



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH: A
ADMINISTRATION AND MANAGEMENT
Volume 21 Issue 6 Version 1.0 Year 2021
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Technology and Performance Management: Strategies in Quality Service Delivery

By Dickens Ouma Mawere & Dr. Kipkorir Sitienei Chris Simon

Kenyatta University

Abstract- The objectives of the study were to establish the effect of technological innovations and performance management techniques on quality service delivery. Systems theory, SERQUAL mode and descriptive research design were used. The target population was 6,480 and the computed sample size of 98 was selected using stratified random sampling technique. Data was analyzed using descriptive, inferential statistics and content analysis. Content validity was determined and coefficient of reliability calculated. Technological innovations and performance management techniques had positive significant effect. In conclusion technological innovations improve communication and management of information. Technological automation reduces cost in terms of the number of staff, time, use of paper and increase accessibility to services. Integrated Development Plans and departmental strategic plans should be formulated. Staff performance should be monitored, managed and evaluated periodically to ensure conformity to the plans.

Keywords: technology; performance management; strategies; service delivery.

GJMBR-A Classification: JEL Code: L25



Strictly as per the compliance and regulations of:



Technology and Performance Management: Strategies in Quality Service Delivery

Dickens Ouma Mawere ^α & Dr. Kipkorir Sitienei Chris Simon ^σ

Abstract- The objectives of the study were to establish the effect of technological innovations and performance management techniques on quality service delivery. Systems theory, SERQUAL mode and descriptive research design were used. The target population was 6,480 and the computed sample size of 98 was selected using stratified random sampling technique. Data was analyzed using descriptive, inferential statistics and content analysis. Content validity was determined and coefficient of reliability calculated. Technological innovations and performance management techniques had positive significant effect. In conclusion technological innovations improve communication and management of information. Technological automation reduces cost in terms of the number of staff, time, use of paper and increase accessibility to services. Integrated Development Plans and departmental strategic plans should be formulated. Staff performance should be monitored, managed and evaluated periodically to ensure conformity to the plans. It was also concluded that Rapid Results Initiative be fully utilized during emergencies for quick results.

Keywords: *technology; performance management; strategies; service delivery.*

I. INTRODUCTION

Fox and Meyer (1995, cited in Kathuri, 2014), describe public service delivery as the provision of public amenities, activities, aid, and performance by the government or local authorities that fulfil the needs of citizens within their jurisdictions. Zeithaml, Bitner and Gremler (2018) define services as deeds, processes or performance provided by one party (person or group) to benefit another. The scholars perceive it as a set of activities performed by an organization that aims at creating value. Lynch (2002, cited in Kathuri, 2014) differentiated between the public and private sector institutions in service delivery. The author observes that in public sector profit motive is not the priority as in the private sector. For Baron and Armstrong (2005, cited in Kathuri, *ibid*) components affecting quality service delivery in the public sector include funding mechanisms and human competencies. Lockhart and Taitoko (2005, cited in Kathuri, *ibid*) examined what causes the collapse of quality service delivery in governments and found out that the problems are due to failure of proper management. According to Meadows (2009, cited in Kathuri, *ibid*) governance

structure is one of these components. Report of 2010 from Auditor General of Canada report (cited in Kathuri, *ibid*) showed that the public want and care about high-quality service from the government. For any government to achieve and maintain high-quality service, the report indicated that it is important to establish service standards for the employees' performance, monitoring performance. Therefore, governments are enabled to take appropriate action to improve service delivery whenever there is non-compliance with the set standards. In South Africa continuous protests against poor services have been one of the worst predicaments the government has faced (Mlambo, Zubane and Mlambo, 2020).

Public sector has been defined by Kilika (2013, cited in Korir, 2013) as part of the economy concerned with providing basic government services. Public sector was formed due to failure by the commercial sector in delivering adequate quality service in key sectors. The sector was deemed unprofitable thus necessitated the government to provide essential service in these sectors and for the wellbeing of the society. Ibrahim Index of African Governance report of 2018 showed that African continent achieved its highest overall governance score which impacted positively on service delivery over ten years from 2007-2016. However, the report showed that Africa's annual average rate of progress slowed down between 2011- 2016 as it was characterized by a number of problems. Public employees in Africa represent less than 12% of total employment, less than half the average level in Europe and Central Asia. Citizens have been dissatisfied with how governments were addressing educational and health needs over the last decade. Sub Saharan Africa has the second smallest public health expenditure of all regions, far below the world average. The five worst performing countries were Central African Republic, Chad, Nigeria, Sierra Leone and South Sudan. In Egypt, Liberia, Morocco, and Sudan, more than 40% of the population has difficulties obtaining medical care. The report indicated that more than 50% of people in 36 African countries reported difficulties getting assistance from the courts. African countries invest in public social protection less than in other regions. The school completion, enrolment and literacy have slowed down.

Governments all over the world are faced with the challenges of poor service delivery leading to dissatisfaction by citizens, necessitating application of

Author α: Kenyatta University, Box 43844-00100 Nairobi City, Kenya.
e-mail: maweredick84@gmail.com

Author σ: School of Business, Kenyatta University, Box 43844-00100 Nairobi City, Kenya. e-mails: sitienei.kipkorir@ku.ac.ke, kipkorircss@gmail.com

series of management strategies in order to enhance quality services (Kalava, 2016). A report by Ibrahim African Governance Index of 2018 indicated that public service is a pillar of governance. Without strong public service and committed public servants there would be no efficient delivery of expected public goods and services. The report showed that many countries in sub-Saharan Africa are unable to provide adequate quality services because of economic factors and dwindling resources.

Public services are provided by the government to the citizens, either directly (through the public sector) or by financing the services (Korir, 2013). The author argues that public service delivery is a phrase used by the governments to describe the distribution of basic resources and services such as housing, water, education, electricity, sanitation and sewerage, infrastructure and security. Kenya, like other African countries, faces challenges of poor service delivery in the public sector. A major reform in the public service delivery in Kenya was the introduction of devolution in 2010. According to Article 174 of Constitution of Kenya one of the objectives of devolution was to promote social and economic development. It was also to facilitate the provision of proximate, easily accessible services throughout the country. The Fourth Schedule of the Constitution of Kenya 2010 spelt out the functions of national and county governments. Part 2 of the schedule outlines services and functions of County governments which include agriculture, health, control of pollution, cultural activities, transport, animal control, planning and development, public works, fire fighting and ensuring participation of communities in governance. Ngigi and Busolo (2019) argue that devolution enabled counties to identify problems, make policies, plan, collect revenue, promote public participation in decision-making, execute budget monitoring and evaluation. County governments were operationalised in 2013 when the first governors and Members of County Assemblies were elected. The governors established the county governments' management systems, structures and operational models in accordance with the Constitution of Kenya of 2010, County Government Act of 2012 and other relevant legislations. The counties establish County Public Service Boards, tasked with the role of appointing, dismissing, disciplining and remunerating county employees. These employees, based on their technical competencies and expertise, were deployed to various service departments. According to Wanjala (2019), devolution was to be a solution to problems like conflicts, corruption, inequalities, inefficient use of public resources, and economic stagnation. Despite expected benefits of devolution, county government of Kakamega has faced several challenges but the current study focused on service standards, consistency and handling of complaints which have greatly affected quality service delivery.

The current study therefore focused on technology and performance management and the emphasis was service standards, consistency and complaints handling as measures of quality service delivery.

II. OBJECTIVES

To establish the effect of technological innovations on quality service delivery in county government of Kakamega, Kenya.

To establish the effect of Performance management techniques on quality service delivery in county government of Kakamega, Kenya.

III. RESEARCH HYPOTHESES

Technological innovations have no significant effect on quality service delivery in county government of Kakamega, Kenya.

Performance management techniques have no significant effect on quality service delivery in county government of Kakamega, Kenya.

IV. LITERATURE REVIEW

SERVQUAL tool was proposed by Parasuraman, Zeithaml, and Berry in 1990. Studies have shown that there are several important components which affect quality service delivery. After research the three scholars found five dimensions considered by consumers in assessing quality service. Earlier the scholars identified ten criteria that consumers rely on while evaluating quality service. They include tangibles, reliability, responsiveness, competence, courtesy, credibility, security, access, communications and degree of customer understanding. Later, the researchers reduced them to five dimensions. The scholars renamed the survey instrument SERVQUAL tool with five quality service dimensions: tangibles, reliability, responsiveness, assurance and empathy. Services can be differentiated from products in five critical ways. These are, namely, higher intangibility, lack of ability to store them for future use, greater interaction between the customer and the service factory, greater variability among service customers' expectations and greater variability in service delivery. Public services fall under the services with high experience and credence qualities (Zeithaml and Bitner, 2000). It throws up more problems which require analysis of the (perceived) customer expectations and actual services delivered. It is believed that citizens who are consumers of public services have some basis of distinguishing between service attributes based on a value-percept (Awasthi, 2007). This premise has led several researchers to distinguish service attributes on various dimensions though not necessarily consumer-value focused; such as having either, mechanistic or humanistic qualities, as being visible or invisible indicators of quality, as being tangible or

intangible; having technical or functional quality and so on. However, using these existing bases researchers find it difficult to explain public perceptions on quality service quality. It is because all these classifications of service aspects are private sector strategy centric. The model was important in evaluating the quality service delivery in the county government of Kakamega in terms of service standards and degree of complaints handling.

Bureaucratic theory is one of the administrative theories of management. It was proposed by a German sociologist and political economist Max Weber in 1905 as one of the best organizational and management approaches. The term bureaucracy is defined as the "rule by desk or offices". This definition shows the impersonal feature of bureaucracy. The four main features of bureaucracy as outlined by Stewart are: specialization based on job specification; hierarchy of authority with clear lines of communication and superior-subordinate relationships; systems of rules calling for strict conformity and adherence; and impersonality in operations and decision-making. Robbins and Judge (2013) emphasized standardization as the key concept that underlies bureaucratic systems. The bureaucracy is characterized by highly routine operating tasks achieved through specialization, very formalized rules and regulations, tasks that are grouped into departments, centralized authority, narrow span of control, and decision making that follows a chain of command. The author of the theory argues that bureaucracy has a number of advantages over other management approaches. It is most efficient form for the management of institutions. It is an important strategy for the administrators when it gets to organizing large number of people to work together for a common goal. The approach is applicable both to the public and profit oriented sectors.

Bureaucracy as a management strategy has been subjected to severe criticism. It emphasizes strict conformity to the rules without considering beneficial outcomes. The approach has a lot of formalities and paper works that result into wastage of time,

duplications and higher costs. There are unnecessary delays in decision-making and action due many approvals needed. It does not reward dedication and commitment. It makes it difficult in coordinating and communicating because of strict adherence to formal authority and chain of command. Though it has faced criticism, given new forms of organizations and management systems which have emerged, bureaucracy is still relevant and applied to date. Bureaucratic theory is applicable to the study as it addressed performance management techniques. However, Bureaucratic theory has not postulated on technology innovations.

A German Biologist, Ludwig von Bertalanffy, is recognized as the founder of systems theory in 1951 (Mele, Pels and Polese, 2010). The author is recognized for devising a general systems theory that can be used to explain how an organism works. A system as an entity, which is a coherent whole such that a boundary is perceived around it in order to distinguish internal and external elements and to identify input and output relating to and emerging from the entity. A systems theory is hence a theoretical perspective that analyzes a phenomenon seen as a whole and not as simply the sum of elementary parts (Mele, Pels and Polese, *ibid*). Cole and Kelly (2015) defined systems theory as, "A collection of interrelated parts and components of an organization that form and function as whole – like human body".

The systems approach attempts to work mid-ground by reconciling the scientific approach of management proposed by Taylor, which was perceived to treat human beings as machines, and human relations approach which basically focused on leadership and motivation while ignoring other factors. The systems theory is a management approach that focuses on the organization as a whole. The management should focus on the totality of the organization in terms of how different components within the organization interact with one another and their external environment.

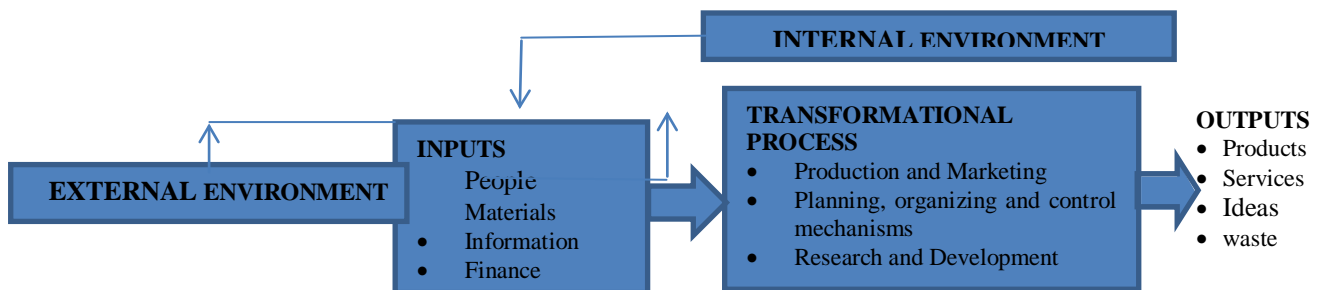


Figure 1: The Organization as an Open System. Adopted from Cole and Kelly (2015)

Organizations rely on the external environment upon which they obtain essential inputs (raw materials, financial and human resources) and discharge their outputs (end products). The three major characteristics of a system are: (i) they receive inputs or energies from the environment; (ii) convert the inputs to outputs through various processes; and (iii) they discharge the outputs into the environment. Most systems like organizations have their sub-systems as well. These sub-systems operate as the unified whole but within boundaries for smooth operations. County governments in Kenya operates as a system with many interrelated parts and sub-systems making systems theory to be relevant for current study. County government of Kakamega has departments which must conform to systems theory principle. The county government has inputs in terms of employees, information technology, funding from the national governments, legislation and policies, and information. All these undergo transformational processes to make them beneficial to citizens. The output from the system is quality service delivery. The theory was relevant to current study because of technology innovations in form of integrated information management systems.

Studies done in 2002 on importance of e-Government in South Africa by the Engineering News entitled National e-Government Strategy and Roadmap, indicated that technology is important in quality service delivery and has become vital aspect for every government. Governments should avail information to the citizens online through their websites and citizen portals. The *e-Government* (electronic government) is commonly used in reference to e-services offered by state ministries and departments. Ndou (2004) observed that flexibility, network organization, and speed up in service delivery are all supported by Information communication technology. Research done in Australia showed that more emphasis on service delivery was extended to indigenous families which were affected by a range of complex issues that impacted on their wellbeing (Kalava, 2016) Although the United States of America has advanced public service, its healthcare has faced many challenges according to Ministry of Health Survey of 2007 as cited in Kalava (ibid)

Menge (2009) established that the use of information communication technology is beneficial to the government institutions in terms of improved operational efficiency, reduced operating cost and providing great opportunities for improvements. Public Service Commission Evaluation Report for the Year 2015/2016 on Public Service Compliance with the Values and Principles in Articles 10 and 232 of the Constitution of Kenya, indicate that critical measure of quality service delivery was the automation of public services through electronic (e-citizen platform) services, business, employees and government. Therefore enhancing e-procurement services thus encouraging

public institutions to embrace Information Communication Technology resources in service delivery. Automation increases efficiency in service delivery by reducing time and cost of operations. However, the report didn't focus on the challenges faced when it comes to automation of services.

Studies done in South Africa showed that poor services in the public sector made the government to face severe criticism. There were complains that public sector is inefficient and ineffective as it was slow and bureaucratic (Mlambo, Zubane and Mlambo, 2020). It led to protests, violence, loss of lives and destruction of property due to citizens' dissatisfaction. The reasons for the protests were poor service in provision of water, sanitation, sewerage and electricity. Mbuthia (2013) revealed that the greatest challenge towards the provision of quality service in Kenya is shortage of funds and inadequate staff. Awosika (2014) researching on the phenomenon of low performance in the public service in West African countries established that Nigerian civil service which evolved from the colonial service was regarded as one of the best until the mid 1980s. Unfortunately from the mid 1980s, the Nigerian public service was riddled with inefficiency, ineffectiveness, mismanagement, corruption, and low productivity. According to Economic Commission for Africa report of 2010 Ghana civil service was described as a "moribund, paper-pushing institution as argued by Awosika (2014). The features of Ghana's civil service included overstaffing, low salaries, and lack of motivation and policy guidance.

In Nairobi County Kibanya (2015) found out that governance style negatively affected quality service delivery to a great extent. In addition, the scholar established that counties have done very little to develop the staff competence in terms of education, training and experience. Kalava (2016) concluded that technology increased quality service delivery due to speed of accessing and processing information. Kibanya and Moronge (2014) established that majority of employees of county governments in Kenya have not been trained on information communication technology. In Nepal, service delivery is affected by strong incentives for competing parties to gain access to state resources and entrench their positions (Kalava, 2016). Awino (2016) studied response strategies adopted by the ministry of health on challenges of devolved healthcare services and concluded that inadequate and delayed financial resources, poor human resource management, and overlap of resources and functions between the county and national governments are hampering quality service delivery under devolution.

Murage (2018) on assessing citizens' perception of quality Service at Huduma (service) Centres in Nairobi County, Kenya, found out that that Rapid Results Initiative has improved service delivery in

several areas of processing and issuance of passports, national identity cards and birth certificates. Other performance improvement technique according to Kenya School of Government report of 2018 include the Staff Performance Appraisal System which is the process of evaluating work which is carried out upon understanding the demonstrated ability of performance achieved in executing the duties of the position concerned. The study focused on how strategic planning, performance appraisals and rewards, and rapid results initiative have improved service delivery in the counties. Kerubo and Muturi (2018) established that most county governments have Information communication technology platform for the roll out of IFMIS in place. However, the scholars found out that there were no regular skills upgrading courses on IFMIS. They further established that there is no motivation to retain skilled personnel. The political class is not supportive of IFMIS, and the counties have not allocated

enough resources towards its implementation. They recommended that for Integrated Financial Management Information System (IFMIS) implementation to be effective in the county governments the National Treasury and the counties should organize regular skills upgrading courses on IFMIS and that counties should allocate more resources for implementation Information communication technology.

V. METHODOLOGY

In the current study descriptive research design was used, a target population of 6,480 comprising county government of Kakamega employees who had relevant information. The targeted population was drawn from all the departments/ service sections. The sample from the population was selected using Integrated Financial Management Information System g Yamane (1967) statistical formula as follows:

$$n = \frac{N}{1+N(e)^2} \quad \text{Substituting} \quad n = \frac{6450}{1+6450(0.1)^2} = 98:$$

Where; n : Sample size; N : Population under study; e : Margin error (0.1); and 1: Constant. In collection of primary data, the study used semi-structured questionnaire which was self-administered. For content validity of research instrument questionnaire was administered to a sample of 10 respondents from each service department for pilot study. The research instrument was reviewed and restructured to ensure content validity. Coefficient of reliability of research instrument was computed under Cronbach's Alpha method of 1951 with confidence level of 0.95. Statistical Package for Social Sciences version 20.0, was used to aid in the computation. Computed Cronbach's Alpha coefficient of reliability statistics for technological innovations and performance management techniques were 0.982 and 0.980 respectively. Descriptive statistics such as the means and standard deviations were used to analyse data. For the qualitative data content analysis was used. Prasad (2008) describes content analysis as data analysis technique that involves the study of the content of open-ended questions purposefully to establish meanings, situations and interpretations in the responses given. Inferential statistics such as analysis of variance (ANOVA) and Multiple Regression analysis were used to assess the relationship between the independent and the dependent variables. Confidentiality of information, anonymity of the respondents was considered and the identity of the respondents was protected. Permission and authorization from Kenyatta University, Ministry of Education, Science and Technology and National Commission for Science, Technology and Innovation (NACOSTI) was granted.

VI. RESULTS AND DISCUSSION

Out of the 98 questionnaires distributed, 92 were filled and returned. This gave a response rate of 93.88%. According to Mugenda and Mugenda (2003) the statistically significant response rate for research analysis should be at least 50%. The results indicate that the response rate was significant. According to Kothari (2004) a response rate of 50% or more is adequate for analysis. The respondents were asked to rate their responses based on Likert Scale Strongly Agree (5), Agree (4), moderate/Neutral (3), Disagreed (2) Strongly Disagree (1)

Table 1: Technological innovations and quality service delivery

Statements	SA(5)	A(4)	N(3)	D(2)	SD(1)	Mean	Std Dev
Kakamega County has automated services for easy access by clients	2931.87%	3841.76%	1213.19 %	66.59%	66.59%	3.828	1.135
Computers & technological equipment has improved quality service delivery	3740.66%	4347.25%	22.20%	77.69%	22.20%	4.165	0.958
County provides enough technological equipment for quality service delivery	1112.09%	1617.58%	1010.99 %	2830.77 %	2628.57 %	2.538	1.385
The County websites, online services & portals are effectively managed and updated for quality service delivery	2325.27%	4650.55%	88.79%	1112.09 %	33.30%	3.824	1.050
It is easier to access and perform activities online using county government websites and portals	3235.16%	4448.35%	88.79%	66.59%	11.10%	4.098	0.895
Integrated Human Resources and information management systems improve quality service delivery	3235.16%	3235.16%	1010.99 %	1112.09 %	55.49%	3.892	1.058
County's media of communication facilitate staff accessibility to clients and quality service delivery	2729.67%	4351.67%	88.79%	1010.99 %	33.30%	3.890	1.058
Aggregate						3.747	1.077

Source: Research data (2020)

Regarding the influence of automation of services for easy access by clients; 31.87% of respondents strongly agreed, 41.76% agreed, 6.09% disagreed and 6.09% strongly disagreed while 13.19% were neutral. The effect of automation of services for easy access by clients on quality service delivery was significant (mean of 3.858) with somehow insignificant variation (standard deviation of 1.135). The assertion that computers and technology improve quality service delivery to clients was strongly agreed by 40.66% of respondents, 47.25% agreed, 7.69% disagreed and 2.20% strongly disagreed with 2.20% being moderate/neutral. The role of technology on quality service delivery was greatly significant (mean of 4.165) whose variation was insignificant (standard deviation of 0.958). Majority of respondents (65%) agreed that they use computers for processing information and performing other functions. The rest (35%) indicated that information is processed both electronically and manually. On provision of enough technological equipment for quality service delivery 12.9% of respondents strongly agreed, 17.58% agreed, 10.99% were moderate/neutral, 30.77% disagreed and 28.57% strongly disagreed that offices were well equipped. The influence of technological equipment on quality service delivery was insignificant (mean 2.538) with somewhat significant variation (standard deviation 1.385).

On effective management and updated websites, portals and online services 25.27% of respondents strongly agreed, 50.55% agreed, 8.79% were moderate/neutral, 12.09% disagreed and 3.3% strongly disagreed that they have affected quality

service delivery. The influence of effective management and updating of websites, portals and online services on quality service delivery was just significant (mean of 3.842) with some variation (standard deviation of 1.050). Websites and online services has improved quality service delivery; 35.16% of respondents strongly agreed and 48.35% agreed, 8.79% were moderate/neutral, 6.59% disagreed and 1.1% strongly disagreed that it is easy to access and perform services online through websites and portals. Accessibility and performance of online services has significant influence on quality service delivery (mean of 4.089) with insignificant variation (standard deviation of 0.895). Regarding the role of integrated information management systems on quality service delivery 36.26% of respondents strongly agreed, 35.16% agreed, 12.09% disagreed, and 5.49% strongly disagreed while 10.99% were neutral. The effect of integrated information management systems on quality service delivery was somewhat significant (mean of 3.892) whose variation was fairly significant (standard deviation of 1.058). On media of communication facilitating staff accessibility to clients, 29.67% of respondents strongly agreed, 51.65% agreed, 10.99% were moderate/neutral while 4.3% disagreed and 3.2% strongly disagreed. Accessibility to clients has significantly improved quality service delivery (mean of 3.890) whose variation was somehow significant (standard deviation of 1.058). The aggregate mean of 3.747 indicate that technological innovations affect quality service delivery whose variation was somehow significant (standard deviation of 1.077).

With the advent of information revolution governments all over the world are embracing use of technology in quality service delivery through adoption of information and communication technology. Branscomb (2001 as cited in Menge, 2009) contends that governments are shifting focus to application of technological innovations to improve quality service delivery. In the National e-Government Strategy and Roadmap of 2002 Gartner describes e-Government as the continuous optimization of government services, constituent participation and governance by transporting internal and external relationships through technology, the internet and new media. It is the process of using technology to facilitate service delivery to the citizens. The governments are making much progress to ensure better and quicker access to government services through e-government platforms. While embracing e-government strategy the concerned must take into consideration three important elements; access to government information by the citizens and other stakeholders; financial sustainability of the e-government strategy and job creation opportunities. However, access to information by citizens and other agencies is the reason why e-Government strategy is adopted. Chonia (2002, cited in Korir, 2013), argues that the problems associated with information communication technology is inaccessibility by majority of the citizens. Botha (2002) argues that e-Government is important in public service

In National e-Government Strategy and Roadmap of 2002 Botha contends that e-Government is important in the quest for good governance. The scholar pointed out that there are a lot of changes in governance as a result of information and governance revolutions which brought radical gains in public service by ensuring that every citizen is accessible to government services physically or electronically. According to Sun and Shibo (2005, cited in Kibanya and Moronge, 2014) technology can revitalize or transform public sectors and enhance quality service delivery. Therefore lack of appropriate communication technology in the county negatively affect quality service delivery. Shah (2005, cited in Mbuthia, 2013) supports e-Government and opines that public sector should be oriented towards serving citizens by eliminating bureaucratic red tape and corruption. The scholar advocates for the need to ensure that judiciary enforces accountability through timely and fair decisions. Menge (2009) argue that use of Information communication technology is perceived to improve operational efficacy, reduces operating costs and provides great opportunities for doing better. Level of computer literacy inhibits use of the information communication technology (Korir, 2013). Digital Literacy in Kenya Report of 2017 show that low digital literacy in Kenya has locked out millions from reaping from the benefits of a robust technology (Mugo, 2017). There is a

problem with low use of technology that slows down the rate of quality service delivery in the county governments in Kenya (Awino, 2016). Though the county government in Kenya have put a number of channels to reach out to their clients, however, Kimani (2017) concluded that in the developing countries, Kenya included, there was inadequate infrastructure, shortage of skills, limited access to electricity and computers and other communication gadgets

According to Next Generation report of 2018, most African countries are still lagging behind in offering e-services to citizens. However, according to the report some African countries have advancing in the use of technology for public service. In Cape Verde citizens can get birth certificates online, and Rwanda has put its judicial system entirely online. Malawi has introduced in its high court an automated case management system for civil and criminal proceedings. In the report use of technology and innovation was advocated for quality service delivery. Kenya School of Government report of 2018 indicates that technology increases government transparency by reducing corruption cases. The report showed that to improve public administration, e-government administrative platforms, such as a computerized treasury, Integrated Financial Management Information Systems (IFMIS) and Government Human Resource Information Systems (GHRIS) were introduced to increase efficiency in public service. Range of information technologies by government agencies and counties transform government operations and service delivery. The technologies include use of government websites and portals, internet, mobile computing, integration of government management systems and use of toll free numbers. Ministry of Information and Communication report of 2019 highlighted challenges that have affected the sector of Information communication technology. They include lack of clear policy, legal and regulatory framework; the unaffordability and inaccessibility in some regions and populace. Other issues include privacy, e-security, cyber-crimes and ethical and moral conduct; inadequate research and development in the sector and inadequate Information communication technology infrastructure especially in the rural areas.

Table 2: Performance management techniques and quality service delivery

ITEM	SA(5)	A(4)	N(3)	D(2)	SD(1)	Mean	Std Dev
County staff is conversant with departmental strategic plans for quality service delivery	9 9.89%	12 13.19%	10 10.99%	37 40.46%	23 25.27%	2.406	1.267
Targets are guided by County Integrated Development Plan enhance quality service delivery	29 31.87%	43 47.25%	10 10.99%	6 6.59%	3 3.30%	4.011	0.901
Departmental targets are achievable within the set time affecting quality service delivery	29 31.87%	42 46.15%	13 14.29%	7 7.60%	0 0.00%	3.868	1.47
There are service charters to guide quality service delivery	39 42.86%	35 38.46%	10 10.99%	5 5.49%	2 2.20%	4.143	0.973
The county conducts appraisals to ensure targets are met	30 32.97%	35 38.46%	4 4.40%	14 15.38%	8 8.78%	3.736	1.324
Staff performance appraisals lead to reward and punishment	10 9.89%	17 18.68%	15 16.48%	27 29.67%	23 25.27%	2.582	1.317
Rewards for outstanding performance are adequate for quality service delivery	10 9.89%	19 20.88%	13 14.29%	27 29.67%	22 24.18%	2.648	1.345
Staff apply rapid results initiative for quality service delivery	7 7.69%	10 10.99%	7 7.69%	34 37.36%	32 35.14%	2.208	1.261
Rapid result initiative enhanced quality service delivery	6 6.59%	12 13.19%	11 12.09%	29 31.87%	33 36.26%	2.209	1.261
Aggregate						3.090	1.235

Source: Research data (2020)

Results show that in being conversant with departmental strategic plans, 9.89% of respondents strongly agreed and 13.19% agreed that they are conversant with the departmental strategic plans. 40.66% of respondents disagreed, 25.27% strongly disagreed and 9.89% were neutral. The influence of departmental strategic plans on quality service delivery was insignificant (mean of 2.406) with some significant variation (standard deviation of 1.267). Regarding departmental targets being achieved within set periods, 31.87% of respondents strongly agreed, 46.15% agreed, 14.29% were moderate/neutral while only 7.60% disagreed. Achieving departmental targets within set time had some significant influence on quality service delivery (mean of 3.868) which varied slightly (standard deviation of 1.47). To confirm the assertion that meeting set targets enhance service delivery, 31.87% of the respondents strongly agreed, 47.25% agreed while 10.99% were neutral. Those that disagreed were 6.59% and 3.30% strongly disagreed. Target setting greatly enhance quality service delivery (mean of 4.011) which in turn did not vary significantly (standard deviation of 0.901). Apart from setting the targets the offices have service charters to guide quality service delivery. Results indicate that 42.86% of respondents strongly agreed, 38.46% agreed, 5.49% disagreed and 2.20% strongly disagreed while 10.99% were moderate/neutral that there were service charters to guide in quality service delivery. The role of service charters in guiding quality service delivery was significant (mean of 4.143) though with insignificant variation (standard deviation of 0.973).

Staff performance appraisals have ensured that set targets are met; 32.97% strongly agreed, 38.46% agreed, 4.4% were neutral, 15.38% disagreed while 8.79% strongly disagreed. The influence of performance appraisal in quality service delivery was moderately significant (mean of 3.736) but variation in quality service delivery was somehow significant (1.324).

In terms of rewards and punishment, 9.89% strongly agreed, 18.68% agreed, 16.48% were neutral, 29.67% disagreed while 25.27% strongly disagreed that appraisals lead to rewards and punishments. The role of appraisals on quality service delivery was low (mean of 2.582) and its variation was somewhat significant (standard deviation of 1.317). Regarding the types of rewards for outstanding performance, 10.99% strongly agreed, 20.89% agreed, 29.67% strongly disagreed and 24.18% disagreed while 14.29% were moderate/neutral that the types of rewards for outstanding performance affect quality service delivery. The influence of types of reward for outstanding performance on quality service delivery was low (mean of 2.648) and there was little variation in quality service delivery (standard deviation of 1.325). Regarding the application of Rapid Results Initiative (RRI) to improve quality service delivery 7.67% of respondents strongly agreed, 10.99% agreed, 7.69% were neutral while 37.36% disagreed and 35.16% strongly disagreed that they apply the initiative to improve quality service delivery. The staff has not used more Rapid Results Initiative in service delivery as confirmed by low mean of 2.648 but somewhat significant variation in set targets (standard deviation of

1.345). Regarding whether Rapid Results Initiative targets have enhanced quality service delivery, the findings showed that as a performance management technique the initiative has not been utilized to improve service delivery. Only 6.65% of respondents strongly agreed, and 13.19% agreed while 12.09 were moderate/neutral. However, 36.26% of respondents strongly disagreed and 31.87% disagreed. The role of Rapid Results Initiative targets enhancing quality service delivery was insignificant (mean of 2.648) and variation was somehow significant (standard deviation of 1.345). The aggregate mean of 3.090 indicate that performance management determines quality service delivery. The influence of performance management techniques on quality service delivery has somewhat significant variation (standard deviation of 1.235).

Mc Bain and Smith (2010) have introduced new concepts which have changed the public sector in many ways. Strategic management has since been introduced in the public sector and has become a standard tool for government employees in enhancing quality service delivery. New management concepts and models such as Management By Objectives (MBO), Total Quality Management (TQM) and the Deming Cycle have been introduced in public service. Hope (2014) supports the introduction in order to better serve the needs of both government and the citizens concerning quality service delivery. Performance management systems is described by Korir, Rotich and Bengat (2015) as processes designed by management and imposed on employees in attempt to link performance to reward. In the study on Performance Management and Public Service Delivery in Kenya, the scholars found out that it is achieved through measuring individual performance against set goals or deliverables that are aligned to team and organizational goals. In practice, key performance areas are measured in terms of key performance indicators, and individual performance rating is used for incentives and promotions. The authors support the use of the service charter provides a great opportunity to ensure that services offered or required are appropriate and provided in a timely and efficient manner. However, Kibanya (2015) found out that 75% of county staff reported non-existence of service charters showing that the county governments need to expose their staff to importance of service charters.

Murage (2018) claims that Rapid Response Initiative has improved quality service delivery in processing of passports, national identity cards and birth certificates in Kenya. Kenya School of Government report of 2018 established that counties have not fully utilized performance management tools such as Annual Work Plans and Rapid Response Initiative. According to Kenya School of Government report of 2018, performance management aims at attaining operational effectiveness and allowing organizations to better utilize

resources. In improvement of programmes the governments restructuring efforts emphasized the need to introduce result or performance-based approach to management in the public sector. The report established that the public sector reform programmes in Kenya were initiated since 1993 with the initial civil service reforms geared towards cost containment through Structural Adjustment Programmes and ministerial rationalization. Reforms in Kenya evolved and culminated in New Public Management. It is a broad term symbolizing the aim of fostering a performance-oriented culture. The culture seeks to revamp the process through which public organizations operate in order to increase efficiency, effectiveness, and encompassing client-oriented, mission-driven, and quality-enhanced management. Performance management tools that were introduced in Kenya to improve quality service delivery were results based management, departmental service charters, individual work plans, performance contracts, performance appraisals and ministerial medium term strategic plans. Performance oriented culture was institutionalized in the civil service through introduction of an objective performance appraisal system, measuring and evaluating performance; linking reward to measurable performance and clarifying the obligations required of the government and its employees. In line with the public sector reforms the county governments in Kenya are required to apply these performance management techniques. The objective is to improve quality service delivery to the public by ensuring that top-level managers are accountable for results, and in turn hold those below them accountable. It is intended to reverse the decline in efficiency and ensuring that resources are prioritized for attainment of the key national priorities.

Table 3: Quality service delivery

Statement	SA (5)	A (4)	N (3)	D (2)	SD (1)	Mean	Std Dev
The county government of Kakamega has set standards for quality service delivery	27 29.67%	34 37.36%	10 10.99%	14 15.38%	6 6.59%	3.655	1.237
Standards for quality service delivery are achievable	30 32.97%	37 40.66%	8 8.78%	9 9.89%	7 7.69%	3.824	1.198
The county has clear processes to ensure quality service delivery	28 30.77%	43 47.25%	6 6.59%	8 8.79%	6 6.59%	3.868	1.147
The county staff spend quality time with clients	24 26.37%	35 38.46%	13 14.29%	13 14.29%	5 5.49%	3.633	0.735
The county has clear mechanisms for handling complains	26 28.57%	34 37.36%	11 12.09%	13 14.29%	7 7.69%	3.648	1.251
Complains received are effectively handled	28 30.77%	33 36.26%	13 14.29%	10 10.99%	7 7.69%	3.666	1.253
Aggregate						3.716	1.137

Source: Research data (2020)

The study established that 29.67% of respondents strongly agreed, 37.36% agreed, 15.38% disagreed, 6.59% strongly disagreed while 10.99% were moderate/neutral that county government of Kakamega has set standards for quality service delivery. The influence of standards on quality service delivery was moderate (mean of 3.655) whose variation was somewhat significant (1.237). It was established whether the staff usually achieves the set standards for quality service delivery, and 32.97% of respondents strongly agreed, 40.66% agreed, 9.89% disagreed, 7.69% strongly disagreed and 8.78% were neutral. Meeting set standards had some significant influence on quality service delivery (mean of 3.824) whose variation was significant (standard deviation of 1.198). The study focused on the measures put in place to attain standard services. There are service charters specifying the expectations, charges and timelines for services. Staff performance appraisals are done regularly to ensure standards and set targets are met. There is elaborate system for handling complains. Auditor General, Ethics and Anti-Corruption Commission (EACC) keep check to ensure the services meet the legislative and constitutional threshold and corruption cases are appropriately dealt with. Each department is guided by core values and standards. It was established that 30.77% of respondents strongly agreed, 47.25% agreed, 6.59% strongly disagreed and 8.79% disagreed while 6.59% were moderate/neutral that there are clear processes to ensure quality service delivery. The processes are somewhat important in determining quality service (mean of 3.868). The variation in quality service delivery was significant (standard deviation of 1.147). In terms of spending quality time with the clients, 26.37% of respondents strongly agreed, 38.46% agreed, 14.29% disagreed, 14.29% were moderate/neutral while 5.49% strongly disagreed. Spending quality time with clients moderately influence quality service delivery (mean of 3.633) which in turn did not vary significantly (standard deviation of 0.735).

In terms of effective handling of complaints received from clients on quality service, 28.57% strongly agreed, 37.36% agreed, 12.09% were moderate/neutral and 14.29% disagreed while 7.69% strongly disagreed. The handling of complaints received is somehow effective (mean of 3.648) but effectiveness varied significantly (standard deviation of 1.251). A number of factors were identified as affecting quality service delivery. These included corruption which prompted the governor to send some officers on compulsory leave in 2019. The infrastructure is deplorable in the rural where most of the roads are impassable. There is understaffing in some sections like the health sector. Most of the offices are under equipped thus slowing down quality service delivery. The health sector lack adequate supply of drugs and other equipment. Vital services like health should be provided for 24 hours as dispensaries close at night. Public is harassed by the county officers especially law enforcement officers. There is laxity of some officers as clients wait for long before they are served. Absenteeism from some of officers forces clients to visit the offices several times. Complaints that taxes/fees charged are high and that services like health should be free. Rampant strikes in the health sector leave patients hopeless with many losing their lives. The aggregate mean of 3.716 showed that service standards, consistency and complaints handling by county government of Kakamega determine quality service delivery and variation was somehow significant (standard deviation of 1.137).

Kenya introduced e-government in 2005 to ensure effective service delivery by facilitating efficient delivery of information and services to the citizens. It is made possible through use of government websites and portals, internet, mobile computing, integration of government management systems and use of toll free numbers.

Table 5: Analysis of Variance on technological innovations using SPSS version 20.0

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	132.026	7	18.861	273.118	.000 ^b
Residual	5.732	83	.069		
Total	137.758	90			

a. Dependent Variable: Quality Service Delivery

b. Predictors: (Constant), Technological Innovations

Source: Research data (2020)

Analysis of Variance generated F value of 273.118 whose P value is 0.000 and is less than 0.05. This shows that there is significant effect of technological innovations on quality service delivery.

The aggregate mean of 3.747 indicated that technological innovations have significant effect on quality service delivery whose variation is somehow significant (standard deviation of 1.077).

Table 6: Analysis of Variance on performance management techniques using SPSS version 20.0

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	113.035	9	12.559	188.993	.000 ^b
Residual	5.383	81	.066		
Total	118.418	90			

a. Dependent Variable: Quality Service Delivery

b. Predictors: (Constant), Performance Management Techniques

Source: Research data (2020)

Analysis of Variance indicated F value = 188.993 and the P value of 0.000 is less than 0.05

showing significant effect of performance management techniques on quality service delivery.

Table 7: Analysis of coefficient using SPSS version 20.0

		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	115	.090		-1.274	.206	-.295	.064
	Technological Innovations	1.116	.195	.989	5.719	.002	.728	1.504
	Performance Management Techniques	.755	.178	-.680	-4.244	.004	-1.109	-.402

Dependent Variable: Quality Service Delivery

Source: Research data (2020)

$$Y = 115 + 1.116X_2 + 0.755X_3$$

Analysis indicated that a unit change in technological innovations leads to 1.116 change in quality service delivery, the other factor held constant. The analysis also showed that a unit change in performance management techniques leads to 0.755 units change in quality service delivery; the other factor remaining the same. The P value = 0.002 < 0.05, therefore the first hypothesis that technological innovations have no significant effect on quality service delivery in county government of Kakamega was rejected. The P value = 0.004 < 0.05, therefore the second hypothesis that performance management techniques have no significant effect on quality service

delivery in county government of Kakamega was rejected.

VII. IMPLICATIONS AND CONSEQUENCES

The findings of the study would have implications on policy formulation by both the national and county governments regarding quality service. The findings help the management and leadership on various management strategies that would guide the county governments in quality service delivery. In the current study service was measured in terms of standards, processes and complains hence implication on SERQUAL model. The research findings form part of the existing body of knowledge. The study findings are reference materials in other researches. The

consequence of research findings is generation of debate by the academicians, county assemblies on issues of resource allocation, performance evaluation and automation of services. It has direct consequence on adopting appropriate technology hence quality service delivery.

VIII. CONCLUSION

It was concluded that technological innovations in form of automation of services reduces cost in terms of the number of staff, time, paper-works as well as increasing accessibility of the services to the residents even within the comforts of their homes. The county governments should put several measures to manage performance by formulating County Integrated Development Plans and departmental strategic plans with clear targets. The performance of the staff require periodic monitoring and evaluation and necessary corrective measures taken to ensure conformity with set targets and strategic plans. The county government of Kakamega has not extensively utilized Rapid Results Initiative to attain drastic results in short time. The public sector like the private sector should embrace technological innovations in quality service delivery. Technology should be used in human resource management activities such as recruitments; keeping employees' records and helping them access human resource services online. Technology should also be used in minimizing cases of corruption by eliminating cash transactions and paperwork. Integrated Financial Management Information System should help in tracking financial transactions, procurement process and for audit. Staff performance appraisal should be done regularly to evaluate how far set targets have been achieved and identify if there is the need for more resources and interventions. County governments should use Rapid Results Initiative to attain drastic results in areas where there is urgency.

ACKNOWLEDGEMENT

The researchers acknowledge the contributions of assistant research analyst, library employees of Kenyatta University, typist and experts who determined validity of the research instruments. We thank the Almighty God for His grace, the staff and management of County Government of Kakamega.

REFERENCES RÉFÉRENCES REFERENCIAS

- Awasthi, A. K (2007). Effects of Service Quality and Satisfaction on Customer Behavioural Intentions. *Proceeds of 2nd IIMA Conference on Research in Marketing January 3-5, 2007*. <https://www.researchgate.net/profile/245528174>
- Awino, E. O. (2016). *Response Strategies Adopted by the Ministry of Health to Challenges of Devolved Healthcare Services in Kenya* (Doctoral dissertation, University of Nairobi).
- Awosika, F. O. (2014). Transforming Public Service Performance in West Africa through Innovations: Experiences from Ghana and Nigeria. *Africa's Public Service Delivery & Performance Review*, 2(4), 72-100. doi.org/10.4102/apsdpr.v2i4.68
- Cole, G. A., & Kelly, P. (1996). *Management: Theory and practice*. New York, NY: Continuum.
- Constitution of Kenya 2010. Government of Kenya.
- County Government Act, No. 20 of 2012. Parliament of Kenya
- Hope, K. R. (2014). Devolved Government and Local Governance in Kenya: Implementing Decentralization Underpinned by the 2010 Constitution. *African and Asian Studies*, 13(3), 338-358. <http://dx.doi.org/10.1163/15692108-12341302>
- Ibrahim Forum Report (2018). Public Service in Africa. *Mo Ibrahim Foundation*.
- Ibrahim Forum Report (2018). Next Generation Internet Forum Report. *Mo Ibrahim Foundation*. <https://mo.ibrahim.foundation/news/2018/2018>
- Kakamega County Integrated Development Plan for 2018-2022. Accessed from <http://www.kakamegacounty.go.ke>
- Kalava, I. V. (2016). Factors Influencing Service Delivery at the County Government: A Case of Kakamega County. (Doctoral dissertation, University of Nairobi). <http://erepository.uonbi.ac.ke/handle/11295/97631>
- Kathuri, W. (2014). *Effects of Organizational Systems on Service Delivery in Civil Organizations in Marsabit County* (Doctoral dissertation, United States International University-Africa). <http://erepo.usiu.ac.ke/handle/11732/196>
- Kenya School of Government (2018). Training Manual for Senior Administrative Officers. *Kenya School of Government; Nairobi*. <http://www.google.com>
- Kenyatta, H. H. U. (2017). *5th Annual Report 2017 on Measures Taken and Progress Achieved in the Realization of National Values and Principles of Governance*. Republic of Kenya. <http://repository.kippira.or.ke/handle/123456789/2876>
- Kerubo, R. and Muturi, W. (2018). Factors Influencing Quality of Service Delivery in County Governments in Kenya. *International Journal of Science and Technology*. <https://www.ijssit.com/main/wp-content/uploads/2019/05>
- Kibanya, M. W. (2015). *Factors Influencing Customer Service Standards in County Governments in Kenya: A Case Study of Nairobi County Government*. Strategic Journal of Business Change and Management. Vol. 2 (67). <http://strategicjournalss.com/index.php/journal/article/view/142>
- Kibanya, M. W. and Moronge, M. (2014). *Determinants of Provision of Quality Services in*

- County Governments in Kenya: A Case of Nairobi County*. Strategic Journal of Business Change and Management. Vol. 3, Issue. 2 (4). <http://strategicjournals.com/index.php/journal/article/view/234/251>
18. Kimani, J. G. (2017). Challenges Facing Integration and Use of ICT in the Management of County Governments in Kenya. *Journal of Information and Technology*, 1(1), 1-11. <https://www.semanticscholar.org/paper/b874bcd03de2487103d4c3e1155efa3f66d3f151>
 19. Korir, S. C. R., Rotich, J. and Bengat, J. (2015). *Performance Management and Public Service Delivery in Kenya*. European Journal of Research and Reflection in Management Sciences: Vol. 3 No. 4, 2015. ISSN 2056-5992. <https://www.idpublications.org/wpcontent/uploads/2015/05/Performance-Management-and-Public-Service-Delivery-in-Kenya.pdf>
 20. Korir, V. C. (2013). Challenges Affecting Devolution of Public Sector Services in Local Authorities in Kenya: Case of County Government of Kericho. *Unpublished MBA Project*. <https://ir-library.ku.ac.ke/bitstream/handle/123456789/10158>
 21. Mbuthia, H. K. (2013). *Service Quality Practices in Public Healthcare Facilities in Mombasa County, Kenya* (Doctoral dissertation, University of Nairobi). <http://hdl.handle.net/11295/62261>
 22. McBain, L., & Smith, J. (2010). Strategic management in the public sector. *E-Leader Singapore, 2010*. <https://www.casa.com/conferences/singapore/papers>
 23. Mele, C., Pels, J., & Polese, F. (2010). A brief review of systems theories and their managerial applications. *Service science*, 2(1-2), 126-135. <https://doi.org/10.1287/serv.2.1.2.126>
 24. Menge, S. W. (2009). *Factors Affecting Provision of Quality Service in Public Sector: A Case of Ministry of Immigration and Registration of Persons*. (Doctoral dissertation Kenyatta University). <https://ir-library.ku.ac.ke/handle/123456789/6305>
 25. Ministry of Information, Communication and Technology, Kenya (2019). National Information, Communication and Technology (ICT) Policy. Government of Kenya. <https://www.ict.go.ke>
 26. Ministry of Planning and National Development (2003). *An Investment Programme for Economic Recovery Strategy for Wealth and Employment Creation*. Government of Kenya. <https://alumni.dkut.ac.ke/index.php/site/download>
 27. Mlambo, V. H., Zubane, S. P., & Mlambo, D. N. (2020). Promoting Good Governance in Africa: The Role of the Civil Society as a Watchdog. *Journal of Public Affairs*, 20(1). <https://doi.org/10.1002/pa.1989>
 28. Mugo, R. (2017). Digital Literacy Programme for Schools – Use of ICTs to Enhance Learning. Republic of Kenya. <http://unesdoc.unesco.org/images/0024/002456/245656E.pdf>
 29. Murage, W. (2018). *Assessing Citizens' Perception of Service Quality at Huduma Centres in Nairobi County, Kenya* (Doctoral dissertation, Strathmore University). <http://su-plus.strathmore.edu/handle/11071/6072>
 30. Ngigi, S., & Busolo, D. N. (2019). Devolution in Kenya: the good, the bad and the ugly. *Public Policy and Administration Research*, 9(6), 9-21. <http://www.iiste.org>
 31. Ndou, V. (2004). E-Government for Developing Countries: Opportunities and Challenges. *The Electronic Journal of Information Systems in Developing Countries*, 18(1), 1-24. doi/abs/10.1002/j.1681-4835.2004.tb00117.
 32. Opano, J. O. (2013). *Strategic Planning and Implementation Practices at The Kisii County Government in Kenya* (Doctoral dissertation, University of Nairobi). <http://erepository.uonbi.ac.ke:8080/xmlui/handle/123456789/59269>
 33. Robbins, S., & Judge, T. (2011). *Organizational Behavior*. (14th) New Jersey: Pearson Prentice Hall. <https://www.pearson.com/us/higher-education/product/9780136124016>
 34. Wanjala, J. L. (2019). Determinants of Employee Performance in Kakamega County Government (Doctoral dissertation, Kenyatta University). <https://ir-library.ku.ac.ke/bitstream/handle/123456789/19607>
 35. Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2018). *Services Marketing: Integrating Customer Focus across the Firm*. McGraw-Hill Education, http://thuvienso.vanlanguni.edu.vn/handle/Vanlang_TV/19151