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Effects of Process Innovation Strategieson Service Delivery at Isiolo County Referral Hospital Kenya

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ABSTRACT
Management places a high value on innovation as a means of ensuring the long-term viability of the organization and encouraging outstanding performance. A particular institution's success is heavily influenced by the innovative tactics it has amassed throughout a certain time period. The study's goal was to determine the impact process innovation strategy influence service delivery at Isiolo County Referral Hospital. Researchers set out to determine whether process innovation strategy affected Isiolo County Referral Hospital's overall service delivery. Building the Culture of Innovation Theory was used in this research. The health management committee, supply chain officers, department supervisors, department heads, and ICT officials were among the 80 members of the target group. 80 people were chosen as the sample size from the target demographic using stratified random sampling. The validity and dependability of the instruments were examined using Cronbach's alpha coefficient. Clarifying the research's goal to participants was an important step in adhering to ethical standards. Descriptive study design was modified by the researcher. A statistical program for social science (SPSS) was used to evaluate data based on descriptive statistics acquired by open-ended and closed-ended questionnaires, as well as through the use of descriptive statistics like percentages, figures, frequencies, and tables. A substantial correlation was found between process innovation strategies and organizational performance. According to the study's findings, additional research should be conducted using more innovative approaches to gather more data that can be used to improve the quality of future studies and minimize bias and mistake. In order to compare the results and so generalize, other techniques of analysis, such as inferential statistics, must be used. It is advisable to do similar research on other businesses in other sectors in order to find just those differences that are unique to them. In conclusion, the majority of the participant agree that innovation strategy had significant positive effect on service delivery on organization. The findings recommended, enhanced innovative strategies such as product, process and administrative innovation strategies to ensure better service delivery.

Key words:*process innovations, innovation strategies, open innovation theory*

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I. INTRODUCTION

Background of the study

Innovation strategy in the health care sector is gaining popularity both in the developed world and the developing countries. Innovation strategy in health care therefore seeks to redesign itself from paper-based processes to technology-based strategy approaches to improve on quality, efficiency in service provision. Innovation strategy in healthcare seeks to fill these identified gaps. Innovation strategy is necessary for growth, however choosing the right path towards achieving different and unique settings and objectives is not easy. The ability to properly recognize and reward creative efforts in the present and future is facilitated by defining an innovation strategy (Oriana Ciani and others 2016). Innovations strategy through easier and cheap financing to access health care services is equally important if universal health is to be achieved after all. High costs of accessing health care has contributed to low uptake of health services resulting to high mortality rates especially in the third world countries. Cheap and affordable health insurance schemes should be encouraged to tap on the many masses out there to the national grid and proper financial framework put in place for sound financial management. In so doing, many will be able to access healthcare services as and when required. Currently, and in regard to most communities in the third world countries access healthcare services through the traditional (archaic) ways in which case have been overtaken by events.

The notion of using mobile health to offer and promote wellness is becoming more and more popular. Mhealth has been dubbed "the biggest technological breakthrough of our time" in the USA, where it is claimed that its implementation would "address our greatest national challenge." (Kathleen Sebelius, 2011, US Secretary of Health and Human Services)

This has been supported based on the following significant factors. First is the current unsustainable of the present health care spending and the need for disruptive solutions strategies to address the problem. Two the ever-increasing number of new subscribers to wireless connectivity globally estimated to be over three billion and the capability this brings for two-way real time transfer of data. And third for more personalized medicine.

The wearable medical device market is fast growing and being appreciated as they alert authorities about serious medical conditions. Devices like wristbands, smartwatches, and Fitbit enable consumers to actively manage their health. By 2018, it is anticipated that 130 million wearable gadgets would have been distributed to customers, according to Huffington Post.

Patient data were previously difficult to communicate and transfer due to the hospital's clumsy filing systems for medical records. With the help of EHRs, several systems have been linked, enabling quicker information transfers and more streamlined, effective health care.

Patients may electronically meet with doctors using their laptops thanks to a technique known as telemedicine in rural regions without hospitals or other relevant services. It is believed up to 100 US dollars can be saved per doctor visit. Remote monitoring tools is another innovative tool used by patients to monitor their health at home.

In Africa, despite a myriad of challenges facing it ranging from social political and economic and underfunded health institutions, there is a glimmer of hope. In West Africa blood transfusion is necessary tool to save lives like any other country of the world. Country like Nigeria is an example where blood transfusion is necessary exercise to save lives every other single day across the country. Surprisingly enough, blood a precious commodity to save lives is usually unavailable in most hospitals. A company by the name LifeBank has come up with innovative ways(Strategies) of reducing the blood transfusion gaps in Nigeria. Technology is used to find the available blood. Once the blood is available through this innovative technology strategy it collects the blood and in accordance with requests placed with them by their customers. The company has invested in Motorbikes which keeps blood in freezers in the meantime waiting to be alerted to transport the precious commodities to where they are required. The Lifebank organization has also invested in some software application where potential blood donors register and login thereby enhancing and widening the supply chain. In S. Africa a larger part of the population has invested in smart phones in communication and the number is growing every day. The ever-increasing number of investment and acquisition of smartphones in South Africa has made it easier and simpler for the Government to interact with its citizens much more easily and effectively. Important and urgent Information is passed across to its citizens on health-related issues with much ease.

During the pandemic (Covid-19) The S. African country used the communication platform to relay the most important urgent information to curb the spread of the pandemic by imposing some Lockdown. This led to the slowing of the pandemic in South Africa. Therefore, the smartphones played a pivotal role as platform through which the government was able to communicate effectively with its citizens and cases of the pandemic were reduced considerably. The government also in collaboration with some NGO(Praekelt)created some WhatsApp application that was used to interact with its citizens in answering queries and concerns related to the covid19 pandemic including the available treatment and the course of action to be undertaken.

The technology was successfully deployed in South Africa during the pandemic and managed to reduce the cases of covid-19 considerably since there was much information available out there. The technology has been borrowed by some international bodies like World Health Organization (WHO).

In East Africa, California-based (Zipline) Company in collaboration with Rwandan Authorities initiated the use of drones in the ministry of health. Rwanda's has poor road networks owing to its bad rugged terrain and which makes it hard for transport of goods and services across the country mainly from the capital Kigali. Far flung regions and hard to reach territories are susceptible to so many diseases which are capable of being detected and their conditions corrected earlier. Many people lose their lives in those regions for lack blood transfusion services nearby.

The company (Zipline) instead of the traditional ways of transportation, has innovatively devised new ways of reaching out to hard-to-reach locations and the far-flung regions of the country so as to create solutions to an already overwhelming situation compounded with logistic accessibility. The company has employed the usage of drones for delivery of health care related goods and services including blood transfusion. It's been argued that so much time has been saved as a result and so many lives managed to be saved.

The organization has continued to expand its operations in West Africa Particularly in Ghana. It's their desire and objective to extend their services across Africa to improve on the many lives in Africa that are at risk of losing their lives for lack of timely health care interventions.

Statement of the Problem

It has been said that innovation plays an important role in the creating new ideas aimed at solving problems for the sole purpose of improving systems, processes and livelihoods of so many people across the world thereby improving on the overall standard of living. In away innovation has contributed to healthier society and life expectancy rates extended as a result. Most people in Isiolo do not access affordable quality health care Services as and when they are demanded owing to poor investment in affordable innovative strategies. Currently medical supplies are erratic in the sense that it cannot be dependent upon when and as it is required. Patients are usually referred to outside chemists for further medication when actually the hospital should encourage own stocks to enhance universal health care. Another challenge is the human resource management where the doctor patient ratio is wanting. There is overwhelming patient population against the available healthcare practitioners at the facility therefore affecting the overall service delivery. Cultural practices among the many pastoral communities' resident in the region act as an impediment in seeking formal convention medicine. Some of this communities encourage the use of archaic curative means by seeking the services of traditional herbalists thereby affecting the overall uptake of more modern and advanced conventional medical care. Lack of comprehensive diagnostic facilities has also contributed to the poor health services in the facility resulting to so many referral cases to other more equipped facilities. Further to the argument, the cost of accessing medical care is such expensive so much so that not many can afford thus resulting to other cheap traditional alternatives. Under funding still remains one of the topmost challenges in realizing the universal healthcare services in the facility. Without adequate funding most of the services cannot be achieved as envisioned in vision 2030 blueprint of universal coverage.

In order to guarantee that the quality of these services is high enough to enhance Kenyans' health, policy brief (2016) states that a number of strategic measures need to be put in place to gradually allow everyone to receive the services that address the most significant causes of illness and death. Fortunately, Isiolo County was among the first four counties earmarked as pilot project counties under UHC in December, 2018 by President Uhuru Kenyatta. Isiolo county referral Hospital by extension has been under that program for almost three years now. At the initial stages there was high uptake of services. Challenges were numerous. Sharing of patient's information is almost unreliable in real time processing as the facility use clumsy and archaic methods thus slowing the whole process of patient transfer and patient records. Interconnectivity, Patient monitoring and evaluation is almost zero. Limited supply of pharmaceutical products for the ever-surging increase in demand under the UHC program. Health care financing is also a challenge in line with UHC spirit of every individual and community to receive health services they need without suffering financial hardships. UHC program a national government subsidized project enables registered residents to access health care services without payment of user fees and not all were enrolled to the program.

Following the above analysis, management should be committed in investing in innovative strategies in modern electronic health records for capturing patients' information to begin with. Management should also invest in some interactive software complete with login portal provisions for patient and clinician sharing of information and which can be linked to some smartphones for quick access from whichever location especially among the pastoral communities residing in Isiolo County. Management through the county government of Isiolo should come with some subsidized mode of Health financing to encourage uptake of health care services. The county may consider allocating some funds every other financial year to cover for this program including partnering with international donors. Traditional and old-fashioned ways of seeking healthcare should be discouraged by sensitization programs organized by the county government through local county administration networks and of course through the services of CHV. This gap on Isiolo referral and teaching hospital needs to be studied with a view of bridging it.

Research Objective

The general objective of the study was to establish the influence of process innovation strategy on service delivery at Isiolo County Referral Hospital.

Scope of the study.

The study will restrict itself to modern innovative affordable health care strategies meant to deliver accessible and affordable universal health care. This will be conducted within Isiolo referral hospital as a case study. The research shall be conducted over a period of 6 months. Data will be collected among the sample size of medical superintendent of the facility, MOH, HRIO, and Head of departments sampled from the target respondents for both the primary and secondary data.

II. LITERATURE REVIEW

Theoretical literature review

Building the Culture of Innovation Theory.

Somewhere in Silicon Valley in the United States of America, there is a HR document which spells out company policies which are disruptive in nature within the industry. These policies are intended to spur a culture of innovation and trust among the employees known as "Netflix culture". David cummings (2015) argues that an entrepreneur has total control over the sole enduring competitive advantage: the company's culture. Chesky, Brian. Culture is simply a shared way of doing something. A place where new ideas are nurtured and in line with value addition so as to ensure resilience and competitiveness of the company within the industry. The culture of innovation should be a place where bold new things happen with regularity according to Euchre (2016).

In the context of Silicon Valley and disruptive companies like Netflix, this implies the fostering of a work environment where audacious ideas are not only welcomed but are also expected to arise regularly. As Euchre (2016) points out, an innovative culture should be a place where "bold new things happen with regularity." Netflix has succeeded in creating such an environment, thus becoming a model for other organizations seeking to cultivate similar cultures of innovation.

Cummings (2015) and Chesky (2015) further emphasize the role of culture in nurturing innovation, suggesting that by creating a strong company culture, businesses can increase their competitive advantage. When employees feel trusted and valued, they are more likely to take risks and contribute innovative ideas. This relationship between trust and innovation, facilitated by a supportive culture, is evident in the success of companies like Netflix (Euchre, 2016).

Ultimately, it's clear that an innovative, trusting culture can significantly enhance a company's competitive edge, fostering a spirit of creativity and risk-taking that is vital in today's fast-paced business environment.

Empirical Literature

Process innovation strategy in Delivery of universal health care services in Isiolo referral Hospital

Health care technology and innovation is the process of harmonizing key inputs in form of technology and improve on quality access of services and products. This is the process of accessing medical products through information technologies.

Technological innovation is generally recognized as an important driver of performance in major service Sectors in a survey carried out by Jose Figueiredo, Vasco Eiriz (2009).

The technological advancement is currently appreciated in almost all service industries including the health sector. Part of innovative strategy is to invest in affordable technologies meant to improve health care service delivery and encourage high level uptake of the same.

For better services delivery, investments should be done in some software technology so that lab tests are ordered online and prescriptions done without movement from one department to another.

In established entities and with well installed technology network there is improved and enhanced patient doctor interactions at all the times which is achievable. Once you have visited the facility, your details are captured, you'll be receiving medical education through your phone for any update. This is where we need to be headed as an institution that is committed to giving world class health care medical services through innovative medical technologies.

This brings to another idea of EHRs where doctors and nurses are able to channel patient data and diagnosis to some established data base without necessarily moving down with physical registers and files. Once the patient details have been taken and diagnosis carried out it can be channeled out to some database for future reference and can be retrieved any time it is required for use. Doctors are then able to share patient files online for easier prescription and cure courtesy of their computer's terminals. This approach improves on e-ticketing in service delivery brings about control over the Organization.

Conceptual Framework

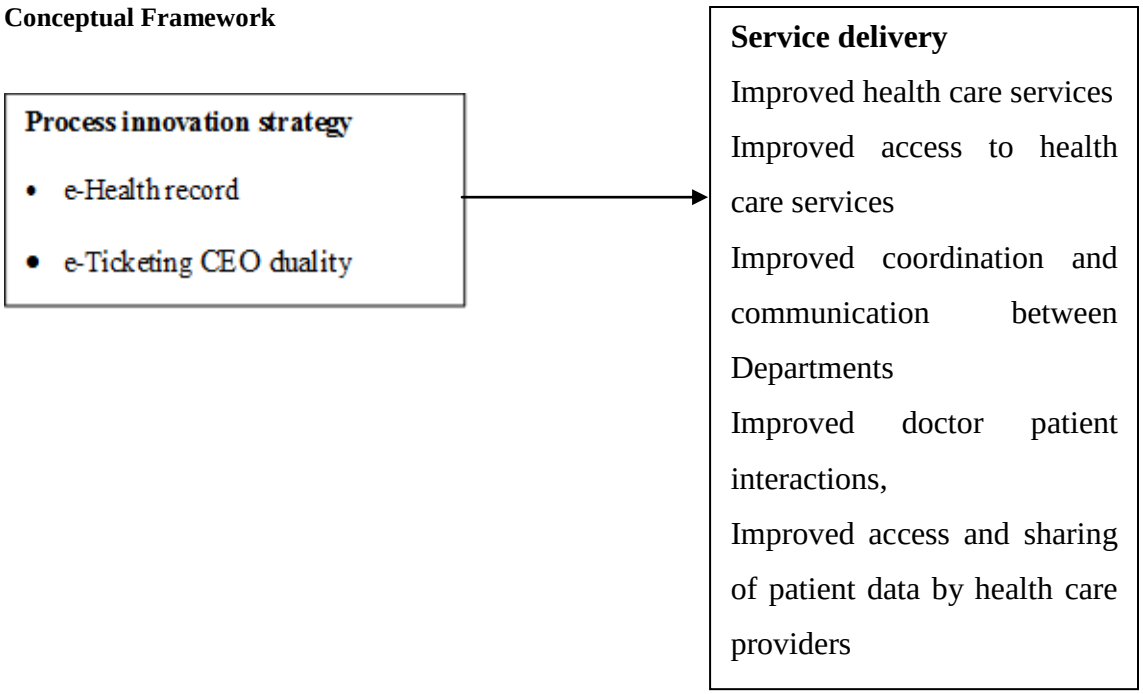

Figure 1: Conceptual Framework

Research Design

To meet the goals of a research study, researchers develop a detailed strategy known as a research design (Srivastava & Rego, 2011). The authors used a descriptive research method to look at how different types of innovation have affected service provision at Isiolo Referral Hospital. Since descriptive studies provide statistically sound results that characterize the study's aims, they are often used in quantitative research (Adams, Raeside, & White, 2007). Since the researcher was able to present scientific results that may be validated with comparable investigations, a descriptive survey is adequate for this study. Like experimental methods, descriptive surveys let researchers characterize study materials in their unaltered natural condition.

Target Population

Data gotten from Isiolo county and referral hospital indicate that the total number of top management level, middle level and lower levels is categorized into three as shown in table 1

Table 1: Target Population

Category	Population
Senior Management	3
Middle management	3
lower management	17
Stakeholders	60
Total	83

Source: Isiolo county referral Hospital (2023)

Sampling Procedures and Techniques

Orodho and Kombo (2002) stated that when doing sampling you select a small portion of items from the whole population in such a way that selected portion has characteristics of the element's entire population. Census study was employed to ensure that all individuals participate in this study. Census helps in eliminating sampling error and provides data on all the individuals in the population for analysis.

According to the definition provided by Cooper and Schindler (2013), a sample size is a subset of the whole population from which a study is drawn. Because a census was used as the basis for this research's sample size calculations, the whole population under consideration is represented. A census is defined as a situation in

which all subjects or elements of a population are sampled for the study (Adams, Raeside, & White, 2007). Census increases study accuracy since the margin of error is greatly diminished.

Research Instruments

The researcher will use a questionnaire of their own design to gather information. There were both open-ended and closed questions on the surveys. Insight into the impact of innovative methods on bettering health care service provision was gleaned from the questionnaire replies. The questionnaires were divided into two parts depending on the research objectives: the first portion aimed at collecting demographic information about the respondents, while the second part included questions specific to the study variables.

Data Analysis Techniques and Procedures

Response Rate

The calculated sample size was 80. The researcher managed to get the 80 questionnaires filled, making a 98% response rate which the researcher found to be significant enough to assess the study variables. According to Mugenda & Mugenda, a response rate of 50% is considered satisfactory, 60% is considered good, and 70% or more is considered great. As a result, a response rate of 100% was considered suitable for the research.

Reliability Test

Mugenda & Mugenda (2003) define validity as the reliability and significance of conclusions drawn from a study. The validity of an analysis is defined by the accuracy with which its results reflect the variables under study. The research instrument will be validated in terms of content validity by seeking opinions from the supervisors on the questionnaires developed. Any amendment will be corrected in the questionnaire hence making the questions asked to make it more valid. The researcher will also ensure that there is good cooperation with the respondents to gain their trust. Orodho (2003) argues that one approach to verify a survey's reliability is to see whether respondents consistently understand the questions in the same manner and if the questions' language makes it clear what is being measured.

According to Mugenda & Mugenda (2003), an instrument may be considered reliable if it yields the same results when given to the same subject repeatedly. To establish the dependability of the study tools, the researcher will use a test-retest strategy. The test-retest technique is administering a test to responders and then administering it again at a later period. The results of the questionnaire's test and retest will be compared by the researcher. A Pearson's product moment correlation coefficient formula will be used.

$$r = \frac{n\sum xy - \sum x\sum y}{\sqrt{n\sum x^2 - (\sum x)^2 (n\sum y^2) - (\sum y)^2}}$$

Where

r= Pearson's product moment correlation coefficient

n=sample size selected

x= results for the first test

y= results for the retest

Coefficients of 0.80 or higher, as stated by Mugenda & Mugenda (2003), indicate data dependability. A correlation value of 0.6 or higher is often recognized, as stated by George and Mallery (2003).

General and Demographic Information

Gender

The study sought to establish the gender of the respondents. The findings are presented in table 2 which shows the percentage of the respondents under this study, the male respondents were more at 55% (44) as compared to their female colleagues who made up 45% (36) of the respondents. From the analysis, it is evident that there is adequate representation of both genders thus ensuring gender balance and diversity.

Table 2: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Male**	44	55.0	55.0	55.0
	Female	36	45.0	45.0	100.0
	Total	80	100.0	100.0	

Age of Respondents

Most of the respondents who took part in this study were aged 18-30 years as shown in Table 3 which displays the age percentage and frequency distribution of the respondents. The age group 18-30 years were the

majority at 68.8% of the population. This was followed by age group 31-40 which accounted for 21.3% of the total and finally, those aged 41-50 years were 10.0% of the population.

Table 3: Age of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**18-30 Yrs**	55	68.8	68.8	68.8
	31-40 Yrs	17	21.3	21.3	90.0
	41-50 Yrs	8	10.0	10.0	100.0
	Total	80	100.0	100.0	

Level of Education

The respondents were asked to indicate their highest level of education; the findings are highlighted in Table 4.

Table 4: Level of Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Certificate**	1	1.3	1.3	1.3
	Diploma	47	58.8	58.8	60.0
	Degree	32	40.0	40.0	100.0
	Total	80	100.0	100.0	

As findings presented in Table 4 indicate, the respondents who participated in the study had varied levels of education. Majority who made up 58.8% have College Diplomas. 40.0% of the respondents had attained a Graduate Degree and only 1.3% have had a Tertiary College Certificate. The results show that every responder has at least a Tertiary degree, making them all qualified to reply to the questions on the data collecting instrument.

Years of Experience

The respondents were asked to indicate their highest level of education; the findings are highlighted in Table 5.

Table 5: Years of Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Less Than 1 Year**	2	2.5	2.5	2.5
	1-5 Years	38	47.5	47.5	50.0
	6-10 Years	30	37.5	37.5	87.5
	Over 10 Years	10	12.5	12.5	100.0
	Total	80	100.0	100.0	

The findings illustrated in table 5 above describes 38(47.5%), a majority of the respondents indicating that they had been working in the organization for 1-5 years, 30(37.5%) were found to have worked for 6 to 10 years for the organization, 10 representing (12.5%) responded as having worked for the company for more than 10 years and 2 respondents accounting for 2.5% responded as having worked for the company for less than 1 year. This illustrates that a large number of employees in the study had vast experience and knowhow on what is required and the routines necessary in order for the company to run effectively on a daily basis.

Descriptive Analysis of Study Variables

Process innovation strategy

E-Health records

The data was gathered using a Likert scale with five points. A 5-point Likert scale was used to examine the data, and the results are shown in the table below. The results are shown in table 6.

Table 6: Response Distribution on e-Health Records

	Very Small Extent		Small Extent		Moderate Extent		Large Extent		Very Large Extent	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
Create then maintain patient related medical problem list	0	0.0%	1	1.3%	14	17.5%	23	28.7%	42	52.5%
Following the result of a particular test	0	0.0%	4	5.0%	15	18.8%	16	20.0%	45	56.3%
Ordering treatment directly	0	0.0%	2	2.5%	10	12.5%	22	27.5%	46	57.5%
Produce data reviews for specific patient	0	0.0%	5	6.3%	12	15.0%	28	35.0%	35	43.8%
Generating health statistics	0	0.0%	1	1.3%	19	23.8%	32	40.0%	28	35.0%
Enter daily notes	0	0.0%	3	3.8%	12	15.0%	33	41.3%	32	40.0%

Key: 1=Strongly disagree, 2=Disagree, 3=Uncertain, 4=Agree, 5= Strongly Agree

From the results in table 6, on the issue of whether the hospital was able to create then maintain patient related medical problem list, the majority of the respondents 52.5% were of the opinion that they did to a very large extent, on whether the hospital was following the result of a particular test the majority of the respondents 56.3% were of the opinion that the hospital did so to a very large extent, on whether e-health systems were used in ordering treatment directly, majority of the respondents 57.3% were of the opinion that it had been so to a very large extent, when asked if using e-health application is used to produce data reviews for specific patients, 40.0% of the respondents being the majority agreed to a large extent. A question on whether e-Health services were used in generating health statistics, 40.0% of the respondents largely agreed to this statement as a majority. On if the e-health was used to enter daily notes, 41.3% as the majority indicated that this was to a large extent.

Table7: Mean & Std. Deviation

	Mean	Std. Deviation
Create then maintain patient related medical problem list	4.3250	.80779
Following the result of a particular test	4.2750	.94098
Ordering treatment directly	4.4000	.80505
Produce data reviews for specific patient	4.1625	.90629
Generating health statistics	4.0875	.79863
Enter daily notes	4.1750	.82332

From the results in table 7, the respondents had a relative mean across all the questions on e-Health records at the hospital showing they had a moderate view on the e-Health records kept at the hospital.

E-Ticketing

The data was gathered using a Likert scale with five points. A 5-point Likert scale was used to examine the data, and the results are shown in the table below. The results are shown in table 8.

Table 8: Response Distribution on e-Ticketing

	Very Small Extent		Small Extent		Moderate Extent		Large Extent		Very Large Extent	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
Improve level of service	0	0.0%	2	2.5%	17	21.3%	28	35.0%	33	41.3%
Produce patient name and data on the ticket	0	0.0%	2	2.5%	14	17.5%	38	47.5%	26	32.5%
Enhance efficiency in terms of service delivery	0	0.0%	3	3.8%	15	18.8%	40	50.0%	22	27.5%
Improve links with patients	0	0.0%	1	1.3%	14	17.5%	35	43.8%	30	37.5%
Improve necessity to remain competitive	0	0.0%	1	1.3%	18	22.5%	33	41.3%	28	35.0%
Enhance more accountability	1	1.3%	0	0.0%	17	21.3%	31	38.8%	31	38.8%

Key: 1=Strongly disagree, 2=Disagree, 3=Uncertain, 4=Agree, 5= Strongly Agree

From the results in table 8, on the issue of whether e-Ticketing was able to improve level of service, the majority of the respondents 41.3% were of the opinion that they did to a very large extent, on whether the e-ticketing system was able to produce patient name and data on the ticket the majority of the respondents 47.5% were of the opinion that the system did so to a large extent, on whether e-ticketing system enhanced efficiency in terms of service delivery, majority of the respondents 50.0% were of the opinion that it had been so to a large extent, when asked if using e-Ticketing system improves links with patients, 43.8% of the respondents being the majority agreed to a large extent. A question on whether e-Ticketing services were used to improve necessity to remain competitive, 41.3% of the respondents agreed to this statement as a majority. On if the e-Ticketing system was used to enhance more accountability, 77.6% as the majority indicated that this was to a large and very large extent.

Table 9: Mean & Std. Deviation

	Mean	Std. Deviation
Improve level of service	4.1500	.84344
Produce patient name and data on the ticket	4.1000	.77296
Enhance efficiency in terms of service delivery	4.0125	.78746
Improve links with patients	4.1750	.75933
Improve necessity to remain competitive	4.1000	.78917
Enhance more accountability	4.1375	.83808

From the results in table 9, the respondents had a relative mean across all the questions on e-Ticketing system at the hospital showing they had a moderate view on the e-Ticketing system used at the hospital.

Significance and Relation

Relationship between Process Innovation Strategy and Service delivery

Table 10: Relationship Between Process Innovation Strategy and Service delivery

Chi-Square Tests			
	Value	**Df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	302.464[a]	228	.001
Likelihood Ratio	173.787	228	.997
Linear-by-Linear Association	26.258	1	.000
N of Valid Cases	60		
a. 260 cells (100.0%) have expected count less than 5. The minimum expected count is .02.			

Symmetric Measures			
		Value	**Approximate Significance**
Nominal by Nominal	**Phi**	2.245	.001
	Cramer's V	.648	.001
N of Valid Cases		60	

From the table 10, chi square test above it was concluded that there was a significant relationship between process innovation strategies and organization performance concurring with of Hilman &Kaliappen (2015) on the linkage between innovation strategies (process innovation and service innovation) and service delivery in the context of Malaysia hotel industry, given the p value of significance was found to be 0.001 and a likelihood ratio of 173.787. The Cramer's V values on the probability of product innovation strategies having an effect on organization performance was found to be 0.648 which interprets to a very large effect with a significance of 0.001 which makes it statistically significant.

Regression Summary

The study sought to establish the effect of Process Innovation Strategy on Service delivery. The model inferential statistics are summarized below.

Table 11: Regression Model Summary

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.708[a]	.501	.474	.36373	2.081

a. Predictors: (Constant), Process Innovation Strategy							
b. Dependent Variable: Service delivery							
ANOVA[a]							
Model		Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression	7.430	3	2.477	18.719	.000[b]	
	Residual	7.409	56	.132			
	Total	14.838	59				
a. Dependent Variable: Service delivery							
b. Predictors: (Constant), Process Innovation Strategy							
				Coefficients[a]			
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B
		B	Std. Error	Beta			Lower Bound
1	(Constant)	1.454	.339		4.293	.000	.776
	Process Innovation Strategy	.394	.079	.546	4.994	.000	.236

From the analysis of variance of table 11 above, we find that the regression model is significant given the result of the p value is 0.000 which is less than 0.05. An R Square of 0.501 was also recorded which indicated that a 50.1% influence on service delivery is observed by a change in process innovation. We also observe that process innovation strategies have a significant effect on organization performance. To determine the relationship between the dependent variable, Service Delivery, and the independent variables, namely Process Innovation Strategy, a regression analysis was performed. This analysis, which was conducted at a 95% confidence level, enabled us to compare the significance of the predictor variables in the model by looking at their corresponding probability values. We used $\alpha = 0.05$ as our benchmark.

If the probability value for a variable was less than α, then we considered that predictor variable as having a significant impact on the model. Conversely, if it was greater, the predictor was deemed not to have a significant influence. Furthermore, we compared the F-statistic derived from our regression analysis with the tabulated F-statistic. A predictor variable was considered significant in influencing the dependent variable if the computed F-statistic from our analysis was larger than the tabulated value; otherwise, it was not.

With these considerations, our findings show a causal relationship between Service Delivery and the independent variables - Process Innovation Strategy.

Moreover, since our P-value result was 0.000, which is lower than the acceptable threshold of $\alpha = 0.05$, we concluded that alterations in Process Innovation Strategy significantly affect Service Delivery.

III. Summary of the Results

On the question of whether the hospital was able to establish and maintain a list of patient-related medical problems, the majority of respondents agreed. When asked whether the hospital followed up on the results of specific tests, the majority stated that they did so extensively; when asked whether e-health systems were used to directly order treatment, the majority stated that they had been used extensively; and when asked if e-health applications are used to generate data reviews for specific patients, the majority stated that they are. When asked if e-Health services were utilized to generate health data, the majority agreed. When asked whether they utilized e-health to record daily notes, the majority responded that they did.

On the question of whether e-ticketing improved service quality, the majority agreed that it did so significantly; on the question of whether the e-ticketing system generated patient names and data on the ticket, the majority agreed that it did so significantly; and on the question of whether the e-ticketing system increased service delivery efficiency, the majority agreed that it did so significantly. When asked if e-Ticketing services were utilized to enhance necessity in order to stay competitive, the majority agreed. When asked whether the e-Ticketing system was utilized to increase accountability, the majority answered that it was in a significant and very significant way. The correlation analysis showed that there was a significant association between process innovation and service delivery concurring with of Hilman &Kaliappen (2015) on the linkage between innovation strategies (process innovation and service innovation) and service delivery in the context of Malaysia hotel industry. The regression analysis confirmed that there was positive relationship between process innovation strategy and service delivery.

IV. Conclusions

About two-thirds of the respondents felt that the hospital was working to enhance customer satisfaction by coming out with new goods. The majority of the participants agreed to a modest degree with regards to the overall structure of the e-Health service. When asked whether rigorous monitoring of all of the e-health system's activities is done, the majority agreed. Researchers discovered that a vast majority of those surveyed believed access to m-health enhanced their healthcare abilities and knowledge. Most respondents agreed to some degree

when asked if there was a consistent way of notification, and they agreed to the same degree when asked whether automated ordering software is utilized.

Most people also felt that organization performance increased to a modest degree as a result of using E-Notification. The majority said that there were considerable advantages from the use of automation technology. According to the report, innovation strategy had a big impact on how services were delivered. The research comes to the conclusion that innovation strategy has a good and substantial impact on organization.

V. Recommendations to policy

The suggestions that came out of the study's findings and conclusions are covered in this section. The suggestions were based on the study's research goals. In reference to the findings, conclusion and the guidance from the literature review, it was clear innovation strategies influence service delivery in hospital. Therefore, hospitals should enhance innovation strategies such as process innovation strategies. In addition, there is need to have unique innovations to offer efficient service. For hospital to ensure better performance they should adapt new and unique technologies and conduct more research, expanding the scope of the innovation strategies and the same study to different hospital is recommended to find out if similar result will be achieved and especially in a hospital.

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