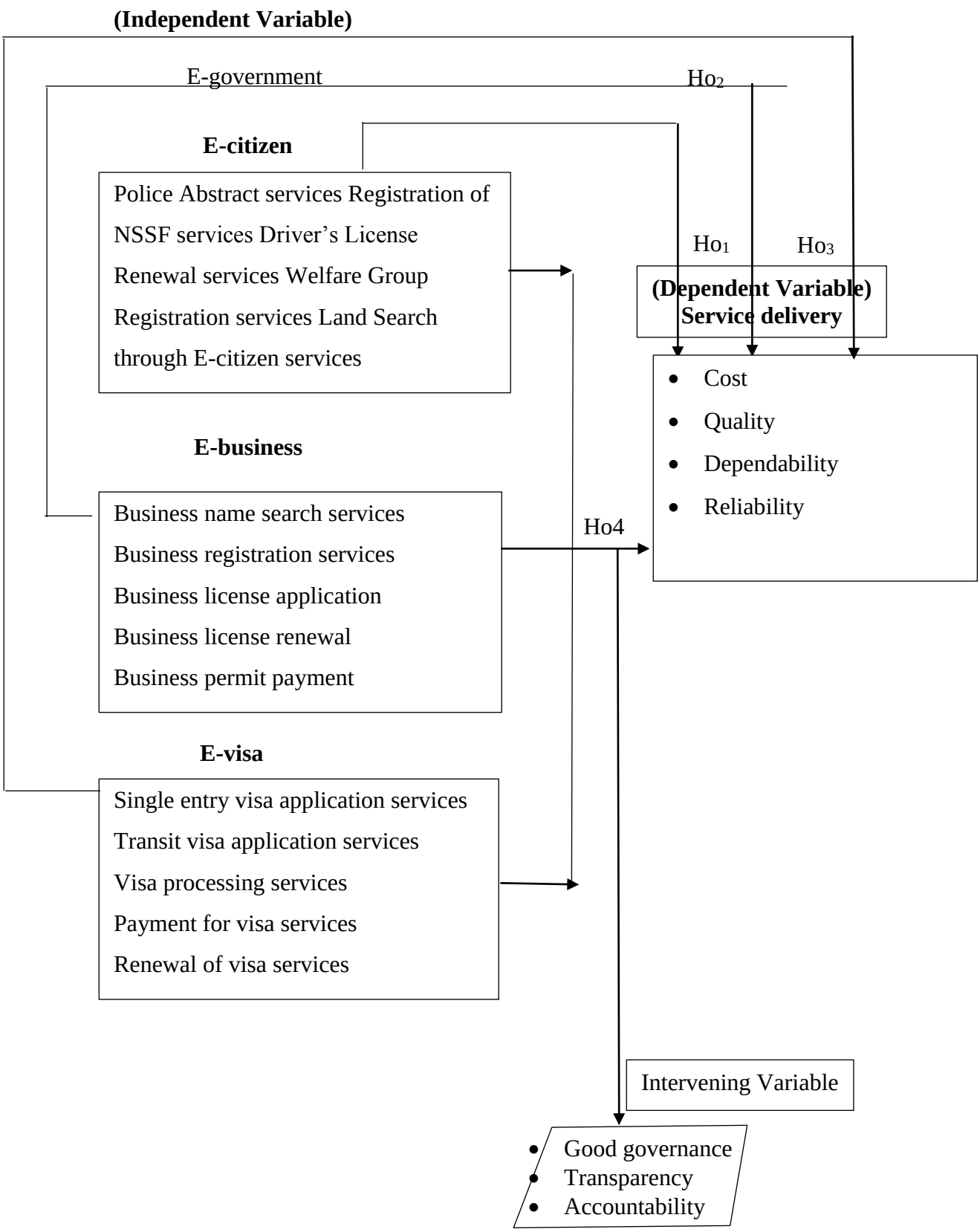

Figure 2.3: Conceptual Framework

E-Citizen is an official digital platform which enables Kenyan citizens, residents and visitors to access government services online. The applications are made online by filling an application form in PDF format. Notifications on the applications are sent via email and SMS.

E-Citizen has a variety of payment options which includes mobile money, debit-card and eCitizen agents.

One can get services in and around business, marriages, driving, lands immigration and civil registration services offered by their respective government departments. For instance, through the Office of The Attorney General and Department of Justice, one can get services involving getting married or entering a civil partnerships in Kenya. Business name search and registration services are also offered. This is possible through eBusiness, a portal of eCitizen which enables individuals owning businesses to access Government to Business service online. The services include the application of business licenses, permits and business registration. To add on that, one can apply for a provisional driving license, book in driving test, get a driving license, pay fees and track the application through the NTSA(National Transport and Safety Authority) in eCitizen.The Ministry of Land Housing and Urban Development offers services such as searching for a title deed,land rent clearance demand notice and payments all through eCitizen. In conclusion, e-Citizen is a platform designed to cater majorly for the citizen. It improves the speed in which the government serves its citizens, thus making service rendering convenient. All that is required is a single account in eCitizen, and you will get access to everything. For more information go to www.ecitizen.go.keIn 2016, the Companies Registry set up a digital Business Registration Service (BRS), which is hosted on the E-citizen portal.Since the BRS system has gone live, all company incorporations have been done online, and a company is automatically linked to the E-citizen portal when incorporated. Entities established prior to 2016, under the manual system, now need to be linked to the E-citizen portal. All companies, including public limited companies, companies limited by guarantee, foreign companies as well as limited liability partnerships and sole proprietorships can now to undertake the following at the Companies Registry, Carry out a company search; File changes such as changes to shareholding, directorship, registered office and share capital; and file annual or interim returns. Other servicers include Conversion of companies; Increase of nominal capital; Splitting of shares; Changes relating to the registered details of foreign companies; Obtaining certified copies; Official searches of business names; Amendment of Memorandum and Articles of Association; registration of debentures and discharges. The Department of Immigration Services offers services such as application of passports and application of a work permit. In e-Visa, another portal of eCitizen one can apply for a visa. An e-Visa is an official document permitting entry into and travel within Kenya. Applicants obtain their visas electronically after entering the required information and making payments by a credit or debit card.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter specifically covered the following subtopics; research design, target population, data collection and research instruments, sample and sampling procedures, data collection and analysis procedures pertinent in answering the research hypotheses.

3.2 Research Design

This study adopted a case study design. Case study design uses one unit of analysis to make inferences to other members of the population (Mugenda & Mugenda, 2003).

3.3 Target Population

The target population in this study is customers who access services at the Huduma Center Nakuru County. The study is restricted to a period of one month. To establish the target population size, the researcher conducted pre-visits to the Huduma center and established that a customer takes on average 5 minutes at the service point. At any given time, on average, ten service points are active between 8 am, and 5 pm on Monday to Friday and between 9 am and 12 noon on Saturdays. According to the Kenya Census of 2009, Nakuru County has an estimated 1.6M People.

3.4 Sample Size

The study adopted a simple random sampling technique. The formula that was used to determine the sample size is as follows. Where n is the desired sample size, the degree of variability of the population is not known. An assumption on the maximum variability was made, which is equal to 30% (p =0.3) and taking 0.04 variance. The census of 2009 indicates that Nakuru County has an estimated 1,600,000 people.

$$n=NC2$$

$$c2+N-1e2$$

$$\text{coefficient of Variation (CV)}=30\%$$

$$(\text{Standard Error} = 0.04)$$

$$1{,}600{,}000 * \frac{0.32}{(30\%2)} + (1{,}600{,}000-1) * (0.042)$$

$$=378 \text{ respondents}$$

3.5 Data Collection

The centre manager allowed the collection of data from the Huduma centre for the one-month period. Data were collected using a structured questionnaire with five points Likert scale. The service providers were requested to assist in the administration of the questionnaires. To ensure randomness in sample selection, an equal number of questionnaires were issued per day during the study period of one month. A few customers requested to be left with the questionnaires, given time to fill the questionnaires and the filled questionnaires to be collected later. In such cases, the researcher requested customer contacts to ensure ease of follow-ups.

3.6 Validity and Reliability Analysis

Validity is when an instrument measures what it's supposed to measure; data need not only to be reliable but also true and accurate.

3.6.1 Validity Analysis

Validity analysis assesses the ability of a research instrument to measure what it is intended to measure (Riege, 2003). The researcher ensured both internal and external validity thresholds were met. Internal validity is the extent to which research findings are a result of actual interaction of research variables and not extraneous variables (Kothari, 2004). External validity, on the other hand, is the extent to which research findings can be applied in a realistic environment (Kassu, 2019). For a study to achieve internal and external validity, it must have achieved construct and content validity thresholds. Construct validity ensures the researcher adheres to existing theory and knowledge when measuring research concepts. Content validity, on the other hand, ensures measurement adopted covers all aspects of a research variable (Williamson & Johanson, 2017). In this study, the researcher ensured content validity by relying on empirically available conceptual constructs when developing research items.

3.6.2 Reliability Analysis

Williamson and Johanson (2017) relate reliability to the consistency of a measure; when an instrument measures what it's supposed to measure, then it is said to be reliable. Reliability analysis establishes the extent to which a research instrument is able to replicate results if the analysis was repeated (Kothari, 2004). This study involved conducting a pilot test at the Huduma Centre in Nakuru before data analysis.

The choice to visit the Huduma centre was based on two assumptions. The first assumption was that customer visits to the centre are random. Secondly, the sample was around 1.5 percent of the

population. Therefore the likelihood of a customer involved in the pilot study being involved in the actual study was very minimal. The researcher issued 38 questionnaires, 10 percent of the sample to citizens at the Huduma centre, for purposes of reliability analysis. From the data collected, Cronbach s alpha was to be computed for all research variables. Values that was greater than 0.7 indicated that the research instrument was reliable (Tavakol & Dennick, 2011). The findings were as presented in table 3.1.

Table 3.1: Reliability Statistics

Variable	Cronbach's Alpha	No. of Items
E-citizen	.735	4
E-business	.841	4
E-visa	.831	4
Service Delivery	.832	4

From table 3.1, E-citizen had a coefficient of 0.735; E-business had a coefficient of 0.841; E-visa had a coefficient of 0.831 and Service Delivery had a coefficient of 0.832. These results were greater than the threshold of 0.7, and all the items were therefore considered reliable and optimal.

Table 3.2: Diagnostic test result

	Colinearity Statistics	
Variable	**Tolerance**	**VIF**
E-citizen	.504	1.985
E-business	.503	1.988
E-visa	.996	1.004

Table 3.2 shows the multicollinearity test for the variables. The diagnostics variance inflation factor (VIF) and tolerance were used to test the multicollinearity of the independent variables. A tolerance value less than 0.1 or VIF greater than ten (10) roughly indicates significant Multicollinearity. The results of this study indicate that Tolerance values were greater than 0.1, and VIF values were much lower than the recommended cut-off of 10 (Kiprop et al., 2017), thus suggesting the absence of multicollinearity in the data. Respective VIF were E-citizen =1.985, E-business =1.988, E-visa=1.004.

3.7 Data Analysis and Presentation

Research variables were measured based on research items identified through the e-government practices, as presented in the questionnaire. Research data collected was analysed by the use of descriptive statistics and inferential statistics. Descriptive statistics mean, and standard deviation was used to describe the research variables. Data were analysed using SPSS version 22 and presented using tables. Regression analysis was conducted to establish the effect of e-governance on service delivery. T-test at 0.05 level of significance was used to test the research hypotheses on the effects of individual e-government practices on service delivery. In contrast, multiple regression and ANOVA was used to test the combined effect of e-government on service delivery. The regression model presented below guided the study

$$\gamma_c = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + e$$

x_1=E-Citizen

x_2=E-business Y=Service Delivery Service Delivery

x_3=E-visa Where; β_0=Constant Term Service Delivery Service Delivery

β1	= Corresponding change in service delivery	as a result of the x1(E-citizen)
β2	= Corresponding change in service delivery	as a result of the x2 (E-business)
β3	= Corresponding change in service delivery	as a result of the x3 (E-visa)
=Error Term	Error Term	

Table 3.3: Summary of Objectives and Measurement of Variables

Research Objective	Independent Variables	Dependent Variable	Descriptive Tools	Inferential Tools
To determine the relationship Between E-citizen Adoption and service delivery in the Huduma Centre in Nakuru County	E-citizen Adoption	Service delivery in the Huduma Centre	Means, S.D, Percentages	Regression analysis
To establish the relationship between E-business Adoption and service delivery in the Huduma Centre in Nakuru County	E-business Adoption	Service delivery in the Huduma Centre	Means, S.D, Percentages	Regression analysis
To determine the relationship between E-visa Adoption and service delivery in the Huduma Centre in Nakuru County	E-visa Adoption	Service delivery in the Huduma Centre	Means, S.D, Percentages	Regression analysis
To establish the combined effect of E-citizen, E-business, and E-visa Adoption on Service delivery in the Huduma centre in Nakuru County	e-Government	Service delivery in the Huduma Centre	Means, S.D, Percentages	Multiple Linear Regression

Multiple regression model assumption was tested by conducting a normality test. This was carried out using histograms with a normal curve. The results showed a bell-shaped curve indicating that data were approximately normally distributed so as to meet the normality test assumption. The results are shown in Appendix.

3.8 Ethical Consideration

The researcher indicated that for the respondents, it was a voluntary exercise for them to participate, and no one would be penalised or victimised for failing to participate. They are at liberty either to choose to participate or not. The researcher safeguards the respondent's privacy at all costs so that they would not worry since their privacy is considered utmost and their identity withheld. Egerton University and The National Commission for Science and Innovation issued an

introduction letter to allow the researcher to collect data from the centre. For ethical standards, the data collected had to be used solely for academic purposes.

CHAPTER FOUR
RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results and discussions of the results of the study. The data collected were analysed using descriptive and inferential statistical methods for each variable, and the findings presented in tables, and their implications were discussed. The chapter starts with descriptive statistics of the study variables and the test of hypotheses. Finally, the chapter presents a discussion of the results of the study.

4.1.1 Response Rate

The researcher issued 378 questionnaires to customers who visited the Huduma centre in Nakuru County in January 2019. Out of these, only 300 questionnaires were successfully filled and returned by respondents, representing a response rate of 78.125%. Table 4.1 below summarises the response rate.

Table 4.1: Response Rate

Questionnaires Issued	Questionnaires Returned	Response Rate (%)
378	300	78

The high questionnaire response rate (78%) shown in Table 4.1 resulted from the self-administration of questionnaires. A response rate of 78% is considered adequate for analysis (Mugenda & Mugenda, 2003).

4.1.2 Demographic Information

The study sought to determine the demographic characteristics of the respondents. The characteristics considered in the study were; a range of respondents' ages, gender; the highest level of education attained by the respondents.

Table 4.*2*: Descriptive Results on Demographic Information

Variable	Measure	Frequency	Percentage (%)
Gender of respondents	Male	167	56
	Female	133	44
	Totals	300	100
Age of the respondents	Less than 18	16	5
	18 to 24	45	15
	25 to 30	106	35
	31 to 40	77	26
	41 to 50	27	9
	Over 50	29	10
	Totals	300	100
Education Qualifications of the Respondents	Certificate	70	24
	Diploma	75	25
	Bachelor	101	34
	Masters	26	9
	PhD	12	4
	Others	12	4
	Totals	300	100

The findings in Table 4.2 suggest that the majority (56%) of the respondents who participated in the survey were male. Female respondents were (44%), which means that a high proportion of males who participated in the survey had accessed Huduma Center services in Nakuru County. The results also indicate that the majority (35%) of the respondents were young and aged between 25 – 30 years. Concerning the level of education, the results indicate that the majority (34%) of the respondents had Bachelor's degrees as their highest academic qualifications. However, there was also a considerable number with undergraduate and postgraduate qualifications. These findings imply that the majority of the respondents had a reasonable level of education and were, therefore, expected to give valid opinions about the study questions.

4.2 Descriptive Analysis

This section presents findings on descriptive analysis of the research variables. The section has findings presented in tables and associated explanations.

4.2.2 E-Citizen Application at the Huduma Center in Nakuru County

The study sought to establish the level of application of E-citizen at the Huduma Center in Nakuru County. Respondents were requested to indicate the extent to which they agreed that the statements on the items of dimensions of E-citizen applications. The responses on each item were measured on a 5-point Likert-type scale, ranging from strongly disagree (1) to agree (5) strongly. To measure the distribution of the responses to the statements, mean and standard deviation were used. The closer the mean score on each item was to 5, the more the agreement concerning the statement. Table 4.3 presents the results.

Table 4.*3*: Descriptive Analysis Findings on E-citizen Application

Statement	N	Min	Max	Mean	Std. Deviation
Application of Police Abstract through e-Citizen	300	1	5	3.86	1.24
Online Application of HELB Loan through e-citizen	300	1	5	3.89	1.28
Online Registration of NSSF through e-Citizen	300	1	5	3.83	1.26
Driver's License renewal through e-citizen	300	1	5	3.80	1.18
Welfare Group registration through e-Citizen	300	1	5	3.82	1.25
Land Search through e-citizen	300	1	5	4.27	1.17
Aggregate				3.913	1.229

As shown in Table 4.3, the Composite mean scores for E-citizen application was 3.913, and the standard deviation was 1.229, which indicates that while in general, the respondents agreed that they use e-citizen to access public services, the components e-citizen there was variability in responses as revealed by(SD > 1). The findings also revealed that the popularly used e-citizen services are land search (mean = 4.27), HELB loan application (mean = 3.89), and police abstract issuance (mean = 3.86). This means that E-citizen and the Huduma centre are gaining popularity among citizens of Nakuru County. The findings agree with those of Ondego and Moturi (2016) that Information Communication Technology application in the e-citizen platform enhances the operation of and services offered to citizens by the government.

The findings also agree with the findings of Komer (2016), whose study on the perception of customers towards e-citizen in Citi-square Huduma centre Nairobi revealed that the majority of the citizens were contented with e-citizen services and used them to access government services.

4.2.3 E-Business Application at the Huduma Center in Nakuru County

The study sought to establish the level of e-business application at the Huduma centre. Respondents indicated the extent to which they applied e-business at the Huduma centre. The responses on each item were measured on a 5-point Likert-type scale, ranging from strongly disagree (1) to strongly agree (5). To measure the distribution of the responses to the statements, mean and standard deviation were used. The closer the mean score on each item was to 5, the more the agreement concerning the statement. Table 4.4 presents the results.

Table 4.4: Descriptive Analysis Findings on E-business

Statement	N	Minimum	Maximum	Mean	Std. Deviation
Business name search through e-business Portal	300	1	5	3.97	1.21
Business registration through e-business Portal	300	1	5	4.04	1.25
Business license application through e-Business	300	1	5	4.01	1.18
Business license renewal through e-Business	300	1	5	3.89	1.14
Business permit payment through e-Business	300	1	5	3.94	1.17
Business service processing through e-Business	300	1	5	4.09	1.16
Aggregate				3.990	1.184

As shown in Table 4.4, the aggregate mean scores for e-business was 3.990, and the standard deviation was 1.184. The results suggest that the majority of the respondents use e-business. However, there was a considerable degree of variability (SD > 1) in the respondents‟ responses that could not have been discounted. In particular, there was a strong high application of online business service processing (mean = 4.09), business name registration (mean = 4.04), and business license application (mean = 4.01), all of which had a mean greater than 4.0. These results meant

that businesses are largely adopting e-business offered through the Huduma centre. The findings agree with that of Beheshti and Sangari (2006) on the benefits of e-business adoption that revealed that a significant number of small and medium-sized companies benefited from e-business implementation in both their operations and performance.

4.2.4 E-Visa Application at the Huduma Center in Nakuru County

The study sought to establish the extent of e-visa application at the Huduma Center. Customers were asked to indicate on the questionnaire the extent to which they use e-visa services. The responses on each item were measured on a 5-point Likert-type scale, ranging from strongly disagree (1) to strongly agree (5). To measure the distribution of the responses to the statements, mean and standard deviation were used. The closer the mean score on each item was to 5, the more the agreement with the statement. A score around 2.5 would indicate uncertainty, while scores significantly below 2.5 would suggest disagreement with the statement posed. Table 4.5 presents the results.

Table 4.*5*: Descriptive Analysis Findings on E-visa Application

Statement	**N**	**Min**	**Max**	**Mean**	**Std. Deviation**
Single entry visa application through e-visa	300	1	5	4.00	1.17
Transit visa application through e-visa	300	1	5	4.09	1.23
Visa Processing through e-visa	300	1	5	4.05	1.16
Payment for a visa through e-visa	300	1	5	3.90	1.11
Renewal of visa though e-visa	300	1	5	3.96	1.14
Aggregate				4.025	1.156

As shown in Table 4.5, the mean scores (composite mean) for E-visa were 4.025, and the standard deviation was 1.156, which indicates that there was considerable variability (SD >1) in the respondents‟ responses despite the observation that the majority of respondents use e-visa services. The results; visa Processing through e-visa (mean = 4.09), visa processing through e-visa (mean = 4.05) and Visa application is made through the e-visa platform (mean = 4.00) confirmed that E-visa is greatly being applied at the Huduma Center. These findings agree with Agarwal (2017), whose study found that the Indian visa online application was not only effective but also cost-effective, particularly for travellers

and the merits of e-visa outdo its costs, making it a more attractive option compared to conventional visa application through embassies.

4.2.5 Service Delivery

The study finally sought to establish the level of service delivery at the Huduma Center on the basis of the respondent's‟ reactions to statements describing dimensions of service delivery. The responses on each item were measured on a 5-point Likert-type scale, ranging from strongly disagree (1) to strongly agree (5). To measure the distribution of the responses to the statements, mean and standard deviation were used. The closer the mean score on each item was to 5, the more the agreement concerning the statement. A score around 2.5 would indicate uncertainty, while scores significantly below 2.5 would suggest disagreement regarding the information posted. The results are presented in Table 4.6.

Table 4.6: Descriptive Analysis Findings on Service Delivery

Statement	N	Min	Max	Mean	Std. Deviation
The cost of providing services through the Huduma centre is reasonable	300	1	5	3.91	1.20
The time taken to provide services at the Huduma centre is significantly short	300	1	5	3.98	1.26
There is Flexibility in the provision of services at the Huduma centre	300	1	5	4.07	1.09
Service offered at the Huduma Center are dependable	300	1	5	4.00	1.02
There is reliability in Service Delivery at the Huduma Center	300	1	5	4.07	1.08
Services offered at the Huduma centre are of acceptable quality	300	1	5	4.44	0.87
Aggregate					

As shown in the table below, the mean score (Composite Mean) of service delivery is M=4.077 and SD=1.085, which indicates that there was considerable variability (SD > 1) in the respondents‟ responses despite the observation that the majority strongly agreed with the

statements. Looking at the results further, it is evident from the strong agreements with the top three highly rated statements; Quality Services are now offered at the Huduma Center (mean = 4.44); There is reliability in Service Delivery at the Huduma Center (mean = 4.07), and; There has been Flexibility in the provision of services at the Huduma centre (mean = 4.07), that the users had more confidence with the e-governance system at the centre as it had improved the quality of service provision. The findings, thus, agree with Abdalla et al. (2015) and Nyaboke (2018), whose studies in Mombasa Huduma centre and Eldoret Huduma Center respectively established that the Huduma centres had greatly improved service delivery to citizens, particularly in terms of quality, speed, accountability and transparency and, as a result, most citizens were satisfied with the reliability of service delivery at the Huduma Center.

4.3 Hypothesis Testing

This section discusses the results of hypotheses testing. The study sought to establish the effect of E-citizen, E-business, and E-visa on service delivery at the Nakuru Huduma Center. This was realised through bivariate regression analysis to test the effect of each independent variable on the dependent variable and also the multiple regression analysis to test the joint model of all the independent variables and the dependent variable (Hypotheses $H_0$1 to $H_0$4). For every variable, a composite mean was computed. The means for the independent variables were regressed against the means of dependent variables. The values of R-square, t-statistics at p=0.05 and ANOVA was used to make decisions.

4.3.1 Effect of e-citizen Strategy on Service Delivery in the Huduma Centre

The first hypothesis of the study was; Ho1: E-citizen strategy has no significant effect on service delivery in the Huduma Center in Nakuru County. The hypotheses were tested using regression analysis, with t-statistic and p=0.05. The findings are presented in Table 4.7.

Table 4.7: Regression Model for Effect of E-Citizen strategy on Service Delivery Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.423[a]	.179	.173	.49940

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.336	1	7.336	29.412	.000[b]
	Residual	33.669	135	.249		
	Total	41.005	136			

Coefficients

Model		Unstandardised Coefficients		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.173	.174		18.212	.000
	E-Citizen	.226	.042	.423	15.423	.000

a. Dependent Variable: Service Delivery

b. Predictors: (Constant), E-Citizen

The results in Table 4.7, R Square = 0.179, show that 17.9% of the variations in service delivery in Nakuru Huduma Center can be explained by E-citizen applications. Similarly, t=15.423; p=0.000 indicate that e-citizen applications significantly affect service delivery. Therefore, the null hypothesis that E-citizen has no significant effect on service delivery in the Huduma Center in Nakuru County was rejected, and the view adopted that E-citizen significantly affects service delivery. Further, the model‟s ANOVA ($F = 29.412$, $p=0.000; \leq 0.05$) confirmed the significance of the model. In addition, the model‟s beta was also significant ($\beta = .226$, $p \leq 0.05$), which indicates that service delivery in the Huduma Centers would change by 0.226 standard deviations when the E-citizen applications changed by one unit.

4.3.2 Effect of e-Business Application on Service Delivery in the Huduma Centre

The second null hypothesis of the study was*;* Ho2: E-business has no significant effect on service delivery in the Huduma Center Nakuru County. From the hypothesis testing, the results are summarised in Table 4.8 were obtained.

Table 4.8: Regression Model for Effect of E-Business Practice on Service Delivery Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.517[a]	.267	.261	.47188

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.944	1	10.944	49.148	.000[b]
	Residual	30.061	135	.223		
	Total	41.005	136			

Coefficients

Model		Unstandardised Coefficients		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.947	.308		6.317	.000
	E-Business	.505	.072	.517	7.011	.000

a. Dependent Variable: Service Delivery

b. Predictors: (Constant), E-Business

The results in table 4.8, R Square = 0.267, show that E-Business applications can independently explain 26.7% of the variations in service delivery in Nakuru Huduma Center. In addition, t=7.011; p=0.000 shows that e-business is a significant determinant of service delivery. Further, the model‟s ANOVA findings (F = 49.148, p=0.000; ≤ 0.05) that the model was significant. Also, the model‟s beta (β = .505, $p \leq 0.05$) indicates that service delivery in the Huduma Centers would change by 0.505 standard deviations when the E-Business applications changed by one unit. Therefore, the null hypothesis that E-business has no significant effect on service delivery in the Huduma Center Nakuru County is rejected, and the view adopted that E-Business significantly affects service delivery.

4.3.3 Effect of e-Visa Strategy on Service Delivery in the Huduma Centre

The third null hypothesis of the study was; Ho3: E-visa has no significant effect on service delivery in the Huduma Center Nakuru County. The results are summarised in Table 4.9 were obtained from the analysis.

Table 4.9: Regression Model for Effect of E-Visa Practice on Service Delivery

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.507[a]	.257	.251	.47511

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.532	1	10.532	46.657	.000[b]
	Residual	30.473	135	.226		
	Total	**41.005**	**136**			

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.138	.288		7.412	.000
	E-Visa	.470	.069	.507	6.831	.000

a. Dependent Variable: Service Delivery

b. Predictors: (Constant), E-Visa

From the results in Table 4.9, the R Square = 0.257 for E-Visa on service delivery, which shows that E-Visa applications can independently explain 25.7 % of the variations in service delivery in Nakuru Huduma Center. Further, the model‟s ANOVA (F = 46.657; p=0000; <0.05). The values; t=6.831; p=0.000; <0.05 confirms that e-visa is a significant determinant of service delivery at Huduma centre. Similarly, the model‟s beta (β = 0.470, p<0.05) indicates that service delivery in the huduma centres would change by 0.47 standard deviations when the e-visa applications changed by one unit. Therefore, the null hypothesis that E-visa has no significant effect on service delivery in the huduma centre Nakuru county is rejected, and the view adopted that e-visa significantly affects service delivery in Huduma Centers.

4.3.4 Combined effect of e-citizen, e-business, e-visa Practice and Service Delivery in the Huduma Centre

The fourth hypothesis of the study was; Ho4: E-citizen, E-business, and E-visa have no significant effect on service delivery in the Huduma Center Nakuru County. The hypothesis was tested through multiple regression models. The results were summarised in table 4.10.

Table 4.10: Regression Model for Joint Effect of E-Citizen, E-Business, and E-Visa

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.603[a]	.364	.349	.44290

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	14.916	3	4.972	25.347	.000[b]
	Residual	26.089	133	.196		
	Total	41.005	136			

Coefficients

Model		Unstandardized Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.439	.319		4.515	.000		
	citizen	.093	.043	.174	2.159	.033	.740	1.351
	business	.299	.082	.306	3.655	.000	.683	1.465
	evisa	.242	.080	.261	3.012	.003	.637	1.571

a. Dependent Variable: Service Delivery

b. Predictors: (Constant), E-Visa, E-Citizen, E-Business

The regression analysis in table 4.10, R Square = 0.364 shows that e-citizen, e-business and e-visa and service delivery collectively explain 36.4% variations in the service delivery at Huduma Center in Nakuru County, analysis of Variance findings of F=25.347; p=.000 indicates the effect is significant. Sen and Srivastava (2011) state that the appropriateness of 59 the multiple regression model as a whole can be tested using the F-test. Therefore, the null hypothesis that e-citizen, e-business, and e-visa strategies have no significant effect on Service delivery in the

Huduma centre Nakuru County is rejected, and this means that there is a significant joint effect on e-citizen e-business and e-visa and service delivery. However, most of the variations in the joint e-governance model on service delivery were explained by the e-business construct ($\beta = 0.299$, $p < 0.05$). This was followed in turn by e-visa ($\beta = .242$, $p < 0.05$) and e-citizen ($\beta = .093$, $p < 0.05$) respectively in that order. These findings indicate that the dependent variable, service delivery at Huduma Center in Nakuru County, would rise by the respective standard deviations given by the beta values of the variables when they each rose by one unit. The findings are consistent with Hassan et al. (2017), who concluded that that e-government had a significant effect on service delivery, further, the tolerance and Variance Inflation Factors (VIF) for the three variables; 1.351, 1.465 and 1.571 all greater than 1.0 were satisfactory. The VIF indicates if the variance of the weight coefficient is inflated. Hence, the degree to which the weight is correlated with either of the predictors in this model is low. The results on the standardised coefficients also show that the effect of E-citizen, E-business, and E-visa application on service delivery is positive and significant, as shown by beta values of $\beta = 0.093$, 0.299 and $\beta = 0.242$, respectively. From the findings, the study model can be presented as; $Y = 1.439 + 0.093 X_1 + 0.299 X_2 + 0.242 X_3$

Where;

X_1 = e-citizen application

X_2 =e- business application

X_3=e-visa application

Y =service delivery

CHAPTER FIVE
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the research findings, conclusions, and recommendations of the study. The chapter discusses the summary of findings regarding the research objectives, hypotheses, and conclusions of the study. Finally, the chapter discusses the implications of the study to management theory and practice and directions for further research.

5.2 Summary of the Findings

This section presents a summary of the research findings. The summary of findings is presented based on the research objectives

5.2.1 Effect of e-citizen on Service Delivery

The first objective was to find out the effect of E-citizen strategy on service delivery at the Huduma Centre in Nakuru County. The findings revealed a positive and significant effect of E-citizen on service delivery. Thus hypothesis H01, which predicted that E-citizen has no significant effect on service delivery, was rejected, and therefore 17.9 % of the variation in service delivery is explained by e-citizen strategy. On the degree to which users of the system agreed to whether they strongly disagreed or agreed that e-citizen had improved service delivery, online had a higher percentage with a mean of 3.913 said that they agreed that the introduction of e-citizen strategy through e-government has improved service delivery through its measures time, cost, flexibility, reliability, dependability, and quality. The results are consistent with Wasunna (2018), who found out that E-citizen significantly influenced service delivery, especially when payment for services was made through mobile phones as it reduced transaction times.

5.2.2 Effect of e-business on Service Delivery

The second objective of the study was to determine the effect of e-business on service delivery in the public sector/service where the one at Nakuru Was used as the case study. The findings revealed a significant positive effect of e-business on service delivery. Therefore, hypothesis H02 which predicted that e-business has no significant effect on service delivery, was rejected, and therefore only 26.7% of the variations in service delivery could be explained by e-business strategy. On the degree to which users of the system agreed to whether they strongly disagreed or agreed that actually e-business has improved service delivery, a higher percentage with a mean of 3.990 said that they agreed that, in fact, usage or introduction of e-business through e-government

has improved service delivery through its measures time, cost, flexibility, reliability, dependability, and quality. E-business strategy contributes to more efficient business; the application of e-business contributes to a better and more intimate relationship with customers, the application of e-business implies significant changes in business strategy, e-business contributes to more efficient organisational marketing, well organised internal electronic network has a significant impact on the exchange of knowledge and information among employees.

5.2.3 Effect of e-visa on Service Delivery

The third objective of the study was to determine the effect of E-visa on service delivery. The findings revealed a significant positive effect between E-visa strategy and service delivery. Hence hypothesis H03, which predicted that E-visa has no significant effect on service delivery, was rejected, and therefore 25.7 % of the variations in service could be explained by e-visa strategy. On the degree to which users of the system agreed to whether they strongly disagreed or agreed that actually e-visa has improved service delivery, a higher percentage with a mean of 4.025 said that they agreed that usage or introduction of e-visa through e-government has improved service delivery through its measures time, cost, flexibility, reliability, dependability, and quality. The findings are consistent with Cakar et al. (2018), which found that e-visa facilitation can improve tourists"‟ recognition of strengths and weaknesses of tourism activities in any tourist destination, potentially making e-Visas an innovative approach to destination marketing and management through increasing tourists‟ use of new technologies.

5.2.4 Effect of e-citizen, e-business, e-visa on Service Delivery

The fourth objective of the study was to determine the joint effect of E-citizen, e-visa, and e-business; the corresponding hypothesis was tested using multiple regression analysis. The regression results showed that the joint effect of e-government explained greater variance in service delivery than individual variables alone. Therefore, hypothesis H04 which predicted that E-citizen, E-visa, and e-business jointly have no significant effect on service delivery, was rejected. The findings further revealed the combined models of E-government (E-citizen, E-visa and E-business) had the greatest effect on service delivery, and therefore 36.4% of the variations in service delivery are explained by the joint strategies. These agree with the observations of Hassan et al. (2017), which revealed that the use of e-government had a significant effect on Service Delivery. The study also concurs with local studies such as Mugabe (2013) and Twinomurinzi and Visser (2004) in South Africa that the application of e-government as a service delivery tool led to improvements in service delivery when managed from a particular portfolio in government and not from diverse silos across government departments.

5.3 Conclusions

The finding confirms that the e-citizen strategy is crucial in linking the government to the public through the integrated technology platform e-government and, therefore, crucial in enhancing service delivery. Hence, more investment in a similar technology interface will bring closer services to people, like access to important government services like the processing of a police abstract. The results of the study also revealed that there is a link between E-business and service delivery. Services like business name registration previously could take time and cost a lot of money for one to get these services; hence, e-business actually improves the delivery of such services to the public. Further, the results of the study also revealed that E-business services affect service delivery. The finding confirms that E-business is crucial in enhancing service delivery. Hence, more investment should be made to boost service delivery and achieve an organisation's objectives. Finally, the results show that the joint effect of e-business, e-visa and e-citizen is greater than the effect of individual variables alone. This shows that combining these components of e-government achieves a greater effect on service delivery than implementing individual variables one at a time. Thus, in the long run, this creates high operational performance and yields higher service delivery in the public service.

5.4 Recommendations of the Study

The study aimed to establish the effect of e-government Practice/Strategy on service delivery in the Huduma centre's one-stop-shop. The findings of the study conducted in Huduma centre Nakuru County have various implications for operations management and management policy and practice explained below.

5.4.1 Recommendations for Management Policy and Practice

This study has implications for management policy and practice.

5.4.2 Effect of e-citizen Strategy on Service Delivery

The study confirmed a positive and significant effect of e-citizen on service delivery. Therefore its recommended that the government should enhance the effectiveness of e-citizen. The study also recommended that for easy access to services, major bottlenecks should be dealt with accordingly. For example, all major services between the citizens and the government should be documented in the e-citizen portal to enable citizens the access the service remotely from handheld services.

5.4.3 Effect of e-business on Service Delivery

The study confirmed a positive and significant effect of E-business on service delivery; this means that E-business technologies as a strategy or a practice have contributed to the improvement of government operations, for example, business license renewal and application, its highly recommended that other engagements between the government and businesses that the government engages in with businesses to provide them with the required services, should be upheld in the e-business portal for example e-procurement should be made part of the e-business framework and overcome barriers which compromise the time and quality of the process.

5.4.4 Effect of e-visa on Service Delivery

The study confirmed a positive and significant effect of E-visa on service delivery; it recommended that managers should use this strategy or practice tool for marketing as it has proved to reduce the time for one to get access to a visa, relevant information should be made available on the websites to allow complete and currency information on tourists to allow them to make accurate decisions, these effects on the time, quality of the information they get. It‟s recommended that the time to process a visa should be reduced in order to improve convenience.

5.4.5 Effect of e-citizen, e-business, e-visa on Service Delivery

The study confirmed a positive and significant effect on the combined Models E-citizen, e-business, and E-visa. First, the study confirmed a significant effect of E-government on service delivery. A user-friendly interface needs to be improved on one of the dimensions of e-government in order to be facilitative; all government services to be downscaled to Huduma centre to avoid travelling a lot, especially for immigration services. Lastly, the results show that the joint effect of E-government models has a greater effect on service delivery than the effect of individual variables. This implies to improve operational performance and service delivery, and E-government models need to be integrated and work together to achieve synergy.

5.5 Recommendations for Further Research

The research was restricted only to Huduma centres in urban centres; further research should be done on Huduma Centers in rural areas. Also, future research should concentrate on citizens accessing services outside the Huduma Center as more services like a renewal of a driver's license could be done at the comfort of your premises. It's recommended that further studies should be done on the mobile money payment aspect of e-citizen to determine its effectiveness in improving the flow of operations within the Huduma centre and the government in general. The study adopted a descriptive study research design in which data was collected once at a single point in time due

to constraints of cost and time. Future research can adopt a longitudinal research design in data collection to enhance understanding of the linkages between variables or other causal relationships involved in the study.

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APPENDICES

Appendix I: Questionnaire

Please provide the response that best describes your knowledge for each question Please tick the appropriate answer

Section A: Profile of the Respondents

1. What is your gender?

Male	[ ]
Female	[ ]

2. What is your Age?

Less than 18	[ ]
18 to 25	[ ]
25 to 30	[ ]
30 to 40	[ ]
40 to 50	[ ]
Over 50	[ ]
Other	[ ]

3. What is your Education level

Certificate	[ ]
Diploma	[ ]
Bachelor	[ ]
Masters	[ ]
PhD	[ ]

Section B: E-Citizen Strategy

The statement below relates to the application of e-citizen in Huduma Centre in Nakuru County. Kindly indicate the extent to which you Strongly Disagree to Strongly Agree with the following statements. The scale range from strongly disagree to strongly agree. Strongly Disagree (1), Disagree (2), Neutral (3) Agree (4), Strongly Agree (5).

Statements	**Rating**				
	1	2	3	4	5
Application of Police Abstract through e-citizen					
Online Application of HELB Loan through e-citizen					
Online Registration of NSSF through e-citizen					
Driver's License renewal through e-Citizen					
Welfare Group registration through E-citizen					
Land Search through e-citizen					

Section C: E-Business Application

The statement below relates to the Effect of E-business on service delivery. Kindly indicate the extent to which you Strongly Disagree and Strongly Agree with the following statements. The scale range from strongly disagree to strongly agree. Strongly Disagree (1), Disagree (2), Neutral (3) Agree (4), Strongly Agree (5).

Statements	**Rating**				
	1	2	3	4	5
Business name search through e-business portal					
Business registration through e-business portal					
Business license application through e-business					
Business license renewal through e-business					
Business permit payment through e-business					
Business service processing through e-business					

Section D: E-Visa Application

The statement below relates to application of E-visa. Kindly indicate the extent to which you Strongly Disagree and Strongly Agree with the following statements. The scale range from strongly disagree to agree strongly. Strongly Disagree (1), Disagree (2), Neutral (3) Agree (4), Strongly Agree (5).

Statements	**Rating**				
	1	2	3	4	5
I apply for single entry visa application through e-visa					
I apply for transit visa application through e-visa					
I apply for visa Processing through e-visa					
I make payment for visa through e-visa					
I apply for renewal of visa though e-visa					

Section E: Service Delivery

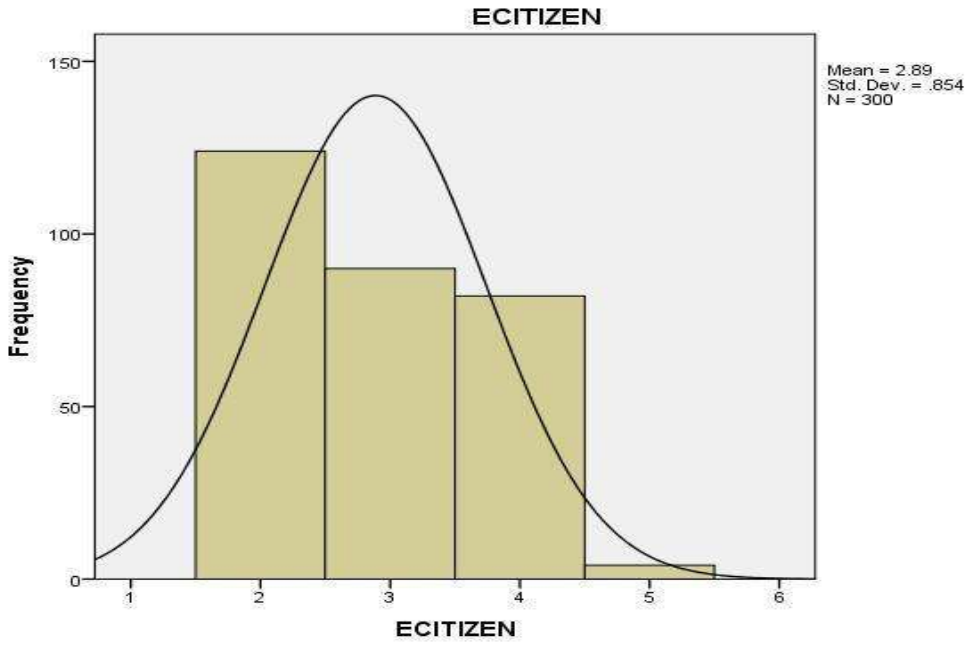
The statements in this section relate to service delivery in Huduma center in Nakuru County. Use the statements to gauge Huduma center in terms of service delivery. The scale range from strongly disagree to agree strongly. Strongly Disagree (1), Disagree (2), Neutral (3) Agree (4), Strongly Agree (5).

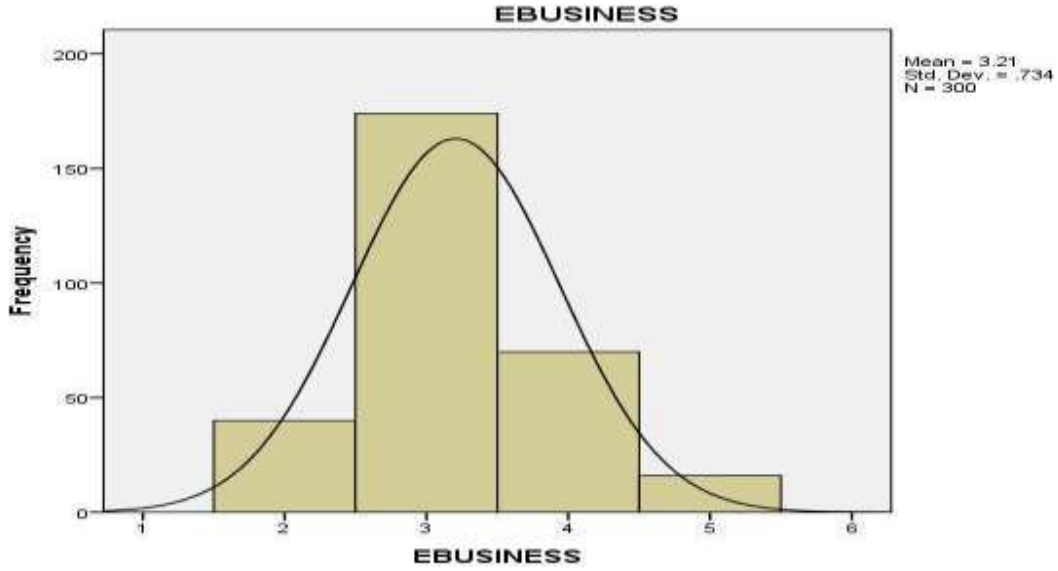
Statements	**Rating**				
	1	2	3	4	5
The cost of providing services through the Huduma Center is reasonable					
The time taken to provide services at the Huduma center is minimal					
There is flexibility in service provision at the Huduma Center					
Services offered at Huduma Center are dependable					
There is reliability in Service Delivery at the Huduma Center					
Services offered at the Huduma centre are of acceptable quality					

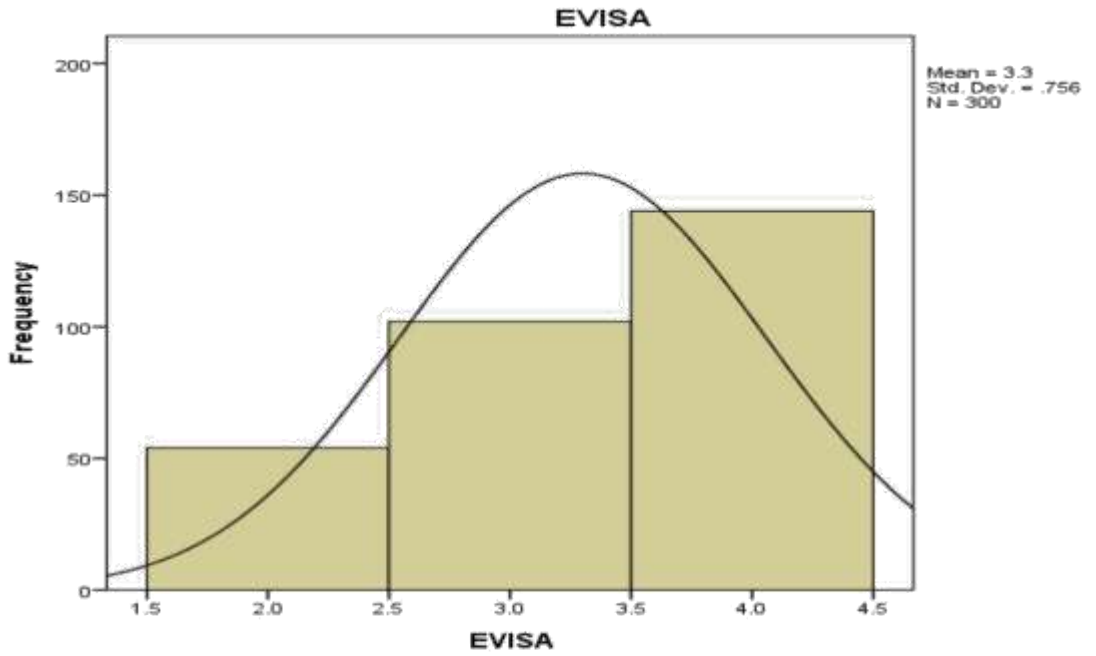
Appendix II: Budget

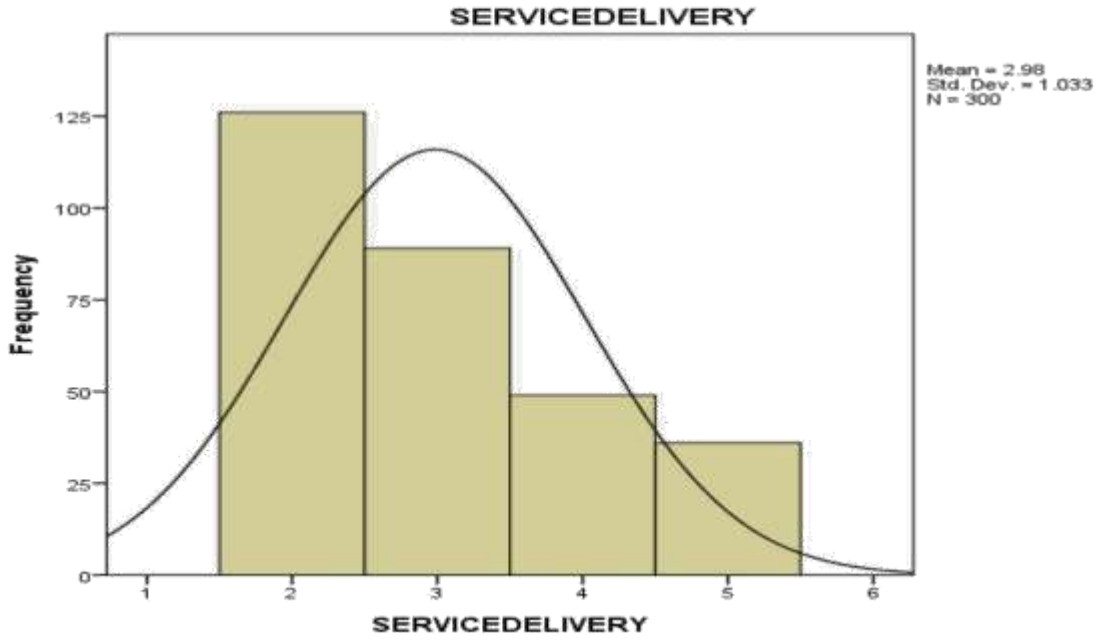
ITEM	UNIT PRICE	TOTAL
Field note books	@100 x 5	500
Folders	@ 100 x 5	500
Typing papers	@ 450 x 2 Reams	900
Publication	@12000 x 1	12,000
Pencil (HB)	@ 25 x 4	100
Typing duplicating/printing	Item	8,000
Binding services	Item	1,000
Travel expenses	20000	20,000
Editing	10000	10,000
Coding/Data entry	10000	10,000
Data Analysis	15000	15,000
Internet Services/Browsing	20000	20,000
Mobile Phone airtime	2000	2,000
Grand Total		**200,000**

Appendix III: Normality Test



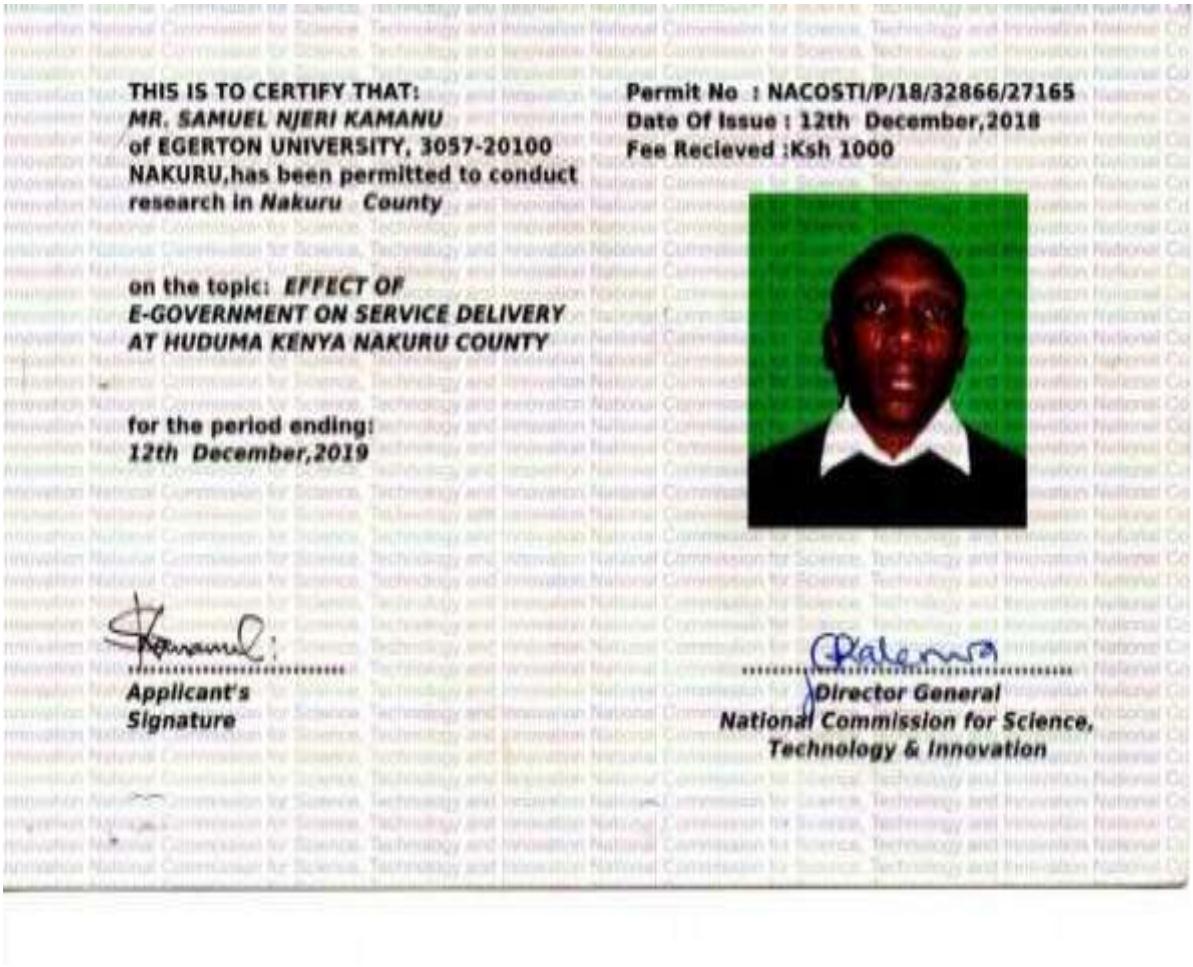






Source: Kamanu & Auka (2019)

Appendix IV: Research Permit



THIS IS TO CERTIFY THAT:
MR. SAMUEL NJERI KAMANU
of EGERTON UNIVERSITY, 3057-20100
NAKURU,has been permitted to conduct
research in *Nakuru County*

on the topic: *EFFECT OF E-GOVERNMENT ON SERVICE DELIVERY AT HUDUMA KENYA NAKURU COUNTY*

for the period ending:
12th December,2019

Permit No : NACOSTI/P/18/32866/27165
Date Of Issue : 12th December,2018
Fee Recieved :Ksh 1000

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.

CONDITIONS

1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
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TEL: 020 400 7000, 0713 788787, 0735 404245
Email: dg@nacosti.go.ke, registry@nacosti.go.ke
Website: www.nacosti.go.ke

REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

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Serial No.A 22382

CONDITIONS: see back page

Appendix V: Nacosti Authorization Letter

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone +254-20-2213471,
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Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/18/32866/27165** Date: **12th December, 2018**

Samuel Njeri Kamanu
Egerton University
P.O. Box 536-20115
NJORO

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Effect of e-government on service delivery at Huduma Kenya Nakuru County"*** I am pleased to inform you that you have been authorized to undertake research in **Nakuru County** for the period ending **12th December, 2019.**

You are advised to report to **the County Commissioner and the County Director of Education, Nakuru County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nakuru County.

The County Director of Education
Nakuru County.

Appendix VI: Publication abstract

www.lrss.academylrmbr.com
International Review of Social Sciences
June 2019
Vol. 7 Issue.6

The Effect of E-Government on Service Delivery A Case of Huduma Center One-Stop Nakuru County

SAMUEL NJERI KAMANU
Department of Accounting, Finance & Management Science,
Faculty of commerce, Egerton University, P.O. Box 13557, Nakuru – Kenya
Email: samuelkamanu51@gmail.com
Tel: +254712017909

PROF DANIEL ONWONGA AUKA
Department of Business Administration, Faculty of commerce,
Egerton University, P.O. Box 13557, Nakuru – Kenya.
Email: danielauka@yahoo.com
Tel: +254720656725

Abstract

The study examined the "effect of e-government on service delivery a case of Huduma center one stop shop Nakuru County". The specific objectives of the study were to; establish the effect of E-citizen portal on service delivery, the effect of E-business portal on service delivery, the effect of E-visa portal on service delivery and the combined effect of E-citizen, E-business and E-visa portals on service delivery. The study adopted a descriptive research design. A sample of 384 respondents was selected using systematic random sampling. Regression analysis was used to test for hypotheses and correlation analysis used to show the relationship between independent and dependent variable. The study showed that there is a positive significant effect between E-citizen portal and service delivery, there is a positive significant effect between E-business portal and service delivery, a positive significant effect between E-visa portal and service delivery and a positive significant effect between the joint combined effect of e-government models i.e. E-visa, E-business and E-visa. The study therefore concluded that E-government models positively affects service delivery, the study recommends that the government needs to invest in E-government technology to a great extent.

Keywords: *E- Government, E- Business, E-Citizen, E-Visa, Government To Government ,Service Delivery, Huduma Center, Government To Business, Government To Citizen.*