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Role of Information Technology Strategic Capabilities on Operationalization of Decentralized Units of Nairobi City County Government in Kenya

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Abstract: The study set to determine the role of IT strategic capabilities on operationalization of decentralized units of Nairobi City County Government in Kenya. There statement of the problem noted that studies had not sufficiently captured the influence of strategic integration of IT on employees' performance. The objectives of the study focused on IT infrastructural development, organizational structural development, operating systems and audit process on operationalization of decentralized units of Nairobi city county government in Kenya. The study adopted a descriptive research design with a target population of 2493 employees drawn from human resource department and a sample size calculated using Yamane (1967) formulae, which provided a sample of 345employees, sampled using stratified random sampling technique. The quantitative data was analyzed by using descriptive statistics, which included frequency distribution tables and the mean, standard deviation and measures of relative frequencies. The inferential statistics included a regression model, which established the relationship between variables. Data was presented using tables, charts and graphs. The study findings indicated that infrastructure development had a positive but insignificant effect on operationalization of decentralized units at Nairobi City County government, organizational structure development has a positive and significant effect on operationalization of decentralized units at Nairobi City County government, operating systems have a positive but insignificant effect on operationalization of decentralized units at Nairobi City County government and audit processes have a positive and significant effect on operationalization of decentralized units at Nairobi City County government.

Keywords: *IT infrastructural development, Organizational structural development, Operating systems, Audit process, Operationalization of decentralized units of Nairobi city county government in Kenya*

Introduction

The fast pace of changes, and especially technological advancement, has never been so visible like in the 21st century. The world is becoming global and organizations which function in such reality are facing new challenges especially in technological progress(Zamosc, 2012).These processes of change also influence organization management on the global stage, where technological and organizational capabilities are benchmarked against competitors worldwide, rather than nationally, and their business models designed exploiting global linkages and integration (Szpakowsk, 2012). The role of knowledge, information, communication and the latest IT and technological solutions cannot be overestimated in organization management (Zamosc, 2012). Applying information technologies in organization management determines changes in economic relations and attitudes substantially. These technologies influence changes in organizing company work and functioning of certain elements of company environment. Therefore, the very new information technologies allow for globalization process that is for reducing financial, political and social barriers in a significant way (Szpakowsk, 2012).

IT can be an enabler for socio-economic development. Examples given from the developed world where significant IT investments have had major impacts include increasing the United States gross domestic product (GDP) by 7.8%, UK by 8.0%, Singapore by 8.3% and Australia by 8.4% (Kamel, Rateb& El-Tawil, 2009). A transition has been made from centralized to decentralized management of information systems and the user became increasingly important. Microcomputer technology suddenly has become a major strategic issue in organization management. A steadily increasing number of employees are using computer technology to perform their work. This rapid change has an impact in a number of areas: information systems, the organization of work, jobs, tasks, recruitment and training needs. In short, over a decade, the organization experiences a complete technological change; consequently, it has to learn to manage the change and its repercussions in all units of the organization (Gagnon & Dragon, 2010). Today, the world has undergone massive changes in IT capabilities; the internet bubble has come and gone. Emerging countries such as China and India have become prominent global users and providers of ICT equipment and services (Osorio, Dutta & Lanvin, 2013). Information flows and networks have spread across borders in ways that could not be expected before the onset of the Internet, the global adoption of mobile telephony and social networks, and the rapid growth of broadband transforming social economic processes in the world.

Statement of the Problem

According to CIC report (2015), the process of decentralizing functions by counties to lower levels have been slow. In some cases lower levels (Sub-counties, Wards) have complained of delivery of services and decision making being centralized at the county headquarters. Some counties will develop faster than others depending on their challenges and priorities at stake, and that by 2017 at least three-quarters of the counties that is 36 percent, shall have achieved their goals and be fully operational with much assistance from national government (Owino, 2013). CIC report recommended that the county governments develop public participation guidelines with clear feedback mechanisms and explore the development of e-participation platforms to cater for those who are unable to physically take part in public participation forums, but have access to internet and also e-system for data collection, collation and analysis.

According to the report (CIC, 2015), for effective public participation and civic education to take place, county governments should collect, collate and analyze data to inform these processes either from the public, county initiatives or external sources. Gakuo (2011) conducted a study on the impact of ICT at Nairobi Water & Sewerage Company observed that its investments substantially increased the average organizational performance in achieving various milestones, overall revenue increment, enhancing research and development, and product innovation through technologies capabilities. Katana (2011) studied e-procurement adoption: the case of Kenya Ports Authority and showed that firms that acquire extensive IT resources are able to create better competitive advantage. Kinuthia (2012), researched on the relationship between IT investment and performance of NGOs in Kenya and concluded that IT was crucial in the efforts to improve performance. Waruguru (2012), explored the influence of ICT on performance of the airline industry in Kenya concluded that IT improved performance of the company largely. Although most of these studies have suggested that IT plays a vital role in improving organizational performance, according to (Mano, 2009) its potential for adoption and innovation is often uncertain especially resource allocation. Organizations allocate their resources differently in a way that maximizes their objectives and those firms that allocate more resources on IT are expected to perform better than those firms that allocate less resources, because high performance also requires good IT infrastructure supported by good IT management practice (Mwania & Muganda, 2012). Despite such studies among others highlighting on the importance of IT, there was a knowledge gap on the role of information technology strategic capabilities on operationalization of organizations in Kenya. This study set to determine the role of IT strategic capabilities on operationalization of decentralized units of Nairobi city county government in Kenya.

Research Objectives

This study was guided by a general objective and specific objectives.

i. To establish the role of IT infrastructure development on operationalization of decentralized units of Nairobi City County Government
ii. To assess the role of organizational structure development on operationalization of decentralized units of Nairobi City County Government
iii. To determine the role of operating systems on operationalization of decentralized units of Nairobi City County Government
iv. To examine the role of audit processes on operationalization of decentralized units of Nairobi City County Government

Theoretical Review

Theory of Information Technology (IT) Complementarities

The complementarities theory by Edgeworth (1881) is an old but powerful concept with the basic premise of the establishment of an activity pattern. A theory of IT complementarities, argues that the initial effects of IT should occur at the level of organizational processes that use the IT resources. The theory suggests a two-stage process through which IT resources impact firm performance, IT resources could enhance the quality and efficiency of organizational processes where they are deployed; in turn, these IT-enabled processes enhance organizational performance. Subsequent empirical research has found support in effect of IT on business processes and how they affect firm performance.

This theory suggests that organizational outcomes depend upon both social and technological factors. The factors must be complementary; advocating increasing one factor will increase the benefits when other complements move in the same direction. Theory of IT complementarities describes the role of IT in understanding organizational design and structure that will be used in developing an operation strategy in order to achieve its objectives.

Resource Based View (RBV)

According to Sciarelli (2008),the approach known as Resource-Based View (RBV), originated from Penrose's idea (1959) of the firm capability to coordinated 'bundle' of resources, tackles the question of a firm's goals and strategic behaviour (Barney, Della Corte & Sciarelli,(2008). Resources are inputs into the production process; they include items of capital equipment, skills of individual employees, patents, brand names, finance, and so on. However, on their own, few resources are productive. According to Sciarelli (2008), Capabilities, also refers to a firm's capacity to deploy resources, usually in combination, using organizational processes, to produce a desired effect. Hence, the presence of capability enables resources to begin to be utilized, and the potential for the creation of output arises. While resources are the source of a firm's capabilities, capabilities are the main source of its competitive advantage. It is important to understand the use of IT as strategic resources that is, to improve efficiency in production and support business functional strategies to achieve set objectives as well as create a competitive edge. IT as a complementing resource relies on skills and competencies of labour employed in the organization. Therefore, employees working in decentralized structures are essential component in understanding the role of IT in operations of decentralized units.

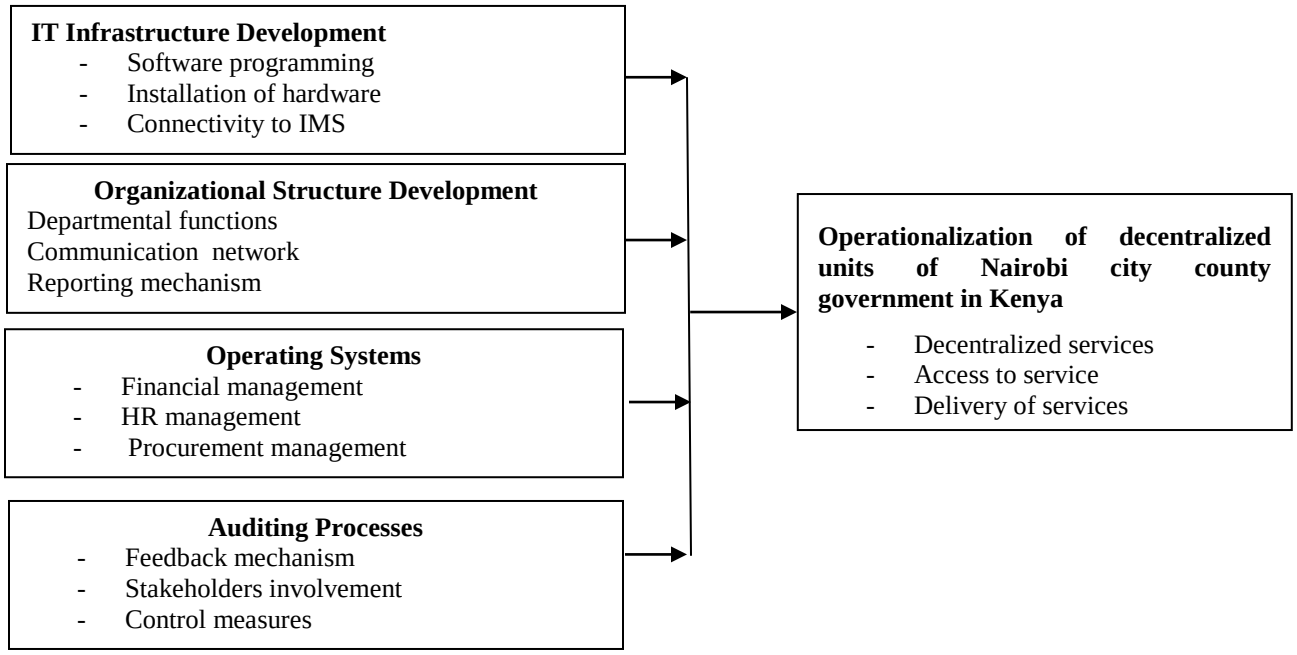
Dynamic Capability Theory

According to Gizawi (2014), the DCT was introduced by Teece and Pisano in 1994 in strategic management. Gizawi (2014) argues that dynamic capabilities have equally been viewed as the routine within an organization's managerial and organizational process that aim to gain, release, integrate and reconfigure resources in which they are immune to changes. They are firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments (Teece et al., 1997). Both the skills or resources and the way organizations use them must constantly change and this move will lead to the creation of continuously changing temporary advantages in service delivery. This theory suggests that it is the way resources are configured and not the capabilities as such that is the source of competitive advantage.

System Theory (ST)

According to Heil (2010), Systems Theory (ST) was introduced, by a German scientist named Ludwig Von Bertalanffy in 1967, who proposed a better understanding of the systems of the world around us. Systems theory suggests that when there is a problem with one component, the component cannot be isolated from it, but takes a holistic approach and view the whole system to understand what the problem is. Problems are a sign of a malfunctioning process. When a system fails it is because either a feedback channel is not working or the adaptation cycle is being ignored; both of these are functions of communication (Heil, 2010). If the environment will be chaotic without control, it would be impossible to meet objectives. Therefore, an organization system that complements processes and it is important in service delivery especially in matters that require effective communication. The role of IT capabilities in complementing operations of the county government is important to avoid a chaotic working environment that will inhibit service delivery through audit processes that ensure efficient processes for control functions.

Conceptual Frame Work



Independent Variables **Dependent Variable**

Figure 1 Conceptual Framework

Research Methodology

The study adopted descriptive research design since it describes the state of affairs as it is. The study aimed at describing the state of affairs of the phenomenon. The target population, therefore, constitute employees working in decentralized units of Nairobi county government. There are 2493employees in the aforementioned units to whom the study collected data for purposes of analysis to answer the research questions. The population for the study is documented in the Nairobi city county government, public service management sector; human resource department. A stratified sampling technique was used and Yamane (1967) formulae provided a simplified formula to calculate sample sizes with a population of less than 10,000 elements.

$$n = \frac{N}{1 + N(e)^2}$$

Where n is the sample size, N is the population size, and e is the level of precision. Sample size assuming 95% confidence level (P =0.05)

N=2493, e= level of precision (0.05), n=sample size. This led to a sample size of 345 respondents. The study used a scaled questionnaire to collect the primary data from the respondents and close and open-ended questions at the end of each scale. Both descriptive and inferential data analyses were used to present the research findings. The descriptive analysis was used to measure distribution (frequencies, and percentages), measures of

central tendencies (means), and measures of variation (standard deviations).While inferential analysis enabled the researcher to draw relevant conclusions and findings presented in form of frequency tables, and in form of descriptive and inferential statistical tables. A multiple regression model was used for ANOVA analysis to explain the relationship among the study variables.

The regression model was;

$$\mathbf{Y= \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon}$$

Where; Y= Operationalization of Decentralized Units, β0= Constant, β1, β2, β3 and β4 are coefficients of the determinants the role of information technology strategic capabilities on operationalization of Decentralized Units of Nairobi City County Government in Kenya, ε=error term, X1= Infrastructure Development, X2= Structure Development, X3= Operating System, X4= Auditing Processes

Research Findings and Discussions

Response Rate

The number of questionnaires that were administered was 345. A total of 250questionnaires were responded to. This represented an overall successful response rate of 72% as shown on Figure 4.1. Mugenda and Mugenda (2009) argue that a return rate of 50% and above is acceptable. A response rate of 72 % is hence acceptable for the current study. The high response rate was achieved because the respondents who were busy were given more time to respondent to the questionnaire before they were picked. Persistence by the researcher also played a role in achieving the high response rate. Figure 2 indicates the response rate of the study.

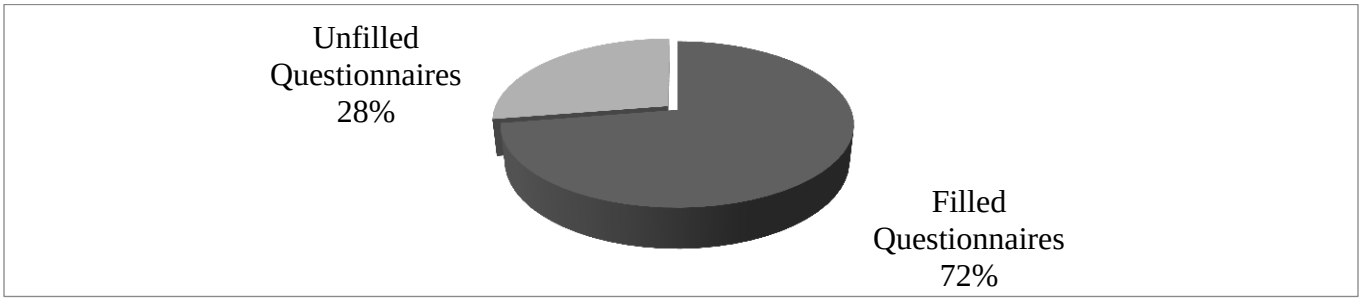


Figure 2 Response Rate

Demographics characteristics of the respondents

Respondent's position at work

The study sought to establish the respondent's position at work. Employees from three levels of employment that is, general staff, middle managers and senior managers participated in the study. The study findings on Figure 3 indicate that 49.6% of the respondents were general staff, 40.8% were middle managers and only 9.6% were senior managers. The findings imply that information was sought from the targeted set of respondents hence valid to be used for analysis.

The information was hence considered to be reliable for analysis. The results also imply that the information was sought from a diversified set of employees hence opinion sought was a true representation of the employees in both management and none management positions.

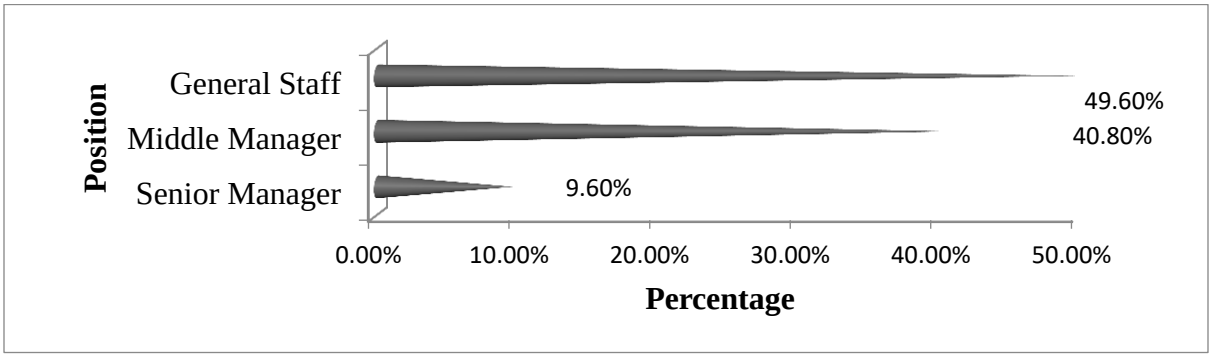


Figure 3 Respondents position at work

Respondents Level of education

The respondent's highest level of education was also established. The study findings on Figure 4 indicate that majority of the respondents, 33.2%, had college level education, 31.6% had university level education while 28.4% had secondary education. Only 6.8% had primary level education. The results imply that majority of the employees at Nairobi City County are literate as they have college and degree level of education. This implies that the respondents were able to understand the instrument and that the information given was reliable as is consistent with an argument by Easterlin (2007) that higher education level is associated with high understanding of concepts.

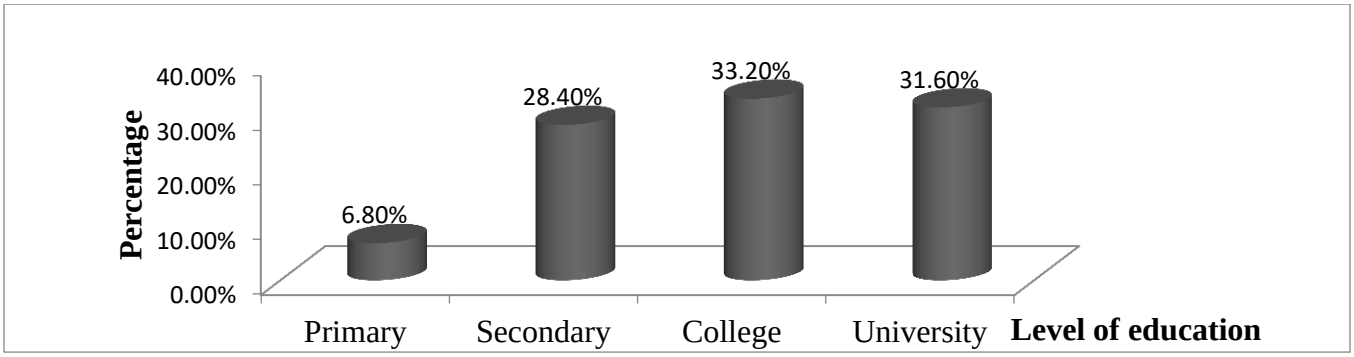


Figure 4 Respondents education level

Respondents Work Experience

The study also sought to establish the respondents work. The study findings on Figure 5 indicates that 87% of the respondents had above 10 years of work experience,7% of the respondents had between 6 and 10 years of work experience,5% indicated that they had between 1 and 5 years of work experience. Only 1% of the respondents had a worked for a period less than a year. The findings imply that majority of employees at Nairobi City County Government had worked in the County for a period over 10 years which indicates a low turnover rate in the County. This also implies that the employees who had responded to the questionnaire are aware of the decentralized units, therefore they could provide information on the study objectives. They were hence in a better position to respond to the questionnaire as is consistent with an argument by Andoh, Biako and Afranie (2011) who noted that work experience with accumulation of experience and knowledge resulting to high understanding and large pool of information.

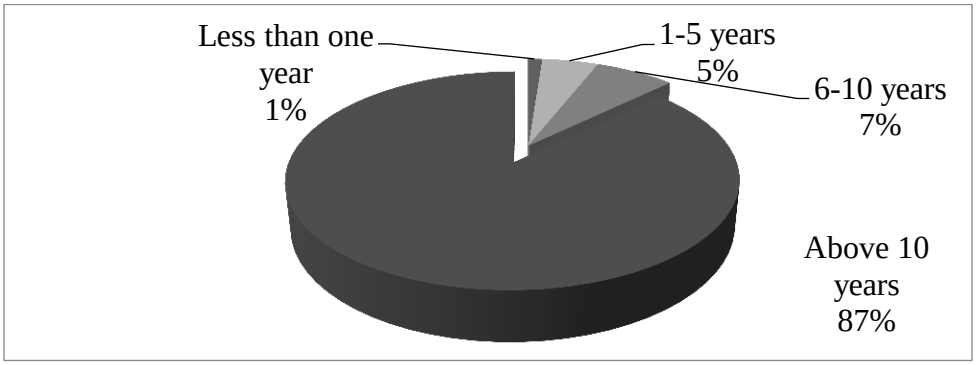


Figure 5 Respondents work experience

Descriptive Analysis

The respondents were asked to rate statements on all the study variables on a Likert scale of 1 to 5 where 1 represented Strongly Disagree, 2 represented Disagree, 3 represented neutral, 4 represented agree and 5 represented strongly agree. The percentage number of respondents is indicated for each rating.

IT Infrastructure Development

The first objective of the study was to establish the role of IT infrastructure development on operationalization of decentralized units of Nairobi City County Government. The respondents were asked to rate 6 statements on IT infrastructure development on a five point Likert scale. The findings are presented in Table 1.The study findings indicate that 41.6% of the respondents agreed that computers and mobile phones has been provided to facilitate operations in the station, 30.4% agreed that connection to internet and website is helping in operations of the station while those who indicated that costs of operating computers, laptops and mobile phone is well catered for in the station were only 18.8%. Furthermore, only 43.2% of the respondents agreed that official email addresses, e-operation platforms are available for service delivery, 14.4% stated that the station is well connected with all services provided by the county government using IT and on the other hand, few

respondents, 10.4%, stated that IT networks linkages are available for use by workers in their stations. Overall, majority of the respondents disagreed with the statements on IT infrastructure development in Nairobi County as indicated by an average mean of 2.37. The overall standard deviation of 1.25 from the mean indicated a wide variation in the responses. The findings imply that IT infrastructure development in Nairobi County fair. There is fair provision of computers and mobile phones to facilitate operations in the stations, connection of internet and website to help in operations of the station. The costs of operating computers, laptops and mobile phone is fairly catered for, station are not well connected with all services provided by the county government using IT and IT networks linkages are un available for use by workers in their stations. The study recommends that Nairobi City County Government should implement strategies to facilitate IT infrastructure development. The findings are consistent with Enakrire and Onyenania (2007) who argues that integrated communications system ensures that organizations work effectively and that failure to adopt new information technology would leave the organization vulnerable to delivering poor quality services to the public.

Table 1 Descriptive analysis of IT Infrastructure Development

Statement	1	2	3	4	5	Mean	Std Dev
Computers and mobile phones has been provided to facilitate operations in the station	26.40%	20.80%	11.20%	30.40%	11.20%	2.79	1.41
Connection to internet and website is helping in operations of the station	33.20%	23.20%	13.20%	19.60%	10.80%	2.52	1.40
Costs of operating computers, laptops and mobile phone is well catered for in the station	39.20%	28.40%	13.60%	15.20%	3.60%	2.16	1.20
Official email addresses, e-operation platforms are available for service delivery	24.40%	20.00%	12.40%	36.40%	6.80%	2.81	1.34
The station is well connected with all services provided by the county government using IT	39.60%	36.40%	9.60%	10.40%	4.00%	2.03	1.13
IT networks linkages are available for use by workers in this station	42.80%	36.00%	10.80%	8.00%	2.40%	1.91	1.03
Average						**2.37**	**1.25**

Organizational Structure Development

The second objective of the study was to assess the role of organizational structure development on operationalization of decentralized units of Nairobi City County Government. The respondents were asked to rate 6 statements on organizational structure development on a five point Likert scale. The findings are presented in Table 2.The results indicate that only 32.4% of the respondents indicated that the station working arrangement is facilitated by computers, laptops and phones, 46.4% indicated that it is possible to connect and work well with supervisors using IT networks and 46.8% indicated that departments and sections work efficiently through IT driven platform. Only 65.6% and 60.4% of the respondents agreed that communication through phones and computer network is making operations efficient. They also agreed that it is possible to file report as expected through emails or any other IT network respectively.

Only 31.2% of the respondents indicated that different levels of operations link well through IT networks in this station. On average, the results indicate that majority of the respondents neither agreed nor disagreed with the statements on organizational structure development as shown by an overall mean of 3.10.The findings imply that organizational structure development in Nairobi City County Government is fairly developed. The results imply that most station working arrangement are not facilitated by computers, laptops and phones, it is moderately possible to connect and work well with supervisors using IT networks, few departments and sections work efficiently through IT driven platform and that only a few different levels of operations link well through IT networks in various stations in the County Government. The only efficient organizational structure development is communication through phones and computer network as well as filing report through emails. The results are consistent with Murugu (2014) who argued that there is development of organizational structures for instance new administrative structures. The biggest challenge now is how to effectively manage the newly created devolution structures to achieve the desired result and meet the high expectations of the people.

Table 2 Descriptive Analysis of Organizational Structure Development

Statement	1	2	3	4	5	Mean	Std Dev
The station working arrangement is facilitated by computers, laptops and phones	24.40%	22.40%	20.80%	25.60%	6.80%	2.68	1.28
It possible to connect and work well with my supervisor using IT networks	16.40%	22.40%	14.80%	31.60%	14.80%	3.06	1.34
Departments and sections work efficiently through IT driven platform	17.20%	19.60%	16.40%	34.00%	12.80%	3.06	1.32
Communication through phones and computer network is making operations efficient	8.80%	8.00%	17.60%	41.60%	24.00%	3.64	1.18
It is possible to file report as expected through emails or any other IT network	9.20%	13.60%	16.80%	41.60%	18.80%	3.47	1.21
Different levels of operations link well through IT networks in this station	22.40%	22.80%	23.60%	24.40%	6.80%	2.70	1.25
Average						**3.10**	**1.26**

Operating Systems

The third objective of the study was to determine the role of operating systems on operationalization of decentralized units of Nairobi City County Government. The respondents were asked to rate 6 statements on operating systems on a five point Likert scale. The findings are presented in Table 3. The results indicate that 44.8% of the respondents indicated that financial transactions through e-payment are effective in various stations, 37.2% indicated that there are financial records in e- platform that concern employees work and only 26.8% stated that work plan and assessment of performance is carried out through IT in the county.

The respondents who indicated that records and reports are available through IT in the station were 30.0% and those who indicated that accessing goods and services through e-procurement is possible were only 23.6%.The results further indicated that only 29.2% of the respondents stated that stakeholders can access information about work in progress through IT platform. The overall findings indicated that majority of the respondents disagreed that operating system is effective in the County Government. This is as indicated by an overall mean of 2.7. There was a wide variation in the responses as shown by a standard deviation of 1.23. These results imply that there is ineffectiveness in the operating systems for various activities for instance financial transactions through e-payment in various stations, keeping financial records in e- platform that concern employees work, work plan assessment of performance through IT, availing records and reports through IT, accessing goods and services through e-procurement and stakeholders accessing information about work in progress through IT platform. The findings are consistent with the argument by COK (2010) that county governments and other necessary structures that shall be put in place should be able to monitor and question spending, resource distribution, social welfare systems and processes, respect for human rights and access to medical care thus improving decentralization.

Table 3 Descriptive Findings of Operating Systems

Statement	1	2	3	4	5	Mean	Std Dev
Financial transactions through e-payment are effective in the station	16.40%	21.20%	17.60%	33.60%	11.20%	3.02	1.29
There are financial records in e- platform that concern my work	19.60%	26.00%	17.20%	30.40%	6.80%	2.79	1.26
work plan and assessment of performance is carried out through IT	20.40%	28.80%	24.00%	21.20%	5.60%	2.63	1.19
Records and reports are available through IT in the station	20.00%	28.40%	21.60%	22.40%	7.60%	2.69	1.23
Accessing goods and services through e-procurement is possible in the station	26.40%	31.20%	18.80%	18.40%	5.20%	2.45	1.21
Stakeholders can access information about work in progress through this IT platform	20.80%	29.20%	20.80%	23.60%	5.60%	2.64	1.21
Average						**2.7**	**1.23**

Audit Processes

The fourth objective of the study was to examine the role of audit processes on operationalization of decentralized units of Nairobi City County Government. The respondents were asked to rate 6 statements on audit processes on a five point Likert scale. The findings are presented in Table 4. The study findings showed that 40.0% of the respondents indicated that IT is helping to monitor service delivery in their stations, 38.8% indicated that IT is helping to evaluate performance in their stations while only 39.6% stated that customers can use their internet methods to seek services.

The findings also showed that those who stated that consumers of county services can use IT networks to access information of facilities in various sub Counties were only 47.2%. While 32.8% and 39.6% respectively indicated that IT networks in the internet are sources of feedback on service delivery in this station and that IT has increased consumers involvement in the employees work respectively. On average, the results indicate that majority of the respondents were neutral on the role of IT in the auditing process in Nairobi County. This was indicated by an overall mean of 2.99. The results imply that the use of IT in audit process in the County Government is fair. The use of IT in various processes for instance monitoring service delivery, evaluating performance, customers using their internet methods to seek services, consumers of county services using IT networks to access information of facilities and providing feedback on service delivery is still low in Nairobi City County Government. The findings agree with CIC report (2015) who indicated that financial controls through internal and external audits and stiffer penalties for culprits of corruption may functionally help to reduce the major risk factors and improve decentralization.

Table 4 Descriptive Analysis of Audit Processes

Statement	1	2	3	4	5	Mean	Std Dev
IT is helping to monitor service delivery in the station	17.20%	20.80%	22.00%	29.60%	10.40%	2.95	1.27
IT is helping to evaluate performance in the station.	17.20%	23.20%	20.80%	29.20%	9.60%	2.91	1.26
Customers can use their internet methods to seek services from this station	16.40%	18.00%	26.00%	25.60%	14.00%	3.03	1.29
Consumers of county services can use IT networks to access information of our facilities.	10.00%	17.60%	25.20%	34.80%	12.40%	3.22	1.17
IT networks in the internet are sources of feedback on service delivery in this station	16.40%	26.40%	24.40%	24.80%	8.00%	2.82	1.21
IT has increased consumers involvement in our work	14.40%	22.40%	23.60%	26.00%	13.60%	3.02	1.27
Average						**2.99**	**1.25**

Operationalization of Decentralized Units

The respondents were asked to rate 6 statements on operationalization of decentralized units in Nairobi County City Government on a five point Likert scale. The findings are presented in Table 5. The results showed that majority of the respondents, 82.8%, agreed that IT facilities are useful in devolving county functions, 71.2% on the other hand indicated that IT knowledge and skills have been useful in devolving county functions while those who agreed that Service delivery using IT platform is efficient and more reliable were 76.4%. The findings further indicated that 65.6% of the respondents agreed that using IT facilities and components service delivery has improved, 52.0% agreed that using IT platform enables employees to interact with customers regularly and those who agreed that customers can access relevant information about operations of this station on an IT platform were 55.2%.

Table 5 Descriptive results of Operationalization of Decentralized Units

Statement	1	2	3	4	5	Mean	Std Dev
IT facilities are useful in devolving county functions	4.00%	4.00%	9.20%	39.60%	43.20%	4.14	1.01
IT knowledge and skills have been useful in devolving county functions	6.00%	6.80%	16.00%	42.40%	28.80%	3.81	1.11
Service delivery using IT platform is efficient and more reliable	6.80%	5.60%	11.20%	45.20%	31.20%	3.88	1.12
Using IT facilities and components service delivery has improved	9.60%	10.00%	14.80%	47.20%	18.40%	3.55	1.18
Using IT platform employees do interact with customers regularly.	14.00%	12.80%	21.20%	37.20%	14.80%	3.26	1.26
Customers can access relevant information about operations of this station on an IT platform.	16.00%	15.60%	13.20%	39.20%	16.00%	3.24	1.33
Average						**3.65**	**1.17**

Correlation Analysis

The study used a correlation analysis to establish the association among the variables in the study. Pearson Correlation indicates the direction in one variable if another variable changes. The correlation findings are presented in Table 6. The findings indicated that IT infrastructure development was positively and significantly associated with operationalization of decentralized units in Nairobi City County as indicated by a positive Pearson correlation coefficient of 0.408 and a significant level of significance of 0.000 at 5% level of significance. This implies that an increase in IT infrastructure development practices for instance provision of computers and mobile phones to facilitate operations in the stations, connection of internet and website to help in operations of the station. The costs of operating computers, laptops and mobile phone, connecting stations with all services provided by the county government using IT and availing IT networks linkages will lead to effective operationalization of decentralized units.

The findings agree with Amado and Ray (2013) who indicated that a flexible IT infrastructure supports efficient growth and also helps firms to control their complexity related costs as the organization increases its operations. The findings also indicated that organization structure development was positively and significantly associated with operationalization of decentralized units in NCCG as indicated by a positive Pearson correlation coefficient of 0.467 and a significant level of significance of 0.000 at 5% level of significance. The findings imply that an increase in organizational structure development practices for instance facilitation of working arrangement by computers, laptops and phones, connection and working with supervisors using IT networks, working efficiently through IT driven platforms and linking different levels of operations through IT networks will lead to effective operationalization of decentralized units.

The finding are consistent with Agbim (2013) as well as Ottih (2008) who argued that knowledge can be leveraged by means of organizational structure to facilitate the flow of organizational knowledge at all levels of management thus improving performance.The results also showed that operating systems were positively and significantly associated with Operationalization of decentralized units in Nairobi City County Government as indicated by a positive Pearson correlation coefficient of 0.411 and a significant level of significance of 0.000 at 5% level of significance. The findings imply that an increase in the use of operating systems in various activities for instance financial transactions through e-payment in various stations, keeping financial records in e- platform that concern employees work, work plan assessment of performance through IT, availing records and reports through IT, accessing goods and services through e-procurement and stakeholders accessing information about work in progress through IT platform leads to effective operationalization of decentralized units. The findings agree with the argument by Muhura (2012) who indicated that presence of systematic management and control improves decentralization as it is promoting an active and open dialog between the team members as well as motivating them to better understand the market, follow the proper procedures for acquiring technical knowledge and spread the correct response model.

The findings also showed that audit process was positively and significantly associated with Operationalization of decentralized units in Nairobi City County as indicated by a positive Pearson correlation coefficient of 0.585 and a significant level of significance of 0.000 at 5% level of significance. The results imply that an increase in the use of IT in various audit process for instance monitoring service delivery, evaluating performance, customers internet to seek services and consumers of county services. Using IT networks to access information of facilities and providing feedback on service delivery is fair in NCCG leads to effective operationalization of decentralized units. Bharadwaj (2007) argues that IT capability increases firm performance due to increased income and reduced operation costs, from a perspective of competitive strategy, strategic integration reflects the capability of IT to support and shape low-cost, different or niche strategies from a resource-based perspective.

Table 6 Correlation Analysis

Correlations		**Infrastructure development**	**Organizational structure**	**Operating systems**	**Audit processes**
Infrastructure development	Pearson Correlation				
Organizational structure	Pearson Correlation	.619**			
Operating systems	Pearson Correlation	.604**	.612**		
Audit processes	Pearson Correlation	.550**	.537**	.582**	
Operationalization of decentralized units	Pearson Correlation	.408**	.467**	.411**	.585**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000

** Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis

The study used a regression model to establish the role of IT strategic capabilities on operationalization of decentralized units of Nairobi City County Government in Kenya. This enabled the study to answer the research questions. The results for model summary, fitness and coefficients are presented in a combined Table 7. The results indicate that IT strategic capabilities account for up to 37.6 % of the changes in the operationalization of decentralized units of Nairobi City County Government in Kenya. This is indicated by an R-square value of 0.376. The findings reveal that the other factors not investigated in the study account for the remaining 62.4% of the changes in operationalization of decentralized units of Nairobi City County Government in Kenya. The results imply that another study can be conducted to establish the other factors which account for the remaining 62.4% of the changes in operationalization of decentralized units of Nairobi City County Government in Kenya.

Table 7 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.613	0.376	0.366	0.719832

The results in Table 8 indicate that the overall model linking IT strategic capabilities to operationalization of decentralized units of Nairobi City County Government in Kenya was significant as indicated by a significant F statistic. The value was less than 0.05 which implies that that IT strategic capability can be used to predict operationalization of decentralized units of Nairobi City County Government in Kenya. In addition to this, the calculated F statistic value of 36.859 was compared with the F (4, 245) critical from the F distribution table which gave a value of 1.8307. Since F calculated that is 36.859 is greater than F (4,245) value of 1.8307, the study concluded that the model was significant to predicting operationalization of decentralized units of Nairobi City County Government in Kenya.

Table 8 Model Fitness (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	76.396	4	19.099	36.859	0.000
	Residual	126.949	245	0.518		
	Total	203.344	249			

The results for the model coefficients are presented in Table 4.16. Infrastructure development has a positive influence on operationalization of decentralized units of Nairobi City County Government in Kenya. The influence is however not significant as indicated by a significance level of 0.675. This implies that even though IT infrastructure development positively influences operationalization of decentralized units of Nairobi City County Government in Kenya, this influence is small and not significant.

The findings are also consistent with Murugu (2014) who indicated that capacity in terms of technical expertise and good IT infrastructure improves decentralization which ultimately has a positive influence in strengthening County governments. Organizational structure development has a positive influence on operationalization of decentralized units of Nairobi City County Government in Kenya. The influence is also significant as indicated by a significance level of 0.005. This implies that organizational structure development has a positive and significant influence on operationalization of decentralized units of Nairobi City County Government in Kenya. The findings agree with Huang and Liu (2009) who indicated that Organizational structure (organic and mechanistic) positively influence the employees' innovativeness in delivery of service thus improving performance. The findings also imply that a one unit increase in operating systems involving facilitation of working arrangement by computers, laptops and phones, connection and working with supervisors using IT networks. If the systems were working efficiently through IT driven platforms and linking different levels of operations through IT networks would lead to a 0.182 units improvement in operationalization of decentralized units.

The results also showed that operating systems have a positive influence on operationalization of decentralized units of Nairobi City County Government in Kenya. The influence is however not significant as indicated by a significance level of 0.962. This implies that even though operating systems positively influence operationalization of decentralized units of Nairobi City County Government in Kenya, this influence is small and not significant. The findings also agree with White (2011) who indicated that no organization can hope to perform the activities required for successful realizations of its objectives without a properly working operating systems. The results lastly indicated that audit process has a positive influence on operationalization of decentralized units of Nairobi City County Government in Kenya. The influence is also significant as indicated by a significance level of 0.000. This implies that audit process has a positive and significant influence on operationalization of decentralized units of Nairobi City County Government in Kenya. The findings also imply that a one unit increase in audit process practices for instance monitoring service delivery using IT, evaluating performance using IT, customers use their internet methods to seek services and consumers of county services. As well as using as well IT networks to access information of facilities and providing feedback on service delivery leads to a 0.400 units improvement in operationalization of decentralized units.

Table 9 Model Coefficients

Variable	B	Std. Error	t	Sig.
(Constant)	1.811	0.167	10.838	0.000
IT Infrastructure development	0.028	0.066	0.419	0.675
Organizational structure development	0.182	0.065	2.814	0.005
Operating systems	0.003	0.07	0.048	0.962
Audit processes	0.400	0.058	6.936	0.000

Based on these study findings, the study developed the overall tested regression model that can be used to test the role of IT strategic capabilities on operationalization of decentralized units of Nairobi City County Government in Kenya. Only the variables with a significant role (Organizational structure development and audit processes) were included in the model. The overall revised regression model is as indicated below:

Y = 1.811 + 0. 182 (Organizational Structure development) + 0.400 (Audit processes)

Conclusion of the Study

The study concludes that infrastructure development has a positive but insignificant influence on operationalization of decentralized units of Nairobi City County Government. There is fair organizational structure development in NCCG in terms of facilitation by computers, laptops and phones, connections of IT networks and IT driven platforms. The study concludes that operating systems have a positive but insignificant influence on operationalization of decentralized units at Nairobi City County Government. The study findings led to the conclusion that audit processes have a positive and significant influence on operationalization of decentralized units at Nairobi City County Government. Furthermore, the study concludes that the use of IT in audit processes in the County is moderate especially with regard to monitoring service delivery and evaluating performance.

Recommendations of the Study

The County government should invest more in developing infrastructure in the County for instance by provision of computers and mobile phones to facilitate operations in the stations. The connection of internet and website also help in operations of the station and provision of IT networks linkages. This will lead to improved operationalization of decentralized units of Nairobi City County Government. The County should aim to improve the existing organizational structure. This can be done through facilitation by computers, laptops and phones, connections of IT networks and IT driven platforms which can lead to faster information sharing and cost efficiency; which positively influences operationalization of decentralized units. The county government should invest more in systems that involve financial transactions through e-payment in various stations, keeping of financial records in e- platform that concern employee's work and work plan assessment of performance through IT. This is because they have been found to positively trigger operationalization of decentralized units.

Conflict of Interest

No potential conflict of interest was reported by the authors.

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