INFLUENCE OF EMERGING TECHNOLOGIES ON SERVICE DELIVERY IN GOVERNMENT INSTITUTIONS IN KENYA: A CASE OF NAIROBI COUNTY'S E-JIJI PAY

Riogi, N. N., & Ombui, K.

The Strategic JOURNAL of Business & Change MANAGEMENT
ISSN: 2312-9492 www.strategicjournals.com
Vol. 7, Iss. 4, pp 470 – 484. October 20, 2020. www.strategicjournals.com, ©Strategic Journals

INFLUENCE OF EMERGING TECHNOLOGIES ON SERVICE DELIVERY IN GOVERNMENT INSTITUTIONS IN KENYA: A CASE OF NAIROBI COUNTY'S E-JIJI PAY

Riogi, N. N., [1*] & Ombui, K. [2]

[1*] Msc. Candidate, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya
[2] Ph.D, Lecturer, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

Accepted: October 18, 2020

ABSTRACT

The purpose of this study was to assess the influence of emerging technologies on service delivery in government institutions. The study utilized four specific objectives which included: assessing the influence of technological infrastructure, ascertaining the influence of training capacity, finding out the influence of policy framework and determining the influence of resource allocation on the delivery of Nairobi County's e-jiji pay. The study was guided by two theories: Technology Acceptance Model (TAM) and Unified Theory of Acceptance. The study adopted a descriptive survey design to examine the relationship between the independent and dependent variables. The design helps the researcher to obtain information concerning the current status of the problem under study and describe it with respect to its variables. The target population was 1445 employees of Nairobi County and these comprised of administrators, accountants, revenue collectors, car park attendants as well as market and licensing officers. The study adopted stratified random sampling procedure to identify specific groups from which data was collected. Simple random sampling procedure was then used to select respondents for data collection from the various strata. A sample size of 212 respondents was utilized for this study in data collection. Data collected was analyzed quantitatively using statistical package for social sciences version 25. Quantitative data collected was analyzed using descriptive statistics. Correlation examination, regression analysis were applied to reveal the relationship between the independent and the dependent variable. The study recommended that institutions should invest more in emerging technologies to improve existing service delivery; there should continuous creation of training capacities and workshops for enhancement of skills. Policies of technology adoption should be improved to attract adoption of the everyday changing technology and Nairobi County in conjunction with the national government and other counties must ensure that there is increased funding on resource acquisition which enables acquisition and use of emerging technologies in Nairobi county.

Key Words: *Technological Infrastructure, Training Capacity, Policy Framework, Resource Allocation, Service Delivery*

CITATION: Riogi, N. N., & Ombui, K. (2020). Influence of emerging technologies on service delivery in government institutions in Kenya: A case of Nairobi County's e-jiji Pay. *The Strategic Journal of Business & Change Management*, 7(4), 470 – 484.

INTRODUCTION

Any business views service delivery as an effectiveness of an organization to provide their customers with the needs with timely and speed that they may require (Ewuim & Nkomah, 2016). Effectiveness in customer service means doing the right things and measures indicators like customer satisfaction, via speed, service quality, timing, and human interaction. A service is effective when its results are valid to the customers. Emerging technologies help to build new and better service delivery through rising transparency and efficiency, enhancing the coordination of public sector procedures and management in general (Ewuim & Nkomah, 2016).

Technological revolution brings with it many benefit such as easy communication across geographies, simultaneously reducing expenses, environmental damage. Open source software, search engines, and online services enable us to summon in a few clicks the tools and information we need to produce (Elliot, 2018). According to Zhang and Guan (2016), 53 percent of Americans work over the weekend, 52 percent work outside designated work hours, and 54 percent work even when they are sick. Therefore, emerging technology should be accepted and improved rather than being ignored and repressed so as to minimize disruption and maximize the benefits.

The world has witnessed great attention to the introduction of new technologies in various fields of everyday life and which can be referred to as changing working environment particularly by the media where newspapers are champions (Elliot, 2018). Advances in technology has led to changes in the workplace causing evident dramatic collapse of the traditional or legacy system and creating a widespread use of artificial realities replacing humans in performing certain functions through these new technologies. It is true to say that these recent technological advancements in both hard and soft ware has dramatically disrupted the way organizations operate especially in public and private sector. Repetitive tasks such as factory work and many back-office duties and complex decisions, such as medical diagnostics have become quickly and more accurately via predictive algorithms courtesy of new technology (Frey & Osborne, 2017).

Internet penetration in Africa is creeping bringing the prospect of digital dividends to a continental long marked by digital divides. Penetration has broken the barrier of 15% thanks to the shift of low–cost submarine connections from satellite. These new undersea fibers have led to a remarkable increase in data transmission capacity that has also reduced cost. Sixteen submarine cables connect Africa to America, Europe, and Asia ending isolation of Africa (Munthali, 2018). Technology as one of the critical driver's service delivery within institutions has assumed an important role (Mimbi & Bankole (2016). Emerging technologies in Africa provide digital connectivity for effective communication, collaboration and integration of people, systems and machines. According to Ndegwa and Achoki (2017) emerging technologies require establishment of a comprehensive and reliable internet infrastructure which enforces strict criteria on communication networks which must be reliable and with are comprehensive and of high quality.

Kenya is ranked top and is position 52 out of 194 globally in government readiness to adopt AI in public service. As emerging technologies become a serious part of the economy, most organizations are applying computers and internet for economic purpose providing consumers with a more diversified and customized services, quality and selling goods and services (Kinuthia & Akinnusi, 2014). Collaborations and partnerships between different technological developments already existing in the country are such a way to achieve growth. The main thing that makes Kenya an attractive prospect to tec-based environment region-wide and globally is its population of young people who are the majority, very tech-savvy and easy adopters.

Thus technologies which include artificial intelligence are proactive tools and applications

The Strategic Journal of Business & Change Management. **ISSN** 2312-9492 (Online) 2414-8970 (Print). www.strategicjournals.com

being used to improve economic growth. According to the Economic Survey Report (2019) by the Kenya bureau of Statistics, the value of information technology expansion is driven by growth in digital economic which includes; mobile telephony, uptake of e-commerce and penetration of the internet in government institutions. According to Githinji (2014), like many developing countries, Kenya has realized that traditional mode of delivering service is not effective and competitive compared to technologically advanced world. In this view, the government is advancing its efforts to institute and implement a wide range of innovative solutions to address the issue. It is noted that investing and promoting technological solutions enhance socioeconomic transformation acceleration transformation, employment creation and economic growth (Economic Survey Report, 2019).

Nairobi County is Kenya's most populated urban area among other towns in Kenya and this citizens demand different attentions in terms of service delivery depending on their needs. This includes job creation, safe clean environment and water, ease of movement and ease of doing business. In order to counter and mitigate the negative impacts that arise from such growth, there is need for proper strategies among them information management through the use of technology (Economic Survey Report, 2019).

For this City to improve and sustain its service delivery, efforts must be put in place to ensure digital ecosystem remains strong replacing the legacy systems. According to Institution of Economic Affair (2017) Controller of Budget and CRA reports show that majority of counties were using fragmented ICT systems in revenue collection and management among them LAIFOMS, IFMIS among other systems. This report puts Nairobi on top of other counties in terms of automation and electronic payment platforms where in early 2016, 31% of all payments among them parking, land rates, licenses, market levies and many more were in electronic system under the e-jiji pay platform powered by Jambo pay. It was expected that by the end of 2016 approximately 50% or more were to be automated through this system. Other services that showed signs of digital migration included electronic platform for construction permits (e-CP) and Record Management.

This high level of technology penetration in revenue department has so far impacted impressive revenue growth and reshaped other service delivery (Riany & Kihara, 2018). The results have been positive whereby 2013/14 collected 10 billion with an increase to 11.5 billion in 2014/15 representing a 14.7% a further 11.7 billion in 2015/16 financial year (ICT Authority Strategic Plan (2013 – 2018). However, these figures are not impressive compared to institutions like Banks and other online service providers like Safaricom and Kenya revenue Authority and this has been associated with poor investment in innovative structures especially application of modern systems. In other non-financial services, hours spent using manual skills and basic cognitive skills have decreased and efficiency improved through this application. This and many more factors make up the purpose of this study in Nairobi County's finance department.

Statement of the Problem

Kenya and Africa ranks lowly in embracing information technologies especially on matters of new emerging technologies in service delivery. The country ranks 122 out of 193 countries globally and 11th in Africa in the e-Government Development Index report (2018) by United Nations, which measures how a country is using information technology to promote access and inclusion of its citizens. Despite emerging technologies giving institutions a reason to hold high their aspirations for their digital economy, inhibition of several setbacks among them inadequate and poor infrastructure halt this development in many areas.

Technology depends greatly on state of infrastructure whereby many underdeveloped and developing countries and cities score low as per the global standards. Lack of proper infrastructure development slows emerging technological growth leading to underdevelopment. Infrastructure

encompasses a wide array of critical issues including information systems, venture capital, standards, norms, innovations and support systems. Presently there is low internet connectivity and higher latency and applications built on a decentralized protocol require strong and fast internet connectivity.

Unreliable infrastructure is the lead cause to poor technological physical control, access control, communication control and application control which result to inaccessibility, interference and interception which according to this study slows implementation of e-jiji pay system in Nairobi County. Poor infrastructure is also a catalyst to poor connectivity and networking resulting to slow pace of development and expansion of this new change in technology across the City. This is supported by CIDP report (2019) which states that Nairobi had automated only fourteen (14) out of a hundred and thirty-six revenues (136) streams which not even a quarter due to poor infrastructure.

Huge gaps in terms of literacy exist as many people are not aware of just how powerful technology is in regard to giving them access they can use to generate and distribute valuable services. Nunda, Ngahu & Wanyoike (2015) in their study of analyzing factors influencing optimal revenue collection in Nakuru County links incompetence of clerks and lack of compliance policy compliance framework to impact revenue collection. In addition, a survey commissioned by bankers' lobby group Kenya bankers Association in (2018) showed that 80% of the customers still valuing traditional model of customer service despite the rising update of technology to enhance service delivery. This is also agitated by the office of the controller of budget (OCOB, 2014) quarterly report which indicate that county assemblies have remained manual contrally to section 12 (i) (e) of the PFM Act, 2012.

According to East African Digital Business week newspaper (2014), Nairobi County government has not fully transferred its revenue system due to limiting factors as inadequate budget. Cost implications pose as an infrastructural obstacle as technology lacks consistence as it keeps changing posing cost implications. The cost incurred is exorbitant and out of reach for this county considering the speed of change in technology. Due to this challenges Nairobi County largely rely on manual systems which are ineffective rather that application of emerging technology. In this interest this research intends to assess the influence of emerging technologies in service delivery in government institutions: a case of Nairobi County's e-jiji pay.

Research Objectives

The general objective of the study was to assess the influence of emerging technologies on service delivery in government institutions: a case of Nairobi County's e-jiji pay. The study was guided by the following specific objectives;

- To assess the influence of technological infrastructure on the delivery of e-jiji pay
- To ascertain the influence of training capacity of Nairobi County's finance department employees on service delivery
- To find out the influence of policy framework on the delivery of e-jiji pay
- To determine the influence of resource allocation on the delivery of e-jiji pay

LITERATURE REVIEW

Technology Acceptance Model (TAM)

This model was developed by Davis in 1989 and is widely studied and verified by different studies. According to this model, users of this system are influenced directly or indirectly behavior, attitude, usefulness and ease of use. According to Davis (1989) the model's aim is to predict and explain causes of potential influence to accept or reject the system use. In this model there are two constructs namely perceived usefulness and perceived ease of use which play a key role in predicting attitudes leading to its use. Davis, (1989) argues that perceived usefulness as the degree of believe that using a particular system would influence service delivery while perceived ease of use refers to the

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degree of believe that a particular system would be free of physical and mental effort.

However according to Venkatesh and Bagozzi (2000) TAM has evolved overtime and extended original model to explain perceived usefulness and intentional use including social influence, cognitive instrumental process and experience. The model explains how the system is determined behavioral pattern intention and behavioral pattern determines attitude towards system use. The author further adds individual attitude is not only based on factors determining users use of the system but also on its impact in performance. This model helped this study to determine factors influencing acceptance and use of new emerging technologies in county governments.

Unified Theory of Acceptance

This model was developed by Venkatesh e.t al. (2003) through review of eight models which explain ICT use. These models are TRA, TAM, motivational model, and theory of planned behavior (TPM), a combination of TAM & PTB, model of PC utilization, DOI, and social cognitive theory. The intention of UTAUT explains user's intention to the system use and the subsequent user behavior. In this theory four constructs are considered as direct determinant of user acceptance and behavior. This constructs are performance expectancy, effort expectancy, social influence and facilitating conditions (Yu, 2012).

In this context performance expectance is defined as the degree a technology use will offer benefits to clients in certain activities performed; effort expectance is associated with the degree of ease associated with consumer's use of technology; social influence is the extent to which consumers perceive that collaboration between different technological developments are already in such a way that it achieves effective and convenient service delivery (Venkatesh, 2003). Such partnership not only grows the foot print of the system but by making it accessible to larger user base, but makes it attractive to consumers. In time where people are constantly on the move and make most of their time, opportunity to still be productive is becoming more important.

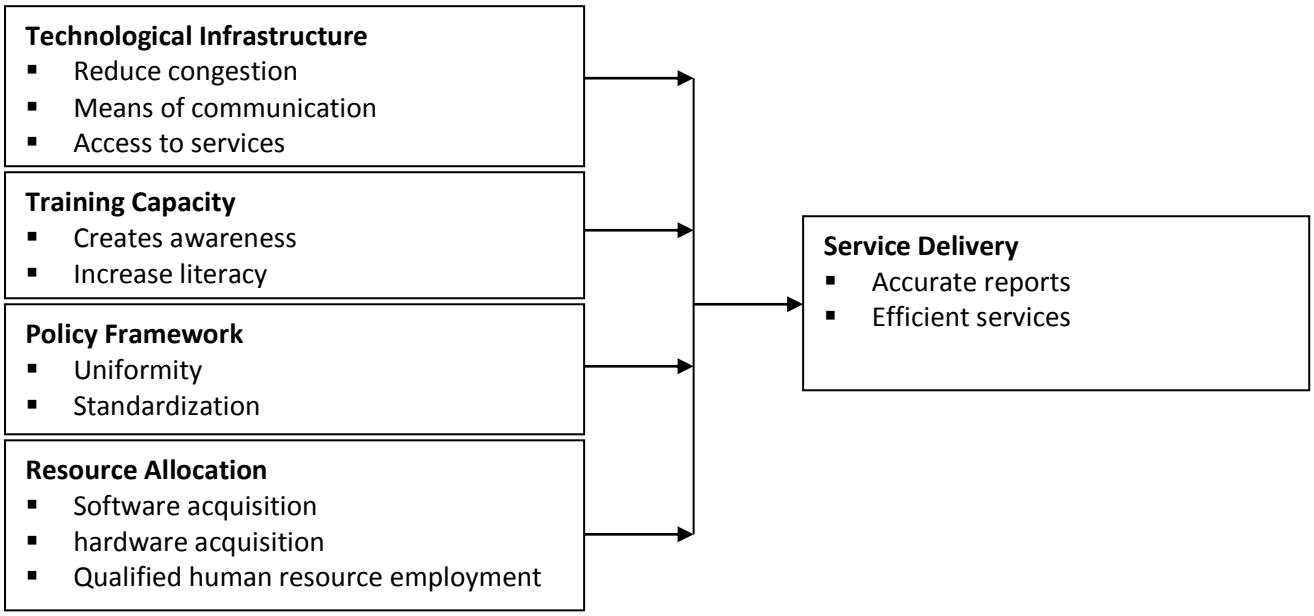

Figure 1: Conceptual Framework

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Empirical Framework

Githinji (2014) opines that information technology replaces inefficient production on revenue collection system. This technological trend taking place around the world is stimulating both private and public sectors to strategize to a more unified system that improve public service. Increased use of emerging technology is gradually leading to the transformation shift of policies, processes and functions. Therefore, to build this institutional strength begins with creating new physical and intellectual spaces that lead to innovation, data analysis, wider use of technology and commercial mindset. Abdelqader, Abu & Al Sakarneh, (2013) notes that, for a business to survive and develop there should be a proactive strategy towards new resources and capabilities for it to achieve and sustain growth. These actions have ignited the boom in technology startup and with its interest from global venture capital.

Emerging technology has drastically cut down the number of human resource and procedures required in delivery of services where a client can create, use, store and retrieve information through this intangible self-service platform. Utilization of emerging technologies has served a variety of ends including better public service delivery, improved interaction, information access and efficient management Githinji (2014). For example, a single computer work-station can eliminate a huge army of secretaries, clerks, sealing many loopholes and gaps resulting to a seamless process. Areas where modernized systems are required include public infrastructure, health care, licensing, revenue collection, communication and permitting among other services.

Improving the quality and efficiency of services to citizens is what every country seeks to achieve. In 2010 alone the size of technology adoption enabled services in the world was estimated to cost 3.1 billion dollars. Out of this 80% were in developed countries (Rudowski, 2009). This level of technology in the service delivery has not been attained yet in the developing world by most professionals and community users at large. Due to insufficient studies aimed at establishing as to why this has not been achieved. Most of these approaches are still at their new stages of implementation. For effective adoption of emerging technologies presently, training capacity has to be improved by developing nations.

For countries to be able to meet their current and future service delivery, training capacity must be enhanced. Training capacity ensure that what is required for people to acquire the necessary knowledge in terms of technology is availed. Availing training materials and expertise will ensure that imparting of requisite skills is made p[possible. Training to all levels of employees and top management aims at changing the behavioral patterns of the employees in a direction which is in line to achieve the organizational effectiveness, sustainability and growth (Argote & Ingram, 2010).

Service delivery strategy is part of a broader effort to modernize public services in all world countries. It demonstrates the priority Governments have placed on the role of technology adoption (Hebda & Czar, 2013). Policy framework strategy seeks to harness and mainstream public service delivery improvement across the public service to deliver effective, equitable and quality services for the achievement of sustainable development. Development of policy frameworks is important as this will re-engineer public services through technology adoption, application and use to enable greater efficiency and effectiveness, promote creativity and innovation in service delivery.

National and county governments need to recognize that service delivery improvement is essential to a productive, high-performing public service. Public sector is the largest service provider in Kenya. Any improvement in public service delivery transforms the daily experience of millions of Kenyan citizens, residents and visitors (Angote, 2016). Innovation is a creative process. However, it is clear that in order to mainstream Public Service delivery innovations and to standardize and replicate them across the public service for

enhanced results and customer satisfaction, the process and products of innovation must be guided and harmonized by a coherent Strategy.

World Bank (2012) contends that devolved systems of government have been practiced in many regions across the world. This system of government is seen as a guarantee against the discretionary use of power and resources by the central government leaders and also as a way of ensuring efficient service provision to the citizens. Several countries have used devolution to address service delivery challenges faced by the citizens at the local level of society. The central governments has attempted to address the challenges and inefficiencies in the design of public policy, service delivery and misallocation of resources by bringing together key actors from within and outside the government in order to support the reforms aimed at improved service delivery (Andrews & Genc, 2017).

In Rwanda, decentralization has been made key policy of the government that seeks to ensure equitable political, economic and social development throughout the country and act as a cornerstone of the fight against poverty by increasing participation in planning and management of development process (Republic of Rwanda, 2010). Service delivery is a key responsibility of the government towards its citizens. The Rwandese constitution has given the its regional governments the responsibility of delivering service such as health, water, sanitation, education and road maintenance through allocation of resources

In Kenya, the Kenyan constitution has given the county governments the responsibility of delivering service such as health, water, sanitation, education and road maintenance. According to the Kenyan constitution 2010, devolution is considered the main mechanism to promote good governance, encourage local development and to bring services closer to the citizens (Republic of Kenya, 2010). The first objective of devolution is to bring services closer to the people. Functions such as health, agriculture trade and development have been devolved, in the process these services have been brought closer to the people.

According to the County Governments' Act 2012, County governments are supposed to develop strategic plans one of which is the County Integrated Development Plan (CIDP) which is the overall strategy for the county. It is anticipated that with successful implementation of strategic plans service delivery would be efficient. However, implementation of CIDP has been a challenge to many counties in Kenya (Abbas & Were, 2017). Many organizations fail to gain the benefits of strategic plans due to lack of adequate resources.

METHODOLOGY

The study adopted a descriptive survey design to examine the relationship between the independent and dependent variables. This study was conducted within city hall in Nairobi County. The study population was all employees currently working in the finance department at city hall, Nairobi County. According to information from the institution, there were 1445 employees in the department, who were group into five groups that is admiration section, accounts section, revenue collection, car park section and market and licensing section. Simple random sampling was used to identify respondents from the five sections of administration, accounts, revenue collection, car park and market and licensing sections. The main instrument for data collection was questionnaires. Descriptive statistics technique was employed to ensure that the masses of numerical data is organized and summarized in such a way that they were meaningfully understood and communicated.

FINDINGS AND DISCUSSION

Descriptive Results

The aim of the study was to assess the influence of emerging technologies on service delivery in government institutions: A case of Nairobi County's e-jiji pay, Nairobi County, Kenya. The study analyzed descriptive statistics for specific objectives on the influence of technological infrastructure, influence

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of capacity training, influence of policy framework and the influence of resource allocation on the delivery of e-jiji pay.

Technological Infrastructure and service delivery

The study in this part required respondents to determine the influence of technological infrastructure on service delivery at. Specifically the study focused on finding out how the efficiency of city hall's Ejiji Pay in delivering services to the citizens. Respondents were required to indicate their level of agreement with statements rating the existing Ejiji Pay services on a five point Likert scale ranging from 1-5 where 1 = Very low extent; 2 = High extent, 3 = Moderate; 4 High Extent; 5 = Very High Extent. Results of this section were as presented in Table 1.

Generally, the results in table 1 indicate means of between 1.26 - 2.73 and a standard deviation of 0.437 – 1.483 was registered. Generally the research findings revealed that majority of the respondents were in agreement with statements on influence of technological infrastructure on service delivery by Ejiji Pay. As shown by means of (2.038) with a standard deviation of (0.8842). Specifically, the findings revealed that technological infrastructure has an influence on delivery of services by Ejiji Pay with a Mean of (M = 1.26), technology is timely with a Mean (M = 1.74), technology reduces congestion with a Mean of (M = 1.74), technology influences communication with a Mean of (M = 2.72), technology improves quality of service with a Mean of (M = 2.73).

These findings concur with literature by Githinji (2014) who argues that emerging technologies have drastically cut down the number of human resource and created procedures required in delivery of services where a client can create, use, store and retrieve information through this intangible self-service platform. Utilization of emerging technologies has served a variety of ends including better public service delivery, improved interaction, information access and efficient management. From these findings, results of the section were as presented in Table 1.

Table 1: Influence of Technological Infrastructure and Service delivery

Technological Infrastructure and Service Delivery	Mean	Std. Deviation	N
Existing technological infrastructure have enabled access to services.	1.74	1.831	301
Existing technologies have facilitated timely delivery of services.	1.26	0.437	301
Existing technologies have provided effective means of communication within Nairobi county's e-jiji pay	2.73	0.843	301
Existing technologies have led to improved quality of services	2.72	1.483	301
Existing technologies reduces congestion at the finance department	1.74	0.827	301
Mean Aggregate	**2.038**	**0.8842**	**302**

Influence of Training Capacity and Service Delivery

The study in this part required respondents to determine the influence of training capacity and service delivery on service delivery at. Specifically the study focused on finding out the influence of training capacity, influence of increased literacy, loss reduction, harmonization of services and working from home as results of emerging technologies city hall's Ejiji Pay has brought. Respondents in this section were required to state their level of agreement on the influence of training capacity on service delivery of Ejiji Pay at city hall. Items were measured on a five point Likert scale type ranging from 1-5 where 1 = Very low extent; 2 = High extent, 3 = Moderate; 4 High Extent; 5 = Very High Extent. Results of this section were as presented in Table 1.

This section was answered by 296 respondents. Results indicate means of between 1.60 - 2.80 and a standard deviation of 0.801 – 1.837 was registered. Generally the research findings revealed that majority of the respondents were in agreement with statements on influence of training capacity

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and service delivery by Ejiji Pay.as shown by means of 2.398. Specifically, the findings revealed that there was an influence on delivery of services by ejiji pay with a Mean of (M = 1.60), technology increases literacy with a Mean (M = 1.98), technology enhances training with a Mean of (M = 2.60), technology enables work from home with a Mean of (M = 2.60), technology harmonizes services with a Mean of (M = 2.80), technology reduces losses with a mean of (M = 2.81).

The findings were in line with a study by Angote and Ingram (2010) who argues that there is a positive relationship between highly skilled personnel and improved service delivery outcomes. Establishing training capacity framework and programs, appropriate recruitment methods and continuous training and development of employees remains critical for the attainment of highly skilled personnel within public institutions that geared towards attaining the desired outcome. Public institutions need to implement human resource strategies like selective hiring, retention, monitoring performance to meet standards and retain credentials for them to offer quality services and growth.

Table 2: Influence of Training Capacity and Service Delivery

Influence of Training Capacity and Service Delivery	Mean	Standard deviation	N
Due to IT training capacity at city hall, there is increased awareness.	2.60	1.367	296
There is increased literacy on emerging technologies at city hall.	1.98	1.208	296
Training capacity at city hall has seen reduced losses at city hall	2.81	1.837	296
Training capacity at city hall have seen harmonization of services	2.80	1.327	296
Has enabled work from home	2.60	1.020	296
Any other	1.60	0.801	296
Mean Aggregate	**2.398**	**1.260**	**296**

Influence of Policy Framework and Service Delivery

The study in this part required respondents to determine the influence of policy framework on service delivery by Ejiji Pay. Specifically the study focused on finding out the influence of policy framework on good procedures, guidance, direction, rules and regulations and plan of action as results of emerging technologies city hall's Ejiji Pay has brought. Respondents were required to state their level of agreement on the influence of policy framework on service delivery of Ejijni Pay at city hall. Items were measured on a five point Likert scale type ranging from 1-5 where 1 = Very low extent; 2 = High extent, 3 = Moderate; 4 High Extent; 5 = Very High Extent. The results indicated means of between 1.90 - 3.10 and a standard deviation of 1.045 – 1.447 was registered. Generally the research findings revealed that majority of the respondents were in agreement with statements on influence of policy framework on service delivery by Ejiji Pay by means of 2.342. Specifically, the findings revealed that policies reflect good procedures at city hall with a Mean of (M = 1.90), provides guidance with a Mean (M = 1.90), provides laid down rules with a Mean of (M = 2.20), provides plan of action with a Mean of (M = 3.10).

These findings were in line with that of Hebda and Czar (2013) who posit that policy framework strategies seek to harness and mainstream public service delivery improvement across the public service, so as to deliver effective, equitable and quality services for the achievement of sustainable development.

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Table 3: Influence of Policy Framework and Service Delivery

Influence of Policy Framework and Service Delivery	Mean	Std. Deviation	N
Policies frameworks at Nairobi county are reflective of good procedures	1.90	1.221	301
Available policies provide guidance	1.90	1.045	301
Available policies provide direction	2.61	1.122	301
Policies at city hall follow laid down rules	2.20	1.327	301
Policies at city reflect plan of action	3.10	1.447	301
Mean Aggregate	**2.342**	**1.232**	**301**

Influence of Resource Allocation and Service Delivery

The study in this part required respondents to determine the influence of resource allocation on service delivery by Ejiji Pay. Specifically the study focused on finding out the influence of resource allocation on communication system, technology hardware, technological software, skilled labour and taxation as results of emerging technologies city hall's Ejiji Pay. Respondents were required to state their level of agreement on the influence of resource allocation. Items were measured on a five point Likert scale type ranging from 1-5 where 1 = Very low extent; 2 = High extent, 3 = Moderate; 4 High Extent; 5 = Very High Extent.

The results indicated means of between 1.50 - 2.99 and a standard deviation of 0.764 – 1.532. Generally the research findings revealed that majority of the respondents were in agreement with statements on influence of resource allocation on service delivery by Ejiji Pay as shown by means of 2.331. Specifically, the findings revealed that technology has influenced good communication with a Mean of (M = 1.50), technology brought in reliable software's with a Mean (M = 1.83), technology lead to efficiency with a Mean of (M = 2.50), technology has lowered taxation with a Mean of (M = 2.84), technology has created skilled labour with a Mean of (M = 2.99). These findings were in line with that of Kihara (2016), who argued that resources whether they are human, financial or in form of equipment are a requirement for successful implementation of the strategic plan. A lack of any of the resources acts as a hindrance to strategy implementation efforts and that the failure of the county governments to adopt the use of technology slows down the effective services and this is especially through the use of technology and in particular computers which makes the work in the counties easier.

Table 4: Influence of Resource Allocation and Service Delivery

Influence of Resource Allocation and Service Delivery	Mean	Std. Deviation	N
Nairobi county has good communication system	1.50	0.764	301
There are enough computers for service delivery in Nairobi county	2.33	1.375	301
There is a software for emerging technologies at Nairobi county	1.83	0.899	301
There is a efficiency through emerging technologies at Nairobi county	2.50	0.928	301
There is availability of skilled labour	2.99	1.532	301
There is Manageable taxation	2.84	1.464	301
Mean Aggregate	**2.331**	**1.160**	**301**

Regression Analysis

The coefficients of determination (R) and correlation coefficient(R) showed the degree of association between emerging technologies and service delivery. The research findings indicated that there was a positive relationship (R=0752) between the variables. The study also revealed that 56.5% of Ejiji Pay's service delivery in Nairobi County could be explained by the influence of emerging technologies. Form the study, it was

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evident that at 95% confidence level, the variables produced statistically significant values and can be relied on to explain service delivery.

ANOVA Test

To determine whether independent variables that is: influence of technological infrastructure influence of training capacity, influence of policy framework and influence of resource allocation on the delivery of E-Jiji Pay in Nairobi County, an ANOVA test was conducted.

Table 5: ANOVA Test

Model Sig		Sum of Squares	Df.	Mean Square	F.
	Regression	175.249	5	35.050	146.398
.000	Residual	0.000	295	.27	
	Total	175.249	300		

a) Dependent variable : Service Delivery

b) Predictor:(constant), influence of technological infrastructure on ejiji pay's service delivery to Nairobi residents, influence of training capacity, influence of policy framework and influence of resource allocation on Ejiji Pay's service delivery in Nairobi County

According to the findings, the F distribution of the data was given as F (5, 295) =146.398, p=0.000. This showed that there was no significant difference among the four objectives which were; determining the influence of technological infrastructure on Ejiji Pay's service delivery to Nairobi residents, influence of training capacity, influence of policy framework and influence of resource allocation on Ejiji Pay's service delivery.

CONCLUSIONS AND RECOMMENDATIONS

The study concluded that emerging technologies has a significant positive influence on service delivery due to lower transaction costs for instance in the information for developing infrastructure which allows for effective delivery of services. Evidently, adopting emerging technologies influences service delivery especially in City County's E-Jiji Pay. Considering the fastness the world is currently moving at, procumbent of emerging technologies is essential to human kind as well as business. Therefore, emerging technologies adoption is the best choice in helping E-Jiji Pay stay on the track in terms of service delivery. The degree to which emerging technologies can improve training capacity systems especially at Nairobi County's E-Jiji pay may be difficult to measure reliably. How emerging technology tools are used within the framework of existing organizational environments depends more on the will of managers and decision-makers than on institutions administrative traditions. This is the case of Nairobi County's management.

It seemed that the advent of emerging technologies had brought about new opportunities to enhance governance. This was to ensure openness, participation, accountability, effectiveness and coherence, transparency, mechanisms for consultation and participation and efficient services are present throughout the literature of service delivery institutions. This therefore called for enhanced resource allocation so as to ensure an effective service delivery system The study concluded that, unless literacy is improved through enhancing training capacity with the institutional employees, the quality of service delivery remains low even if all emerging technology facilities are procured by the institutions. Skills and knowledge on application of emerging technologies still has a long way to go before being fully integrated into service delivery institutions in most developing countries.

The study recommended that the institutions invest more in emerging technologies so as to improve on the current ICT situation in the service delivery institutions to increase the countries competitiveness, productivity and growth through

investment in information technology. The quality of the system used is bound to dictate the level of service delivery that transforms to customer satisfaction.

Create more trainings capacities and workshops should be set for workers in the institution to enhance their knowledge and skills on E-Jiji Pay system. Still, killed employees with past experience in E-Jiji Pay system should be incorporated into the institutions to run the systems.

Nairobi county plus other counties should increase funding on resource acquisition and training of its personnel since the study identified inadequate ICT staff training and development as the main challenge encountered by the institution under study in implementation of E-Jiji Pay system service delivery and this has a major impact affecting the quality of service delivery through use of E-Jiji Pay system.

The institutional management should train its employees in the handling of users' complaints and the importance of having positive attitude towards its consumers. The institution should further find out ways of motivating its employees as the demotivated employees do not perform.

Suggestions for Further Research

The study only focused on assessing the influence of emerging technologies on service delivery in government institutions: a case of Nairobi County's e-jiji pay. The effectiveness of ICT adoption in the study was looked from improvement in service delivery which was again measured by its effectiveness in county government's E-Jiji Pay. However, other major objectives other than influence of technological infrastructure, influence of training capacity influence of policy framework and influence of resource allocation on the delivery of e-jiji pay if studied in future research, would add more value to the effectiveness of service delivery institutions.

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