ISSN 2349-7807

International Journal of Recent Research in Commerce Economics and Management (IJRRCEM)
Vol. 12, Issue 3, pp: (70-79), Month: July - September 2025, Available at: www.paperpublications.org

STRATEGIC INNOVATION AND SUSTAINABILITY OF PUBLIC HEALTHCARE ORGANIZATIONS IN WEST POKOT COUNTY, KENYA

Elijah Kagen Chebii [1.1]*, Dr. Julius Miroga[1.2] (PhD)

[1.] School of Business, Department of Economics, Accounting and Finance, Jomo Kenyatta University of Agriculture and Technology, P.O. Box 62000 - 00200, Nairobi Kenya

[2.] School of Business, Department of Economics, Accounting and Finance, Jomo Kenyatta University of Agriculture and Technology, P.O. Box 62000 - 00200, Nairobi Kenya

[3.] College of Human Resource Development, Department of Entrepreneurship and Procurement Leadership and Management. Jomo Kenyatta University of Agriculture and Technology, P.O. Box 62000 - 00200, Nairobi Kenya.

DOI: https://doi.org/10.5281/zenodo.17194816

Published Date: 24-September-2025

Abstract: **Kenya's healthcare sector plays a crucial role in economic growth and the realization of Vision 2030. Public healthcare organizations in West Pokot County, however, face sustainability challenges, including inadequate financial resources, staff turnover, weak health systems, and patient non-payment. This study investigated how strategic innovation affected the sustainability of these facilities, focusing on business model, process, service and technological innovations. The study was anchored on the organizational innovation theory, disruptive innovation theory, dynamic capabilities theory, and the balanced-score card model. The research involved 438 employees and a sample size of 209 from the five healthcare facilities (Kapenguria county referral hospital, Kacheliba, Kabichichi, Chepareria and Sigor sub-county hospitals), using stratified simple random sampling technique and a descriptive research design. Data was collected using structured questionnaires and analyzed using SPSS v29, with multiple linear regression to determine relationships between variables. Analysis of data was done using descriptive and inferential statistics. The study findings revealed the existence of a statistically significant regression effect of independent variables sustainability of public healthcare facilities in West Pokot County, Kenya. The study findings indicated that the multiple regression model significantly predicted how the independent variables affected the dependent variable (sustainability of public healthcare facilities) which indicated an overall statistically significant model with business model innovation 35.6%, (t~3.056) of sustainability of public healthcare facilities in West Pokot County, Kenya. The study further recommended on each of the variables for management and policy consideration in future decision making processes. The findings were expected to be of importance to policy formulation and future scholarly work in strategic innovation and in the field of strategic management as a whole.**

Keywords: **healthcare sector, healthcare organizations, economic growth.**

1. INTRODUCTION

The healthcare industry has seen significant transformation in recent years, with new business models, unanticipated collaborations, and expedited schedules forcing firms to rethink how they operate. Many of these shifts are expected to continue (Dube et al., 2022). The healthcare sector has traditionally been a delinquent throughout digital adoption, according to Dal Mas et al. (2020), but the COVID-19 pandemic threw a major jolt of pressure to integrate new tools and

technologies.Globally the environment of conducting business is metamorphosing rapidly more than ever witnessed. This rapid change is attributable to emergence of novel technologies which disrupt existing technologies (Kula & Kavale, 2022). Faced with this kind of uncertain environment, many established businesses, including hospitals, have become aware of the need to acquire sustainable competitiveness to match and outdo their competitors.Addressing sustainability challenges is crucial for maintaining healthcare access and improving population health outcomes (Trinkley et al., 2022). Sustainability in county hospitals is essential for their continued operation, requiring a balance between financial stability, organizational strength, and social and environmental responsibility (Bentahar et al., 2023). It involves maximizing and building reserves through cost reductions and program enhancements for the locals served to also contribute towards the operations of the hospitals (Irvin & Furneaux, 2022). Organizational sustainability depends on fostering capabilities, establishing robust infrastructure, and nurturing a culture aligned with sustainability goals (Bertassini et al., 2021). Key pillars such as employee satisfaction, customer loyalty, and environmentally friendly practices enhance a county hospital's ability to deliver high-quality, sustainable healthcare services (Olajiga et al., 2024).

It is imperative to start by defining the term strategy before delving into the deeper waters. According to Kula and Kavale (2022), a strategy is a firm plan that presents an expected course of action and guides the firm when handling situations. A strategy ought to be capable of creating a market niche which has a potential to generate revenue for the firm and provide competitive edge against the firm competitors. A good strategy provides a firm with a competitive advantage over its competitors which springs from the firm's ability to generate a clear-cut distinction from other competitors in the industry. Kula and Kavale (2022) further defined innovation as the process of turning an idea into a product or service that creates value. It is the application of better solutions to the new problems.

Innovations in an organization need be strategic. Strategic innovation is crucial in boosting efficiency, performance, and competitive edge, especially in rapidly changing sectors like healthcare (Baharun et al., 2019). Strategic innovation, as described by Omondi and Deya (2023), is a framework for future-focused business development that spots chances for breakthrough growth, moves business choices along quickly, and produces immediate, measurable results within the framework of a longer-term goal for sustainable competitive advantage. An organization is challenged by strategic innovation to look beyond its pre-existing organizational limits and mental models and to engage in an open-minded, imaginative investigation of the universe of possibilities. Strategic creation is the application of reimagining or redesigning an institution's company's strategy in effort to enhance company growth, add value to the firm and its customers, and obtain a competitive advantage (Grillitsch et al, 2019). Healthcare organizations must use this type of innovation to keep up with the rapid speed of development progress. Organizations that embrace strategic innovation need not modify the products and services they sell to their clients, because the technological innovation enables these services, in order to thrive. The term "strategic innovation" refers to initiatives that take place at the executive level (Mohamed et al, 2020).

According to AlQershi et al (2021) corporate strategies could include the following considerations: what services or products need to be reinvented or developed; what business models to develop; how to optimize operation processes; how to expand the customer base; how to position the company's brand in relation to target clients; how to make the supply chain and value chain more efficient; and go-to-market strategy. Although strategic innovation initiatives are led by senior management, they need to foster a culture of innovation that encourages collaboration across organization teams and functions.

In his study of a strategic innovation in an Asian organization, Kodoma (2018) uncovered a phenomenon called as disruptive innovation. According to his research, the company provided a novel business strategy which challenges or disrupts the business models of opponents. As a result of the Asia industry's choice to give free delivery, other e-commerce businesses have been compelled to offer free or reduced shipping in that area. Gwayagwaya (2020) assessed the surveillance of antibiotic prescribing practices and resistance trends at an accredited private hospital in Zimbabwe. The researcher of the aforementioned study discovered that PSMI's surveillance system for monitoring prescribing practices and reporting resistance patterns in low-income countries' healthcare facilities will help to reduce antibiotic resistance by adding data to national health systems and assisting in the development of national antibiotic policy and antibiotic stewardship programs. However, adoption levels at PSMI were quite low. Chisveto (2017) looked at how a centralized treasury management system affected business operations, with a focus on PSMI. The study looked into the reasons for the company's use of a centralized treasury management system, the costs associated with the current treasury management system, how the centralized treasury management system affects the flow of goods and services across the

company's business units, and drew strategic conclusions about centralized treasury management for the company. The findings revealed that finance managers from strategic business units are only involved in financial data consolidation. The findings point to the necessity for an effective hybrid treasury structure that combines the advantages of both centralization and decentralization. A supportive information technology system is also recommended by the organization to facilitate effective decision making and resource allocation among the strategic business units.

The findings from the review of local literature highlight that strategic innovation has low impact on performance of private hospitals. The findings are accurate for strategic innovation developing countries as the study by Palesa (2018) of a company in Zambia demonstrated that because of limited technology advancement and complex organization structure made it difficult for strategic innovation to be implemented and ultimately be successful. The study via literature review also found that some private hospitals in the form of PSMI for instance as stated by Berth et al (2020) have started using big data analytics to provide faster and more accurate diagnoses for its patients. The new system can comb through thousands of data points about each patient to diagnose the condition and find treatment options nearly instantly. Mpedu et al (2021) indicates that strategic innovation in healthcare can drive economic growth by improving efficiency and increasing productivity, as well as optimizing patient outcomes. The study also noted the key barriers to the effectiveness of strategic innovation. Lee et al (2021) states that inadequate effort devoted to effectiveness made strategic innovation to fail. Lee et al (2021) observed that cost-effectiveness is generally not rigorously assessed during the course of development. Drug and device development are an expensive and lengthy process. It is hard for companies to justify further dollars and time in cost-effectiveness studies, particularly as there are no agreed-upon set of measures by the industry and payers. As result, there is an opportunity to develop a stronger and commonly agreed upon scientific foundation for cost-effectiveness measures and studies.

Not enough patients entering RCTs (randomized controlled trials). The study by Goldberg et al (2020) identified several reasons for this. Patients are reluctant to accept the default arm of trials, often not considered an equivalent therapy. For many patients with cancer, treatment is a “one-shot chance” and they want to take the option recommended by their physicians. Further there is less reliance on evidence-based medicine in cancer treatment and too great a tendency for premature adoption of therapies based on presentations at major conferences. Finally, managed care plans generally refuse to encourage participation in trials. Strategic innovation is a critical component, enabling county hospitals to stay competitive and adapt to changing environments, particularly in regions with unstable health systems and limited resources, like Kenya (Cherop et al., 2022). In West Pokot County, hospitals in the county face challenges including poor financial reporting, staff shortages, and inadequate governance, which undermine their sustainability (MOH, 2021). Innovative strategies, such as adopting new technologies and enhancing operational efficiency, are necessary to address these challenges and ensure the long-term viability of these essential healthcare providers.

By setting organizational direction, encouraging collaboration, and reducing uncertainty, strategic innovation helps institutions adjust to evolving environments (Cennamo et al., 2022). Healthcare organizations in counties, particularly in Kenya, are essential in delivering care to underserved populations (Azmat et al., 2024). However, they face major sustainability issues due to limited financial resources, dependence on unstable county funding, and rising healthcare costs (Malua et al., 2024). These challenges hinder hospitals' ability to retain qualified staff and keep operations running (Mudzanire, 2022). County hospitals across the country also struggle with staff turnover, poor governance, and stiff competition from private healthcare providers (Son et al., 2024).Healthcare organizations (hospitals) in Kenyan counties face issues like poor governance, financial instability, and patient non-payment (Mang’ana, 2022). Despite these challenges, they continue to provide essential healthcare services, contributing to public health and the achievement of goals like universal health coverage (Luyckx et al., 2021).

The sustainability of healthcare facilities in Kenya faces significant challenges due to a mix of political involvement due to devolution of public healthcare services, rapid technological advancements, globalization, and growing competition from private healthcare providers. The transition from the National Health Insurance Fund (NHIF) to the Social Health Insurance Fund (SHIF) could potentially alleviate funding pressures for the healthcare organizations by providing enhanced financial stability. This shift may also reduce the number of uninsured patients and address high staff turnover, thus improving service delivery and operational efficiency (Ministry of Health, 2024; Long et al., 2024). However, public healthcare facilities in West Pokot County continue to struggle with maintaining long-term viability amidst these external pressures, as they strive to deliver quality care to underserved populations (Muema, 2024).

Despite these well-documented sustainability challenges, limited research has explored the role of strategic innovation in helping public healthcare facilities in West Pokot County overcome these hurdles. While strategic innovation practices have been studied in other industries, their impact on public healthcare particularly in West Pokot County, remains largely unexamined (Makina & Oundo, 2020; Mang'ana, 2022; Mugo & Macharia, 2020; Nduati, 2020). This gap is particularly pronounced in West Pokot County, where public healthcare facilities play a crucial role in providing healthcare services.

The lack of understanding of how business model, service, process, and technological innovations can enhance the sustainability of these institutions underscores the need for further investigation. This study addressed this gap by examining the effect of business model innovation and sustainability of public healthcare facilities in West Pokot County, Kenya.

2. BUSINESS MODEL INNOVATION AND SUSTAINABILITY

Si-Jia Xue, et al (2019) studied Business Model Innovation and Firm Performance: A Meta-Analysis in China used STATA to analyze data from a review and screening of existing Chinese and English literature. The study's main effect meta-analysis findings revealed a significant positive relationship between business model innovation and firm performance. Therefore, in a business environment that is changing quickly, business model innovation can assist organizations in maintaining a durable competitive edge and enhancing company performance. Business model innovation and firm performance have a strong positive association with the moderating values of power distance, enterprise life cycle stage, and regional development level. The report also claimed that, in order for new enterprises to prevail in the fierce market competition and boost their overall strength. Khaddam et al, (2021) studied the effect of business model innovation on organization performance, it measured BMI in the dimensions of value creation, value proposition and value capture innovation. Confirmatory factors analysis was used to examine validity and usability of testing the hypothesis. The findings supported that all the BMI dimensions had a significant effect on company performance where value capture had the highest effect on company performance.

Salfore et al, et al, (2023) analyzed Business model innovation and firm performance: Evidence from manufacturing SMEs in Ethiopia primary data was collected using questionnaires the independent variables of value capture, value proposition and value creation, had a positive relation to the performance of manufacturing SMEs and showing a positive and significant path coefficient. Through BMI, the manufacturing SMEs were able to offer a valuable bundle of products and services, and attract and retain a large portion of their customer base. According to Alexandre (2018), sustainability refers to conducting business in a way that does not harm the environment, the community, or society at large. It addresses the effect the business has on the environment and the society. The goal of a sustainable business is to make a positive impact in one of the key areas. When making business decisions, sustainable enterprises take into account a wide range of environmental, economic, and social concerns. The healthcare organizations need to keep a close eye on the impact of their operations to ensure that short-term gains do not become long-term liabilities (Omondi & Deya, 2023). Business sustainability is closely related to sustainable development, which according to Brundtland report of 1987 defined sustainability as development that meets the needs of the present without compromising the ability of future generations to meet theirs (Garcia, 2022). Morioka et al (2016) referred to sustainability as the capacity of firms to contribute to global sustainable development and all the challenges regarding economic, social, and environmental interconnections together with short, medium, and long-term aligned and conflicting demands.

An article by International Business Machines (IBM) states that Sustainability refers to a business's approach to minimizing the damaging environmental effects of its operations in a certain market. Being identified as a sustainable firm can increase brand recognition and help you attract consumers who favor companies that actively engage in sustainable initiatives which will give the business a competitive advantage over other businesses.

In Kenya, factors such as poor governance and weak health systems hinder effective service delivery (Cherop et al., 2022). Additionally, inadequate financial resources, high staff turnover, and patient non-payment exacerbate operational difficulties, limiting these institutions' ability to provide quality care (Mwai et al., 2023; Mwongera, 2023). While strategic innovations (such as business model, service, and technological innovations) have been proposed to enhance sustainability (Grynko et al., 2020; Suraci et al., 2022), limited empirical evidence exists regarding their specific application in Kiambu County's mission hospitals. This study filled that gap, offering insights to inform policy and practice within Kenya's healthcare sector. Feng et al. (2021) proposed a service innovation strategy that enhances service

delivery in both new and existing markets through five categorized processes, including research-oriented collaborations and customized innovation projects. Rodahl (2020) evaluated sustainable business innovation in a traditional fashion retail company, concluding that sustainable models focus on value creation, yet this exploratory case study limited its applicability to strategic innovation in Mission Hospitals. Kozma et al. (2022) explored digital innovations in Premier League clubs but lacked empirical backing.

The current study aimed to fill the gap by providing empirical evidence on strategic innovation and sustainability of healthcare organizations in West Pokot County, Kenya, an area least explored if not completely ignored by previous scholars on this area of strategic innovation and sustainability in the health sector.

3. METHOD

The study adopted a descriptive research design. The target population for this study was 438 respondents who were the employees from the level 5 (Kapenguria County Referral hospital) and four other level 4 hospitals in West Pokot County (Kacheliba, Kabichibichi, Chepareria and Sigor Sub-county hospitals) who work in the departments of the targeted healthcare facilities in West Pokot County (Human Resource Documents, 2025). This study focused on the accessible population from individual employees of the target healthcare facilities in West Pokot County. Proportionate stratified random sampling technique was therefore used since it guarantees that each stratum was represented in the final sample and therefore gave an accurate reflection of the attributes of the population. Kaki et al., (2022) averred that a population is stratified based on its different features and a sample ought to be picked from each stratum. The target population of 438 respondents was divided into homogeneous strata on the basis of departments. According to Odunga (2021), it was upon these strata that the sample size for this study was obtained using Taro Yamane (1973) formula for finite population with a 95% confidence interval level as a total sample size of 209 respondents The study utilized primary sources to collect data. Questionnaires were used to collect data from the target population. A pilot test was conducted in selected public healthcare facilities in Trans Nzoia County to ensure the reliability and validity of the research instrument. Data collected was analyzed using regression and correlation. The data was presented in form of tables, charts, and bar graphs. Descriptive and inferential statistics were used, including mean, standard deviations, regression, correlation and analysis of variance (ANOVA). Correlation analysis was used to establish the relationship among the study variables.

Data processing and analysis was finally done using quantitative techniques in the SPSS v29 software. According to Mugenda and Mugenda (2019), linear regression analysis attempts to determine whether a group of variables together predict a given dependent variable and in this way, attempt to increase the accuracy of the estimate.

4. DISCUSION

4.1 Sustainability of Public Healthcare Facilities in West Pokot County

The research instrument was developed using a likert-scale from which the analysis included application of the descriptive statistics; mean and standard deviation. The interpretation of the findings was premised on the following key according to Odhiambo and Njuguna (2021): Mean >4.20 meant strongest agreement; agreement 3.50-4.19; disagreement 2.50-3.49; strongest disagreement 1.50-2.49 while neutral was <1.49. The collected and analyzed data on the sustainability of public healthcare facilities in West Pokot County, Kenya was tabulated as below;

Table 4.1: Sustainability of Public Healthcare Facilities in West Pokot County

Statements	SD %	D %	N %	A %	SA %	Mean	STDV
The public healthcare facility has clear strategies on improving revenue	5	4	21	43	27	3.923	1.149
The public healthcare facility has experienced growth in number of customers over the last year.	9	17	10	43	21	3.941	1.100
The public healthcare facility has experienced increased due to customer satisfaction rates as per the customer feedback records.	3	9	14	47	27	3.847	1.121
The facility continues to get positive brand recognition and reviews	7	14	8	49	22	4.105	0.837
Average						**3.954**	**1.052**

The findings in Table 4.1 indicated the composite average as (M=3.954), this meant that respondents positively rated most of the statements provided under sustainability of public healthcare facilities in West Pokot County, Kenya. On whether the public healthcare facilities had clear strategies on improving revenue, 27% of the respondents strongly agreed, 43% agreed, 21% were neutral, 4% disagreed and 5% strongly disagreed that the public healthcare facility has clear strategies on improving revenue, with a mean of 3.903 and standard deviation of 1.149. The findings had 70% of the respondents, being an overwhelming majority, vehemently returning a positive feedback on the statement posed to them. This verdict was supported by a strong mean of 3.903.

Whether the public healthcare facilities had experienced growth in number of customers over the last year, 9% of the respondents strongly disagreed, 17% disagreed, 10% were neutral, 43% agreed while 21% strongly agreed with a mean of 3.941 and standard deviation of 1.100. With the majority of the respondents (64%) returning positive feedback, it was considered a positive response that the public healthcare facilities had experienced growth in number of customers over the last year. However, the 36% of the respondents, which was a relatively high response from the respondents who remained neutral, strongly disagreed or disagreed, needed scrutiny as to why the situation was like that.

As to whether the public healthcare facilities had experienced increased customer retention rates due to customer satisfaction, 3% strongly disagreed, 9% disagreed, 14% were undecided, 47% of the respondents agreed, 27% strongly agreed that the public healthcare facilities had experienced increased customer retention rates due to customer satisfaction. With a mean of 3.847 and standard deviation of 1.121. From the findings, the 74% of the respondents who were positively in agreement implied that the public healthcare facilities in the county had experienced increased customer retention rates due to customer satisfaction.

Finally, on whether the facilities continued to get positive brand recognition and reviews, 7% strongly disagreed, 14% disagreed, 8% were undecided, 49% agreed while 22% of the respondents strongly agreed that truly, the public healthcare facilities in the county continued to get positive brand recognition and reviews, with a mean value of 4.105 and standard deviation of 0.837. The 71% aggregate of the positive feedback implied that indeed, the facilities continued to get positive brand recognition and reviews.

4.2 Business Model Innovation and Sustainability

The findings on the effect of business model innovation on sustainability of public healthcare facilities in West Pokot County, Kenya were as presented in the table below;

Table 4.2: Business Model Innovation and Sustainability

Statements	SD %	D %	N %	A %	SA %	Mean	STDEV
The public healthcare facility has core products and services that constantly generate large revenue share.	15	19	19	33	14	3.542	1.261
The public healthcare facility is always on the look out to satisfy different customer segments	11	14	10	37	28	3.441	1.270
The public healthcare facility is always looking to explore different new operation models with an aim of meeting developing client needs.	9	5	20	39	27	3.401	1.218
The public healthcare facility aligns with the needs of customers to ensure that the products and services are novel and solve different client problems/complications	10	17	11	28	34	3.497	1.009
Average						**3.470**	**1.189**

The findings in Table 4.2 indicated the average mean as M=3.470, this meant that respondents agreed that business model innovation had an effect on sustainability of public healthcare facilities in West Pokot County, Kenya.

It was established that 33% of the respondents agreed that the public healthcare facilities had core products and services that constantly generated large revenue share. 14% strongly agreed, 19% were undecided, another 19% disagreed and 15% strongly disagreed. It then followed that in general, only 47% of the respondents were in agreement with a mean of

3.470 that there were core products and services that constantly generate large revenue share at the public healthcare facilities in West Pokot County in Kenya. The results showed that 28% of the respondents strongly agreed that the public healthcare facilities were always on the look out to satisfy different customer segments, 37% agreed, 10% were undecided, 14% disagreed and 11% strongly disagreed. Thus, 65% of the respondents generally agreed (with a Mean= 3.441 and a standard deviation of 1.270) that public healthcare facilities were always on the look out to satisfy different customer segments.

The findings of the study showed that 27% strongly agreed, 39% of the respondents agreed that public healthcare facilities were always on the lookout to explore different new operation models with an aim of meeting developing client needs, 20% were undecided, 5% disagreed and 9% strongly disagreed. This meant that overall, as to whether public healthcare facilities were always on the lookout to explore different new operation models with an aim of meeting developing client needs, 66% accepted with a mean of 3.401 and standard deviation of 1.218. However, a substantial percentage (20%) of respondents who remained undecided left many unanswered questions.

The study established that 28% of the respondents agreed that public healthcare facilities aligned with the needs of customers to ensure that the products and services were novel and solved different client problems/complications, 34% strongly agreed, 11% were undecided, 17% disagreed and 10% strongly disagreed. This meant that in general, 62% of the respondents supported the statement (with a Mean=3.497 and a standard deviation of 1.1.009) that public healthcare facilities aligned with the needs of customers to ensure that the products and services were novel and solved different client problems/complications. The findings were in tandem with Mchopa (2023) who showed that public healthcare facilities ought to align with the needs of clients for purposes of solving different patient complications.

4.3 Correlation Analysis

In this section, the study measured the degree of association between strategic innovation and sustainability of public healthcare facilities in West Pokot County, Kenya, through correlation. Table 4.17 presented the correlation coefficients for all the variables considered in this study. Using the correlation analysis by employing the services of the SPSS version 29 software from which the results were extracted and presented in the table below;

Table 4.3: Pearson Correlation Matrix

		Sustainability	Bus. Model Innovation
Sustainability	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	161	
Business Model	Pearson Correlation	0.695*	1
Innovation	Sig. (2-tailed)	0.021	
	N	161	161

Correlation is significant at .01 level (2-tailed)

From the correlation result for the study model in table 4.3, the study indicated that business model innovation strategy had a strong positive and significant correlation with sustainability (r=0.695, p=0.025).

4.4 Regression Analysis

The section below presented the results of regression analysis. A multiple regression analysis was conducted to test the relationship among predictor variables.

4.4.1 Model Summary

The main objective of the study was to examine the effect of strategic innovation on sustainability of public healthcare facilities in west Pokot County, Kenya. Table 4.4 was the model summary.

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.831[a]	0.691	0.688	0.15405

a. Predictors: (Constant), business model innovation,

Table 4.4 was a model fit which established how fit the model equation fitted the data. The adjusted R-square was used to show the predictive power of the study model and it was found to be 0.691 which implied that 69.1% of the variations on sustainability of public healthcare facilities in west Pokot County, Kenya were explained by the independent variables. R-square was bigger than adjusted R-square because adjusted R-square explained only variations in the dependent variable explained by actual or important variables and not less important variables. The results from the model showed that there were other factors that affected sustainability of public healthcare facilities in west Pokot County, Kenya; therefore, those other factors not included in this research contributed 31.9% to variations in sustainability of public healthcare facilities in west Pokot County, Kenya. Those other variables did not form part of this study scope.

4.4.2 ANOVA

Analysis of variance results were tabulated as shown in Table 4.5 below;

Table 4.5: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.974	1	4.994	6.632	0.000[b]
	Residual	117.501	159	0.753		
	Total	16.945	160			

a. Dependent Variable: Sustainability

b. Predictors: (Constant), business model innovation

From the ANOVA statistics in Table 4.5, the probability value of < 0.05 indicated that the regression model was significant in predicting how business model innovation affect sustainability of public healthcare facilities in West Pokot County, Kenya. That is, there is a significant relationship between sustainability of public healthcare facilities in west Pokot County, Kenya and the independent variables (business model innovatio).

4.4.3 Multiple Regression Analysis

The multiple regression results were presented in a regression coefficients table form from which the model was extracted.

Table 4.6: Regression Coefficients

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		β	**Std. Error**	**Beta**		
1	(Constant)	11.524	0.038	1.640	4.911	0.000
	Business Model Innovation	0.356	0.139	0.344	3.056	0.003

a. Dependent Variable: Sustainability

The established model for the study was:

$Y = 11.524 + 0.356X_1$

The multiple regression equation above show that by incorporating all factors into account (business model innovation) constant at zero sustainability of public healthcare facilities in West Pokot County, Kenya is 11.524. The findings presented also showed that taking all other independent variables at zero, a unit increase in the business model innovation would lead to a 0.356 increase in the scores of sustainability of public healthcare facilities in West Pokot County, Kenya. Overall, business model innovation had the least effect on sustainability of public healthcare facilities in West Pokot County, Kenya, in that order. None of the variables had a significance value greater than 0.05 ($p > 0.05$) implying that the relationship between the dependent variable and independent variables were not likely by chance.

5. CONCLUSION AND RECOMMENDATIONS

Based on the findings, the study concluded that business model innovation affected sustainability of public healthcare facilities in West Pokot County, Kenya while the facilities were to ensure that core products and services that constantly generate large revenue share at the public healthcare facilities in West Pokot County in Kenya are in place. Of the public healthcare facilities, not all were always on the look-out to satisfy different customer segments as well as being always on the look-out to explore different new operation models with an aim of meeting developing client needs. However, the public healthcare facilities aligned with the needs of customers and ensured that the products and services were novel and solved different client problems/complications. The findings were in tandem with Mchopa (2023) who showed that public healthcare facilities ought to align with the needs of clients for purposes of solving different patient complications. Correlation results were that BMI strongly and positively correlated with sustainability of public healthcare facilities in West Pokot County, Kenya. The findings of regression analysis demonstrated that BMI was third in strength in effect on sustainability of public healthcare facilities in West Pokot County, Kenya.

REFERENCES

[1] AlQershi, N. (2021). Strategic thinking, strategic planning, strategic innovation and the performance of SMEs: The mediating role of human capital. *Management Science Letters, 11(3*), 1003-1012.

[2] Azmat, S. K., Thom, E. M., Arshad, M., Hamza, H. B., Aabroo, A., Balal, A., Awan, M. A., Rifaq, F., Hemachandra, N., & Qudsia, U. (2024). A study protocol for integrating outpatient services at the primary health care level as part of the universal health coverage benefit package within the National Health Insurance Program of Pakistan through private health facilities. *Frontiers in Public Health*, 12

[3] Baharun, R., Mi, T. J., Mardani, A., Shakeel, J., Streimikiene, D., & Nitsenko, V. (2019). Innovation in healthcare performance among private brand's healthcare services in small and medium-sized enterprises (smes). *Acta Polytechnica Hungarica*, 16(5), 151-172.

[4] Cennamo, C., Oliveira, P., & Zejnilovic, L. (2022). Unlocking innovation in healthcare: The case of the patient innovation platform. *California Management Review*, 64(4), 47-77.

[5] Cherop, F., Korir, M., Bagire, V., & Wachira, J. (2020). Patient loyalty to HIV care in an HIV facility in Eldoret, Kenya: A Mediated Mediation. *Open Research Africa*, 3, 48.

[6] Chisveto, T., P. (2017). The effect of a centralized treasury management system on business operations: *A case study on Premier Services Medical Investments*.

[7] Dal Mas, F., Piccolo, D., Edvinsson, L., Skrap, M. & D'Auria, S. (2020). Strategy innovation, intellectual capital management, and the future of healthcare: The case of Kiron by Nucleode. In Knowledge, people, and digital transformation (pp. 119-131). Springer, Cham.

[8] De Vries, N., Lavreysen, O., Boone, A., Bouman, J., Szemik, S., Baranski, K., Godderis, L., & De Winter, P. (2023). Retaining healthcare workers: *A Systematic Review of Strategies for Sustaining Power in the Workplace*.

[9] Dube, O., Simuka, J. & Chitumba, C. (2022). Exploring strategic innovation in the success of private healthcare business: A conceptual model. *Journal of Research and Innovation for Sustainable Society (JRISS), 4(2*), 190-199. DOI: 10.33727/JRISS.2022.2.18:190-199

[10] Grillitsch, M., Hansen, T., Coenen, L., Miörner, J. & Moodysson, J. (2019). Innovation policy for system-wide transformation: The case of strategic innovation programs (SIPs) in Sweden. *Research Policy, 48(4*), 1048-1061.

[11] Gwayagwaya, C. S. (2020). Surveillance of antibiotic prescribing practices and trends of resistance at a private hospital in Zimbabwe (*Doctoral dissertation, Stellenbosch: Stellenbosch University*).

[12] Irvin, R. A., & Furneaux, C. W. (2022). Surviving the black swan event: how much reserves should nonprofit organizations hold? *Nonprofit and Voluntary Sector Quarterly, 51(5*), 943-966.

[13] Kodama, M. (2018). E-healthcare service innovations: In-depth case studies in Japan. In collaborative dynamic capabilities for service innovation (pp. 91-111). Palgrave Macmillan,Cham.

[14] Kula, B., & Kavale, S. (2022). Strategic innovation strategies and performance of five star hotels in Mombasa, Kenya. *The Strategic Journal of Business & Change Management*, 9 (2), 628 – 644.

[15] Long, K., Chandy, S., Feeley Iii, F. G. R., Laing, R., Laird, L. D., & Wirtz, V. J. (2020). Mission hospital responses to challenges and implications for their future role in India's health system. *Christian Journal for Global Health, 7(2)*, 19-36.

[16] Luyckx, V. A., Al-Aly, Z., Bello, A. K., Bellorin-Font, E., Carlini, R. G., Fabian, J.,& Stanifer, J. (2021). Sustainable development goals relevant to kidney health: an update on progress. *Nature Reviews Nephrology, 17(1)*, 15-32.

[17] Malua, M. N., Wandiga, E. & Gachuru, G. (2024). Effect of strategic innovation on sustainability of mission hospitals in Kiambu County, Kenya. *Journal of Business and Management. 26(10), 1-11.* DOI: 10.9790/487X-2610110111

[18] Mang'ana, R. (2022). Strategic adoption of technological innovations on the competitive advantage of commercial banks in Kenya. *Journal of Business and Strategic Management, 7(2)*, 16-36.

[19] Mohamed, K. S., Suliman, E. T. A., Mazen, J. S. & Abu-Naser, S. S. (2020). Perceived organizational reputation and its impact on achieving strategic innovation. *International Journal of Academic Information Systems Research (IJAISR), 4(6)*.

[20] Mudzanire, S. (2022). *A missiological investigation of the role of the church of christ's medical missions* At Mashoko, Zimbabwe, As Transformational Development (Doctoral Dissertation, Stellenbosch: Stellenbosch University).

[21] Muema, E. M. (2019). *Influence of strategic agility on the competitive advantage of private hospitals in* Nairobi County (Doctoral Dissertation, University Of Nairobi).

[22] Nduati, L. N. (2023). *Innovation strategies, entrepreneurial orientation and performance of data service providers in* Kenya (Doctoral Dissertation, Jkuat-Cohred).

[23] Pandey, P. & Pandey, M. M. (2021). *Research methodology tools and techniques.* Bridge Center.

[24] Son, B., Roscoe, S., & Sodhi, M. S. (2024). Dynamic capabilities of global and local humanitarian organizations with emergency response and long-term development missions. *International Journal of Operations & Production Management*. Https://Doi.Org/10.1108/Ijopm-12-2022-0778.

[25] Wang, Z., & Zhou, Y. (2021). Business model innovation, legitimacy and performance: social enterprises in China. *Management Decision, 59(11)*, 2693-2712.