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Strategic Innovation and Service Delivery in Public Universities in Kenya: A Case of Kenyatta University

Maroa Stella Gati[1], Dr Mary Namusonge[2]

[1]*Correspondent Author, Business Administration Department, Kenyatta University, Kenya*

[2]*Lecturer, Business Administration Department, Kenyatta University, Kenya*

ABSTRACT

Strategic innovation is a strategic tool that can be used to align the institution's resources and capabilities with opportunities in the external environment in order to enhance survival and long term success of the organization. Innovation promotes use of technology consequently impacting positively on service delivery. Public universities reforms have been a necessary and on-going policy objective for the Government of Kenya. Innovation as one of the approaches to the reforms is intended to induce an overhaul the public university system to better serve the needs of both government and the citizens with improved delivery of public services. In Kenya technology in public institutions has not been effectively used to enhance service delivery more so institutions where technology use has been embraced, its impact on service delivery has not been assessed effectively. This study applied the institutional theory, diffusion of innovation theory and stakeholders theory of management to determine how strategic innovation at Kenyatta University impacts on service delivery. The general objective of this study therefore was to determine the effect of strategic innovation on service delivery in Kenyatta University. Specific objectives included finding out the influence of eLearning, online student registration and use of e-messaging services on service delivery in Kenyatta University. A population of 72,000 students admitted to Kenyatta University was used from which random sampling was conducted to a sample of 200 students using Nassiuma's formula. Data was collected by disbursing physically the questionnaires to the students. Descriptive and regression analysis was conducted using SPSS 22 to provide findings on the study. The study conducted a multiple regression analysis to estimate the model for the study. The study had a coefficient of correlation R of 0.912 an indication of strong of correlation between the variables and a coefficient of adjusted R^2 was 0.814.This means that there was a significant correlations between the variables and service delivery at Kenyatta University however other factors that are not considered in the research paper contribute approximately 18.6% of the service delivery at Kenyatta University. Therefore, a very extensive further research is highly required to investigate and come up with other factors of the viability to service delivery at Kenyatta University. The study concluded that the strategic innovation of the public universities ranges from the products and services offered and is determined by the technology that is revolutionizing the current global world and has improved the service delivery at Kenyatta University. A strategic innovation brings a lot of advantages and has a great impact on human and business daily life. Therefore, strategic innovation development is the best choice in helping higher institution of learning stay on track.

Cite this Article:

Maroa, S., & Namusonge, M. (2019). Strategic Innovation and Service Delivery in Public Universities in Kenya: A Case of Kenyatta University. International Journal of

Current Aspects, 3(III), 199-211. http://journals.ijcab.org/journals/index.php/ijcab/article/view/39

1. INTRODUCTION

The need for governments to deliver public services in new, better and cheaper ways has been a topic of research in recent years (Hughes, Moore & Kataria, 2015). The combination of levelled public finances with major social challenges means that public services need to become more productive and develop new ways of working (Gallouj & Djellal, 2014). Innovation in the public sector is therefore a pressing task, emerging only recently in literature, as public sector players have traditionally not been faced with competition and market dynamics, and so the incentives to innovate were not present in the past (Gallouj & Djellal, 2014). The strategy to achieving institutional goals should mainly focus on service delivery in this current era of development. For sustainability purposes most organizations globally take time to review their ways of service delivery to their customers, this also helps the growth of the institutions. An example of higher learning institutions where information communication technology is in place, it assists in delivering services in real time towards the need of its clients such as generating student's transcripts, module syllabus, student financial reports and other services immediately.

Firms, companies and organizations have turned to using innovation as a tool to stay ahead of their competitors. Innovation enables development of new solutions aimed at improving business operations and enhancing service delivery (Friesen, 2009). Institutions such as banks have vastly utilized innovation in the 21st century to better their service delivery by using wire transfers, ATMs, mobile money transfers and internet banking (Madhavaram & Hunt, 2008), giving some a competitive advantage over others. Strategic innovation serves as a catalyst in growth and success of businesses and organizations and ensuring their sustainability (Abir & Chokri, 2010). It is not just about invention of products, for clients but also includes developing and improving systems for service delivery (Verma & Jayasimha, 2014). Service delivery becomes effective when firms provide new and creative solutions for their clients. Such solutions could range from integrating technology, using knowledge and linking resources within an organization (Miles, 2008). Strategic innovation becomes a tool for organizations to use in moving away from conventional ways of running operations to exploiting other opportunities that have been unused with an aim to expand revenue (Mathu, 2017).

The world today applies strategic innovation in Universities as a way of improving the educational systems (O'Neil & Perez, 2014). Today, the use of computers offers endless choices of data available to all and has become a symbol of transformation as far as service delivery is concerned (Isman & Dabaj, 2014). Approaches of delivering services in institutions have been the major concern and the use of innovation has been hinged on this to enhance the quality especially in higher learning institutions. A Study in the United States (Sears, 2014) recommends the acquisition of specified technology as well as innovative skills by the university leadership for effective implementation the use of technology into their operations. It's the responsibility of the university leadership to assist the university administrative staff, lecturers and students in acquiring computer literacy skills so as to enhance the use of technology as they perform their duties which was to also result into improved university services and efficiency. The University management should also ensure that all persons within the University understand how to effectively use computers and digital technology. The safe use of these technologies should also be put into consideration (Hague & Williamson, 2014). The concept of service innovation is derived from intertwining service delivery and innovation, which traditionally has been used to refer to creation of new ways of

offering services in a manner more friendly, easy and effective (Michel, Brown, & Gallan, 2008). Unfortunately, product innovation has been on the forefront of most innovation departments of companies and organizations, forgetting the importance of service innovation, and limiting expansion and development of new ways to offer services. Innovation therefore has to be multifaceted to ensure that as organizations develop new product, new and better service delivery ways are employed (Gallouj & Savona, 2009).

Rouse (2016) defines strategic innovation as process of developing or redeveloping operational strategies to create a competitive advantage and spur business growth. Strategic innovation revolves around development of new markets and making strides in improving customer value with an aim to create a competitive advantage (Worch, Truffer, Gebauer, & Truffer, 2012). Strategic innovation is the creative departure from conventional ways of running business operations and switching to newer technologies and knowledge use that could potentially result in endless and unknown possibilities from the new ideas being developed (Markides & Oyon, 2010).

In the past, innovation was only a private business interest, with its main focus being product innovation. Over time the importance of innovation in service has grown. This new field of service innovation attempts to free itself from technologist and industrialist conceptions, bridge the innovation gap in post-industrial economies and make invisible innovation in all its forms: organization, process, product, concept, social innovation, visible (Gallouj & Djellal, 2014). The Public sector reform has been an imperative and a continuous policy objective for the Government of Kenya. Innovation as one of the approaches to the reforms is intended to induce an overhaul the public administrative system to better serve both the government and the citizens with improved service delivery to the public in order to reduce poverty, improve livelihoods, and sustain good governance. (Hope, 2013). According to Anderson & Billou(2007) strategic innovation is the identification of gaps in the market, developing ways, mechanisms and services to fill the gaps, and obtaining a competitive advantage thereafter. Najmaei (2010)suggests that innovation is important in ensuring success in service delivery and creating a competitive atmosphere. Research into innovation (Mahmoud-Jouini and Charue-Duboc, 2008; Jaruzelski et al., 2012; Kanter, 1998; Jaskyte, 2008) has resulted in a new, wider view about the nature of innovation: radical technological inventions are no longer considered as the only types of innovations, and research and development (R&D) systems (Jaruzelski et al., 2012). Innovations can also be continuous and less tangible improvements are nowadays counted among innovations, and the role of everyday business as an important arena for the creation of innovations has been acknowledged (Lundvall, 1992; Schienstock, 1999; Schienstock and Hamalainen, 2001). Service innovation has really improved due to the new thoughts and capabilities to understand and highlight the importance of service in context. Evaluation of strategic innovation in product companies is evaluated by number of ideas, quality of ideas, implementation of these ideas and success in overall (Malinoski, 2000). In this study however, strategic innovation in Kenyatta University shall be evaluated by assessing e-learning services, online student registration and e-messaging services.

Globally the business environment is rapidly changing due to current trends of technological upheavals, economic fluctuations and shifts in labour movement all with public demands for better services. All this has necessitated organizations to embrace various innovation strategies in order to provide better services to its customers. Efficient and effective service delivery requires an elaborate evaluation of the user needs and expectations; Having a connection between the development, delivery of the service and the needs of the user; Checking the performance of the service and its end result; ensuring sustainability of improved service delivery in line with the user demands and developing the skills needed to

sustain service delivery and sharing and applying best practices and knowledge across the organization (Emrouznejad, & Cabanda, 2014). Providing quality service is about satisfying and even enhancing the organization's capability to deliver much more value than the customer's expectation. This means it's the difference between customer expectation prior to the service encounter and the actual perceived service that the organization provides (Oosterom, 2007). In addition, innovative and top quality service provision makes an organization reliable hence delivering customer satisfaction. Besides the efficiency and effectiveness, service delivery is hinged on the appropriateness and timeliness of the strategy employed. Performance of these innovation strategies may not be devoid of errors, especially due to different systems and parties involved, system breakdown, congestion in peak periods, complexity and inflexibility in service delivery. For an organization to compete in the turbulent market environment coupled with fast technological changes, it is ideal to do things differently and innovate in a timely manner to safeguard market territories and stay ahead of the competition (Oosterom, 2007; Chemengich, 2013). The organization should not underestimate the competitive challenge faced as it would be risky if competitors react more to potential challenges the same way. The Kenya Government appreciates the importance service delivery innovation as a necessity to the Public Service in discharging it duties. The public sector plays a big role in providing extremely important services in Kenya. In this regard a slight shift in service delivery, changes the experience of not only the citizens and residents of Kenya but also the experience of visitor. This is in the sense that a slight improvement can have a big impact positively. Innovation is a creative process and for it work across the public service for better results and customer satisfaction there is need to put in place a strategy that both guides and harmonizes the innovations put in place In the public service. Public service delivery innovation works best when standardized, accepted and replicated across the public service.

The Public Service Delivery Innovation Strategy is an approach envisaged to modernize public services in Kenya. The strategy shows how the Government is prioritizing on innovation. Through the implementation of the Strategy the Government has opened doors for innovation from different platforms that was to enhance effective and equitable delivery of quality service for a high performing Public service. This initiative is demanding due to its complexity of ensuring the Government continuously commits itself to provide quality services to the public which can as well be viewed as ambitious. It's a direction in which the Government needs to have a balancing act of different factors; scarce resources, competing interests, emerging new trends in the local and global context and service user expectations. The intentions of the Government of Kenya is to utilize the ideas and creativity of our public servants and other stakeholders to technologize public service delivery in order to change the public service experience in a gratifying way. Effective service delivery demands that client's needs are met. Parasuraman, Zeithaml & Berry (2008) defines service quality as the difference between a clients' expectation of a service offered by the firm and the clients' perception of the service being offered. According to Ramadani and Gerguri (2011), quality service delivery is how best the service is delivered in tandem with client's expectations. Quality service delivery means consistently conforming to the customers' expectations.

Innovation in public service delivery in Kenya has been well captured in Kenya Vision 2030: Towards a Globally Competitive and Prosperous Kenya. The Kenya Vision 2030 document demonstrates science, technology and innovation as a means to foster global competitiveness for wealth creation, national prosperity and a high quality of life for its people. Specifically, the document states that "the government was to create and implement an STI policy framework to support Vision 2030." Further, Articles 10 and 232 of the Constitution of Kenya, 2010 emphasize service delivery that is responsive to the needs of the citizenry. This

calls for creativity and innovation. The Government has since 2006 strived to create awareness and streamline innovation in MDAs. Service delivery innovations have therefore been factored in Performance Contracts; a circular on Management and Coordination of service delivery innovations in the Public Service was issued in December 2009; Public Service Recognition and Award Scheme for innovation was introduced in 2011; and Kenya has been participating in public service innovation competitions regionally and internationally. The Government has established institutions mandated to management of innovation, notably; the National Commission for Science, Technology and Innovation (NACOSTI) and Kenya National Innovation Agency (KENIA). Customer's perceived quality service delivery is derived from comparisons by clients, of expectations with their perception of service delivery by the suppliers (Saunila, Ukko & Rantanen, 2012). Clients' expectations as postulated by Lusweti (2009) are their perceptions of service that acts as a standard against which service performance is evaluated. If customers' expectations outweigh performance, then perceived quality is unsatisfactory and client dissatisfaction occurs (Rosli & Sidek, 2013). Oke (2010) identifies four factors that normally influence the customers' expectations; personal needs, word of mouth communications, external communications and past experience (Mabrouk & Mamoghli, 2010). A gap exists if clients' perception of service delivered does not meet their expectations (Weru, 2010). This gap can be bridged by pinpointing and executing strategies that affect expectations or perceptions or, or both (Varis & Littunen, 2010).

University education in Kenya started in 1963 with a handful of students enrolled in Nairobi University College. Since then, the sector has witnessed phenomenal and exponential growth and as of 2017, there were a total of 31chartered public universities and 6 of newly established university constituent colleges that were awarded charters recently to become fully fledged public universities. The rapid growth in higher education sector can be attributed to the increased number of student enrolling for various programmes, reduced government funding which has heightened students' expectation of service quality and proliferation of competitive private universities. In Kenya, there is a continuing spirited campaign that suggests that every county must have a public university. As a result, quality service delivery is therefore gaining a greater prominence in a bid enhance customer satisfaction. Most public universities in Kenya are facing a myriad of challenges in keeping and maintaining the required quality standards of education. Commission for University Education (CUE), had once and on several occasions stopped accreditation and closed campuses and of some universities. Competition amongst universities had risen putting into consideration funding from the exchequer has been reducing, the performances of many public universities have adversely been affected more so on the quality of service delivery. To therefore in order to attract, remain relevant, nurture and adequately equip graduates with the requisite skills amid in a constantly changing environment in the sector, most public universities have embraced serious innovation strategies in to achieve competitive advantage. Kenyatta University is a public university in Kenya with its main campus located about 18 Km from the city of Nairobi. The university has 9 campuses in Kenya. The institution provides high quality programmes that attract individuals aspire to be globally competitive. To achieve this, the university has embraced innovation and heavily invested in infrastructure and facilities (process and organizational innovation) to offer students the best experience in quality academic programmes (product innovation) under a nurturing environment in which students learn and grow. The university has school of virtual and open learning that allows students to study through open and distance learning modes. The university also has an online portal for students to access essential services.

2. PROBLEM STATEMENT

In most institutions, service delivery is still stagnant and traditional ways of offering services are being used due to lack of innovation (OECD, 2008). Majority of institutions in developing countries have not embraced online learning techniques such as eLearning consequently making them lag behind in terms of innovation and technology use. Despite knowing that innovation and investment in technological advancements is beneficial in enhancing service delivery, majority of institutions have not seemed to attain a competitive advantage by switching to these systems. On the other hand, some of the institutions that have exploited technological advances do not fully utilize innovation which could improve education services (Singh, Pathak, & Naz, 2007). This could be attributed to the scanty research that showcase the importance of using innovation to enhance service delivery. This study therefore provides insight on the role of strategic innovation in improving service delivery in academic institutions. Kenyatta University has been on the forefront of innovation and excellence. Technological advancements have seen the use of eLearning and distance learning systems put to use for students. Online registration systems have been utilized and allowed students to conduct registrations remotely. However, since introduction of these services, a comprehensive review of literature reveals that no significant research has been done to determine the effects of these systems, or the challenges associated with it. Without conducting research to determine the impact of the systems, then the benefits of the systems maybe unknown. This study therefore was conducted to determine the role of innovation in service delivery.

3. OBJECTIVES

The general objective of the study was to determine the role of strategic innovation on service delivery in Kenyatta University.

The specific objects of the study were:

i. To determine the effect of eLearning on service delivery in Kenyatta University
ii. To examine the effect of online student registration on service delivery in Kenyatta University
iii. To establish the effect of using e-messaging on service delivery in Kenyatta University

4. REVIEW OF LITERATURE

4.1 Institutional Theory

Institutional theory was developed from the works of Meyer and Rowan (1977) and DiMaggio and Powell (1983). The theorists of this theory postulate that employees are expected to adhere to the institution's work environment, this is because the work environment contributes more to business development than external influence. In this case, the work environment comprises o the characteristics that contribute to change in the organisation. Innovations that enhance the operational efficiencies of an organisation are permitted within the organisation and with time they are adopted whether they improve efficiency or not. The institution is guided by set statutes and processes "institutional myths" for purposes of direction and going concern. A study conducted by Sossion (2015) reveals that highly likely these are adopted in order for the organizations sake to obtain or retain relevance in the operational environment. In the context of Kenyatta University, this theory applies as it represents the statutes and processes that the university stakeholders need to comply to in order to deliver the university mandate. The importance of such statutes gives the university a sense of authority or legitimacy that enhances the university stability at all times even in challenging situations. Institutions assume structural changes within the work

environment in different forms like change in job titles, review of procedures and institutional roles. The trappings of legitimacy if not coerced ensures continued improvements in service delivery and sustainable organizational survival. However, it's good to note that political manipulation and other factors internal or external can influence the formal structures of the Authority put in place thus affecting efficiency and quality of service. This theory applies to this study as it addresses the formal structures put in place within Kenyatta University .The university employees and other stakeholders need to conform to the set rules, regulations and processes in order to deliver the university mandate.

4.2 Diffusion of innovation theory

The diffusion of innovation theory developed by Rogers in (1962) explains how, over time, an idea or product gains momentum and diffuses (or spreads) through a specific population or social system. In this theory, after innovation of a product or service, it is not immediately accepted within the population. Its acceptance occurs gradually through diffusion from one group of a population to the other. Acceptance of an innovation diffuses through five main groups within a population namely innovators, early adopters, early majority, late majority and the laggards. Innovators are the usually the inventors, and the people willing to take risks to try out new technology. They adopt innovations the quickest and earliest. The early adopters are a group of people usually holding leadership roles within institutions and usually understand the essence of change, and are eager to try our new innovations. Early majority are a group of people who adopt technology earlier than most people, and do not require much convincing to accept new innovations. Late majority are people who only adopt innovation after majority of people have tried it and approved it. The laggards are conservative people who only adopt technology due to pressure from the society or only when they cannot do without the technology(Rogers, 2003). The theory explains that adoption of innovation occurs when the innovation offers a relative advantage over the currently used product or service, when it offers ease of use and it is result orientated (LaMorte, 2016). The diffusion of innovation theory explains adoption of innovation or technology in institutions, and how quickly it is adopted. This mainly depends on the people at the decision making table, and how quickly they would like to adopt technology. Improving service delivery at Kenyatta University requires adoption of technology such as online registration systems which help in streamlining of operations.

4.3 Stakeholder Theory of Management

The stakeholder theory was first developed by Freeman in 1980. The theory explains a stakeholder as a group of people or an individual with interest in an organization. In this regard, the stakeholder can directly or indirectly be affected by the actions, objectives, policies and strategies of the organization and vice versa. A stakeholder can be student, employee, supplier, shareholders, customer or a member of the board of directors. The stakeholder theory states that organization should attach great value to the stakeholder (who, in this case include the customer, employees and the entire organization offering the services), with nil support from stakeholders the organization would not be sustainable or crumble (Donaldson & Preston, 1995). This is partly because the university students or clients are the reason the university exists since it is for them that the services are designed, created and delivered. In delivering its services, the university relies on its employees and strategic partners who offer the services to the students. Keeping the interest of each and every stakeholder geared towards the same direction is an important factor for management to put into consideration. This theory has three approaches that work hand in hand i.e. the instrumental approach, normative approach and descriptive approach. The instrumental approach points out a link of corporate goals achievement and stakeholder management with

the use of factual data. The most important approach which describes the behavioural and physiological direction for strategy, functions and leadership of an organisation is the normative approach. The descriptive approach describes the features of an organisation and its intrinsic attributes (Donaldson & Preston, 1995). The main aim of the Theory is to identify the different stakeholders and balance their different interests. This theory applies to this study as it enhances the consideration of the interests and capabilities of the students, employees and university as the key stakeholders for whom the efficient and effective service delivery is meant.

5. CONCEPTUAL FRAMEWORK

The study shall attempt find out the role of strategic innovation on service delivery in Kenyatta University. The dependent variable shall be service delivery while independent variables shall be eLearning, online registration systems and Bulk SMS system.

Independent Variable   **Dependent Variable**
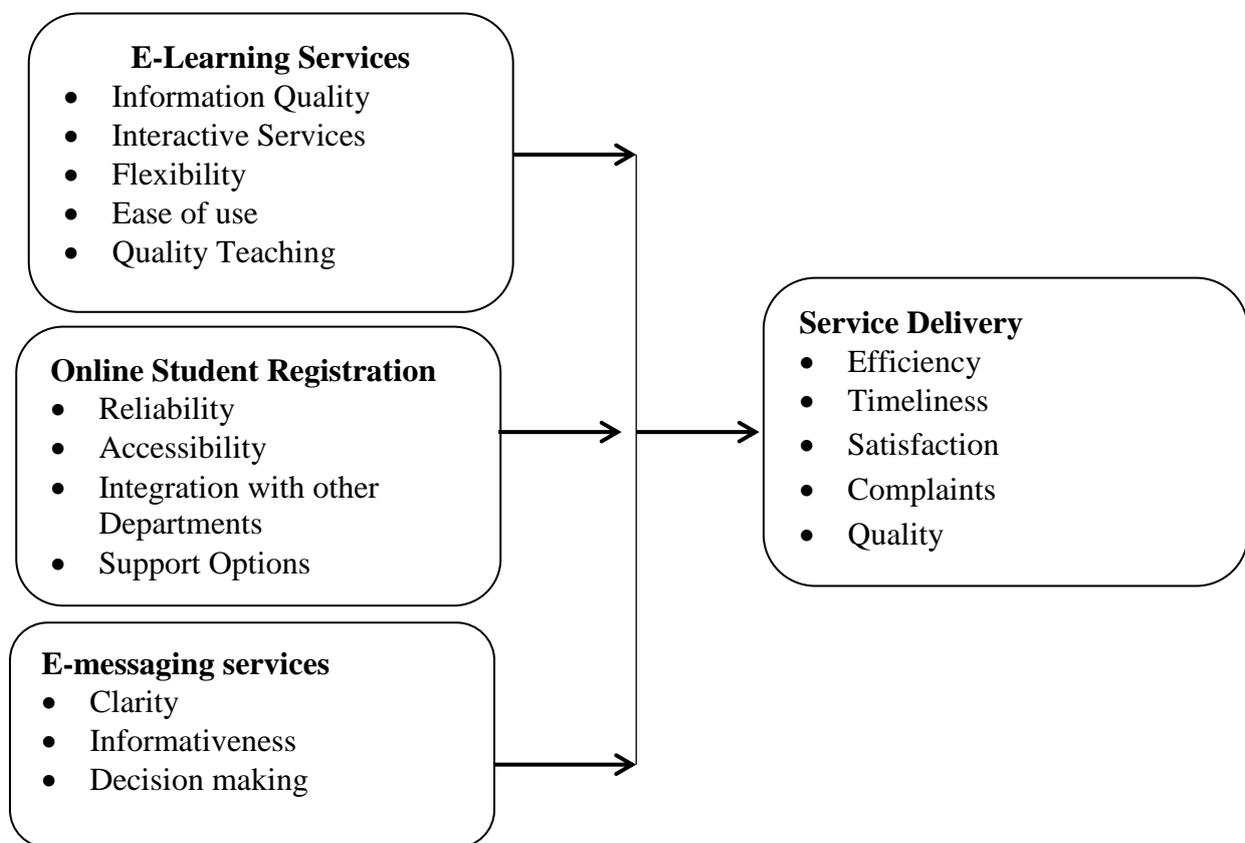

Figure 1: Conceptual Framework

6. RESEARCH METHODOLOGY

A descriptive research design was used in this study. This type of design was applicable in this study since the questionnaire used collected categorical data for both dependent and independent variables. The target population of this study was 72,000 students from Kenyatta University (Kenyatta University, 2014) who access innovative technology such as student registration systems, eLearning and student portals within the university. It included students pursuing undergraduate and post-graduate degrees. Collected data was entered in SPSS and descriptive analysis was done using figure tables. The data collected was purely quantitative and underwent analysis by descriptive statistics. Mean score and Standard deviation were

analysed by use of the Likert scale in order to establish the relationship between strategic innovations and service delivery of public universities in Kenya. There was use of frequencies, percentages, means and other central tendencies in data analysis. Multivariate regression model was used to show relationship between dependent and independent variables. A multiple linear regression model was used to establish the influence of strategy innovations on service delivery at Kenyatta University.

7. RESULTS

The findings of Model Summary, ANOVA and Coefficient of Regression are indicated in subsequent sections. The researcher used SPSS to code, enter and calculate the measurements of the multiple regressions for the study. The Coefficient of determination explains the extent of the changes in the dependent variable that can be determined by the modification of the independent variables or the percentage of variability in the dependent variable that is well explained by the following independent variables namely; E-Learning, E-Messaging and online students' registration. The findings are shown in Table 1.

Table 1: Model Summary

R	$R2$	The Adjusted R^2	Standard. Error of the Estimate
0.912	0.814	0.841	0.4439

The findings show the independent variables that were studied explain 81.4% of service delivery at Kenyatta University which is represented by the adjusted R2. This means that other factors that are not considered in the research paper contribute approximately 18.6% of the service delivery at Kenyatta University. Therefore, a very extensive further research is highly required to investigate and come up with other factors of the viability to service delivery at Kenyatta University.

ANOVA comprises of the computations that give rise to information pertaining levels of variance within particular regression models and hence forms a basis for the testing of significance. Table 2 shows the analysis of variance.

Table 2: Analysis of Variance (ANOVA)

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1.433	4	0.209	3.2	.0013ª
Residual	5.316	44	0.212		
Total	6.812	48			

Dependent variable: Service Delivery
Predictor Variables: E-Learning, Online students registration, E-messaging

From these findings, the significance value is .0013 which is even less than 0.05. Therefore, the model is statistical significance when it comes to prediction of how E-Learning, online students registration and e-messaging influence service delivery at Kenyatta University. The F critical at 5% level of significance was 3.20. Since F critically is far much greater than the F calculated (value = 2.21), this satisfies that the overall model was very significant.

The multiple regression analysis was conducted to enhance determination of the relationship that exists between strategic innovations and service delivery at Kenyatta University. Table 3 shows the results of coefficient of regression generated.

Table 3: Regression Coefficient

Model	Unstandardized Coefficients		Standardized coefficients		
	B	Std. Error	Beta	T	Sig.
(constant)	1.206	1.231		1.512	.0346
E-learning	.458	.228	.171	4.562	.0245
Online students registration	.721	.153	.210	3.383	.0253
E-Messaging	.773	.321	.063	3.979	.0236

Dependent variable: Service Delivery

As per the SPSS generated in table 3, the equation ($Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$) becomes: $Y = 1.206 + 0.458 X_1 + 0.721 X_2 + 0.773 X_3$. Whereby: Y = Service Delivery at Kenyatta University, X_1 = E-Learning, X_2 = Online students registration and X_3 = E-messaging. The equation of regression above establishes that taking all factors into consideration E-Learning, E-Messaging and online student's registration remains constant at zero, service delivery was at 1.206. The results also shows that taking all other independent variables at zero, an increase in E-learning by one unit lead to an increase in service delivery at Kenyatta University by 0.458; an increase in online students registration by one margin will lead to a 0.721 increase of service delivery at Kenyatta University; a unit increase in E-messaging lead to 0.773 increase in service delivery at Kenyatta University. This shows that E-messaging contributes the largest share in the service delivery at Kenyatta University, followed by online students' registration while E- Learning contributes the minimum to the service delivery.

The study established that E-learning had a p value of 0.001<0.05 an indication that the variables significantly influenced service delivery. This is supported by Alsabawy & Cater-Steel (2012) who realized that institutions invested a lot in technological services through the use of eLearning management systems aimed at offering education via electronic channels. Service quality is an important component of eLearning systems, and its success is dependent on the systems responsiveness, availability and promptness. The p value of online students registration was 0.001<0.05 an indication that the variable significantly influenced on service delivery. This is in support of Crowd (2018) stated that Online registration systems can be effectively used to facilitate communication from institution faculty to students and vice versa, manage student admissions and registrations, provide billing functionalities and store student information. The study pointed out that E-messaging had a p value of 0.001<0.05 an indication that the variable significantly influenced on service delivery. This supported by Awodele et al. (2009) whom stated that using an SMS system to relay results was efficient and quick. SMS notifications on as a form of result checking systems was revealed to offer convenience, save time and reduced mobility thereby improving service delivery in educational institutions.

8. CONCLUSION

The implication of the findings is the need for the management to align strategic innovation strategy with the wider business strategy. The management needs to clearly communicate the importance of the strategic innovations to staff and students in totality so as to improve service delivery. They also have to demonstrate their capability in understanding the customer insights and offer new and significant value if their long term success and survival is to be guaranteed. The study can conclude that indeed there is a significant relationship between the dependent and independent variables of the study. The main aim of this study was to get an understanding on the influence of strategic innovations on the performance of

public universities in Kenya. The indicators of service delivery were identified to have been: efficiency, timeliness, satisfaction, complaints and quality. The innovative strategies were identified as: e-learning, online student registration system and e-messaging services. Based on the findings, the researcher has sufficient evidence to conclude that indeed there is a relationship between strategic innovation and service delivery in public universities.

The researcher concludes that universities that adopt and are successful in strategic innovations such as introducing open and distance learning, aligning their academic programmes to vision 2030 and the new constitution achieve improved service delivery as indicated by increasing number of students enrolled each academic year, increased number of PhD and Masters graduates, and increased enrolment in open and distance learning. The study there concludes that there is a strong positive relationship between strategic innovation indicators and the service delivery of public universities. The study has established that there is a strong positive relationship between strategic innovation and competitiveness of the public universities. The study concludes that universities can obtain competitive advantage through strategic innovations that are effective and create efficiency. The study findings gives the evidence to the researcher to conclude that strategic innovation of the public universities ranges from the products and services offered and is determined by the technology that is revolutionizing the current global world and has improved the service delivery in public universities. Therefore with strategic innovations universities can be able to comply with the set budgetary levels, reduce costs and save more and be sure to allocate funds to intended purposes which in turn translate to improved service delivery. Evidently, considering how fast the world is moving towards customer satisfaction public universities should make immediate step to catch up if it wants to keep in track. Strategic innovations brings a lot of advantages and has a great impact on human and business daily life. Therefore, strategic innovation development is the best choice in helping higher institution of learning stay on track.

9. RECOMMENDATIONS

The study recommends that the institutions invest more in strategic innovation so as to improve on the current situation on service delivery in the universities and increase the countries competitiveness, productivity and growth through investment in strategic innovations. The quality of the system used is bound to dictate the level of service delivery that transforms to customer satisfaction. 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 more ways of improving service delivery.

REFERENCES

Abir, M., & Chokri, M. (2010). Dynamic of Financial Innovation and Performance of Banking Firms : Context of an Emerging Banking Industry. *International Research Journal of Finance and Economics*, *51*(51), 17–36..

Alsabawy, A. Y., & Cater-Steel, A. (2012). Identifying the determinants of e-learning service delivery quality. *Proceedings of the 23rd Australasian Conference on Information Systems*, 1–10. Retrieved from http://dro.deakin.edu.au/view/DU:30049073

Anderson, J., & Billou, N. (2007). Serving the world's poor: Innovation at the base of the economic pyramid. *Journal of Business Strategy*, *28*(2), 14–21. https://doi.org/10.1108/02756660710732611

Awodele, O., Adagunodo, E. R., Akinwale, A. T., Idowu, S., & Agbaje, M. (2009). An improved SMS user interface result checking system. *Interdisciplinary Journal of Information, Knowledge, and Management*, *4*, 51–62.

Crowd. (2018). Best K-12 Student Information Systems Software in 2018. Retrieved June 25, 2018, from https://www.g2crowd.com/categories/k-12-student-information-systems

Friesen, N. (2009). *Re-thinking e-learning research: Foundations, methods and practices*. New York: Peter Lang.

Gallouj, F., & Savona, M. (2009). Innovation in services: A review of the debate and a research agenda. *Journal of Evolutionary Economics*, *19*(2), 149–172.

Governors State University, C. for O. L. and T. (2008). E-learning glossary. Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/1161/www.govst.edu/elearning/defa ult.aspx

Kenyatta University. (n.d.). E-learning management system. Retrieved June 25, 2018, from http://www.ku.ac.ke

Kenyatta University. (2014). Students & Staff. Retrieved from www.ku.ac.ke

LaMorte, W. W. (2016). Diffusion of Innovation Theory. Retrieved June 25, 2018, from http://sphweb.bumc.bu.edu/otlt/MPH-Modules/SB/BehavioralChangeTheories/BehavioralChangeTheories4.html#

Madhavaram, S., & Hunt, S. (2008). The service-dominant logic and a hierarchy of operant resources: developing masterful operant resources and implications for marketing strategy. *Journal of the Academy of Marketing Science*, *36*(1), 67–82. https://doi.org/10.1007/s11747-007-0063-z

Markides, C., & Oyon, D. (2010). What to do against disruptive business models: when and how to play two games at once. *MIT Sloan Management Review*, *54*(4), 25–32. Retrieved from https://dialnet.unirioja.es/servlet/articulo?codigo=2491554

Mathu, H. (2017). Effect of Strategic Alliance on Competitive Advantage. *The International Journal of Humanities & Social Studies*, *5*(6), 84–88.

Michel, S., Brown, S., & Gallan, A. (2008). An expanded and strategic view of discontinuous innovations: deploying a service-dominant logic. *Journal of the Academy of Marketing Science*, *36*(1), 54–66.

Miles, I. (2008). Service innovation viewed through a service-dominant logic lens: a conceptual framework and empirical analysis. *IBM Systems Journal*, *47*(1), 115–128.

Mohammad, M. A., & Norhayati, A. (2003). A short message service for campus wide information delivery. *4th National Conference on Telecommunication Technology, NCTT 2003 - Proceedings*, 216–221. https://doi.org/10.1109/NCTT.2003.1188339

Najmaei, A. (2010). Strategic management of strategic innovation. *SSRN Electronic Journal*, (September). https://doi.org/10.2139/ssrn.1594430

Nassiuma, D. K. (2000). *Survey Sampling: Theory and methods*. Njoro: Egerton University Press.

OECD. (2008). *Innovative Service Delivery*. Cologne.

Rogers, E. (2003). *Diffusion of Innovations* (5th ed.). New York: Free Press.

Rouse, M. (n.d.). What is messaging? Retrieved September 13, 2018, from https://whatis.techtarget.com/definition/messaging

Rouse, M. (2016). What is strategic innovation? Retrieved June 21, 2018, from https://searchcio.techtarget.com/definition/strategic-innovation

Shepherd, R. (2011). University streamlines student registration with help from IBM. Retrieved June 25, 2018, from https://www.city.ac.uk/news/2011/jan/university-streamlines-student-registration-with-help-from-ibm

Singh, G., Pathak, R. D., & Naz, R. (2007). E-Learning and Educational Service Delivery- A case study of the University of the South Pacific (USP) e-Learning and Educational Service Delivery- A case study of the University of the South Pacific (USP), 1–11.

SoftKenya. (2016). KU Student Portal: Kenyatta University Student Portal. Retrieved June 25, 2018, from https://softkenya.com/education/ku-student-portal/

Verma, R., & Jayasimha, K. R. (2014). Service delivery innovation architecture: An empirical study of antecedents and outcomes. *IIMB Management Review*, *26*(2), 105–121. https://doi.org/10.1016/j.iimb.2014.03.002

Worch, H., Truffer, B., Gebauer, H., & Truffer, B. (2012). Absorptive capacity, learning processes and combinative capabilities as determinants of strategic innovation. *European Management Journal*, *30*(1), 57–73. Retrieved from https://econpapers.repec.org/article/eeeeurman/v_3a30_3ay_3a2012_3ai_3a1_3ap_3a57 -73.htm

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