



INNOVATION STRATEGIES ON PERFORMANCE OF PUBLIC HOSPITALS IN WEST POKOT COUNTY, KENYA

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ABSTRACT

This research project examined how innovation strategies affect the performance of public hospitals in Kenya, specifically in the case of West Pokot County. Although quantifying the effects of innovation can be challenging due to the challenges in isolating and evaluating it, it has gotten a lot of attention. The ability to innovate is critical for every company that aspires to achieve and sustain a competitive edge in the market. Furthermore, healthcare companies are increasingly dependent on innovation in order to maintain their competitive edge and provide patients with fresh therapeutic options. There is a surprising lack of knowledge on the nature of innovation in healthcare and its connection to performance. Focusing on West Pokot County Public Hospitals, this study aimed to analyze the relationship between innovation strategies and performance within the healthcare setting, taking into consideration the unique characteristics of the healthcare industry. Specifically, this study aimed to: establish the effects of product innovation; organizational innovation, process innovation; and market innovation on such performance. A descriptive research design was used throughout this examination. A total of 145 participants drawn at random from three public hospitals made up the research's target responder pool, and the study's methodology was stratified random selection. As the major instrument for the research, open-ended and closed-ended questionnaires will be used to gather the necessary primary data. These questionnaires were sent to participants on an individual basis using the drop-and-pick approach. A study of the data was performed using descriptive analysis, correlation analysis, and regression analysis. Data were given in the form of charts and tables. The study results revealed that combined effect of product innovation strategy, organizational innovation strategy, process innovation and market innovation strategy significantly accounted for 65.5% variation in the performance of public hospitals in Kenya, specifically in the case of West Pokot County. The study concluded that innovation strategies have significant effect on the performance of public hospitals in Kenya, specifically in the case of West Pokot County. The study recommended that there's a need for the management of hospitals to improve communication channels to ensure clearer understanding of the sector's initiatives and their impact on innovation-driven competitiveness. Promoting patient-centric approaches is essential, therefore, public hospitals management should actively engage with patients to understand their needs and preferences, and tailor market innovation strategies accordingly.

KEY WORDS: Innovation Strategies, Performance, Public Hospitals, Product innovation, Organizational innovation, Process innovation, Market innovation

INTRODUCTION

Innovation has become a central concept in many fields, including healthcare. However, there is no universally accepted definition of innovation, as different disciplines use the term in varying ways. Innovation differs from invention in that it involves improving existing processes, products, or services rather than creating something entirely new (Benjamin Talin, 2023). According to the International Organization for Standardization (2020), innovation is the realization or redistribution of value by a new or modified entity, often optimizing knowledge consumption at minimal cost. In the corporate world, innovation is often associated with risk, expense, and time consumption (Costello & Prohaska, 2013). However, beyond new tools or technologies, innovation also brings changes in behavior, strategy, and operational processes (Reiman & Dotger, 2008).



In healthcare, innovation is constrained by the industry's unique characteristics and regulatory requirements. Healthcare innovations must be rigorously evaluated before their widespread adoption, and their implementation is often guided by policy and legislation (Herzlinger, 2006). Innovations in healthcare take the form of new technologies, services, or operational processes, all of which pose challenges to existing healthcare systems and professionals (Lansisalmi, 2006). Medical advancements over the past century have significantly improved life expectancy and quality of life, with continued progress in prevention and treatment through innovation (Faulkner & Kent, 2001). Healthcare innovations focus on improving efficiency, effectiveness, and patient care outcomes (Thakur, Hsu, & Fontenot, 2012).

Extensive research has examined the link between innovation and performance (Escoval, 2013; Chen, 2014). Innovation enables organizations to sustain operations while enhancing effectiveness and profitability. Ruoranen (2006) highlights the importance of the service sector in innovation, as integrating new processes improves efficiency and competitiveness. Innovations within organizations can address inefficiencies, strengthen structures, and improve overall performance. Studies indicate that innovation fosters sustainability and long-term operational success.

Performance evaluation is essential for organizations, as it helps measure progress toward goals and enables adjustments to enhance efficiency and effectiveness (Zott & Amit, 2008). Performance is defined as an organization's success in achieving its objectives and meeting stakeholders' expectations (Longenecker, 2015). Performance assessment typically considers efficiency (optimal resource use) and effectiveness (goal achievement) (Tatjana Samsonowa, 2012). Various models exist for measuring organizational performance. Studies highlight the Balanced Scorecard (BSC) and self-assessment excellence models like the European Foundation for Quality Management (EFQM) model as widely used tools for performance monitoring (Kaplan & Norton, 1996, 2001). The EFQM model evaluates leadership, strategy, resources, and processes while considering outcomes' impact on employees, customers, and society. The model's feedback loop promotes continuous improvement and innovation.

Globally, standardizing healthcare quality assessment and performance evaluation remains a challenge due to varying national service structures (Naomi & Harold, 2018). Effective healthcare quality assessment allows for improvements at individual, institutional, and systemic levels. Healthcare performance depends on various factors, including planning, resource allocation, and efficiency in service delivery. Kenya's Vision 2030 recognizes healthcare as a pillar of national development, emphasizing efficiency and affordability (Omondi, 2016). Despite increased healthcare investment, efficiency and cost-effectiveness remain key concerns (Ministry of Health, 2014-2015). Under Kenya's devolved government structure, county health departments manage substantial healthcare resources, with their performance determining healthcare system success. Strategic planning, budgeting, and innovation are crucial for improving county healthcare delivery. Public hospitals in West Pokot have focused on preventive healthcare, communicable and noncommunicable disease control, reproductive and child health services, and healthcare access in remote areas. These efforts have contributed to reducing disease burden, improving service access, and enhancing environmental sanitation (County Annual Report, 2019). However, healthcare service challenges persist, necessitating innovative strategies to improve public hospital performance.

Innovation strategies involve leveraging scientific and technological advancements to drive economic and social benefits. Various academic disciplines have explored innovation's impact on performance, competitiveness, and economic growth. Innovation is a multidimensional process involving changes in products, processes, management structures, and market approaches (Barrett, Davidson, Prabhu, & Vargo, 2015). Firms must align innovation strategies with market demands to remain competitive. Innovation enables businesses to adapt to changing market conditions and develop new solutions.

Product innovation enhances existing goods and services by improving features, components, or functionalities. It includes evolutionary upgrades and the introduction of new products that better meet user needs. The "Jobs to be Done" (JTBD) theory and Outcome-Driven Innovation approach emphasize that consumers adopt innovations based on how well they fulfill their functional and emotional needs (Silva, Styles, & Lages, 2017). Successful product innovation increases market share and business growth. Process innovation focuses on improving production and service delivery methods (Afuah, 1998). It involves new techniques, tools, and management practices that enhance efficiency and effectiveness. Process innovation enhances productivity, reduces costs, and improves service delivery quality. The Oslo Manual (OECD, 1997) highlights that process innovation lowers production costs while increasing



product quality and efficiency. Process innovations, such as digital transformation and workflow automation, have significantly improved healthcare service delivery (Boer & During, 2001).

Market innovation involves modifying marketing strategies, target audiences, and distribution methods to expand market reach (Chen, 2006). It encompasses changes in market positioning, customer engagement, and promotional techniques. Market innovation enhances customer satisfaction, entry into new markets, and competitiveness (Naidoo, 2010). Companies must continuously adapt their market strategies to maintain relevance and attract consumers (Halpern, 2010). Studies confirm that market innovation positively influences revenue growth and financial performance (Fernández, 2009). Organizational innovation refers to changes in workplace structures, management approaches, and business operations. It improves operational efficiency, collaboration, and decision-making (Damanpour, 1991). The OECD (2005) defines organizational innovation as introducing new management and operational strategies that enhance business processes and stakeholder relationships. Workplace innovation promotes employee engagement and productivity by improving job roles and decision-making processes (OECD, 2002).

Innovation is essential for improving healthcare service delivery and organizational performance. The effectiveness of Kenya's public hospitals depends on adopting innovative strategies that enhance efficiency, accessibility, and quality of care. While public hospitals in West Pokot have made progress in preventive care and disease control, further improvements require strategic innovations in product development, process optimization, market positioning, and organizational management. Leveraging innovation enables hospitals to address operational challenges, optimize resource use, and enhance patient satisfaction. This study explores how innovation strategies can drive sustainable healthcare improvements in Kenya's public hospital system, particularly in West Pokot County.

STATEMENT OF THE PROBLEM

Kenya's healthcare system is primarily designed to address acute illnesses rather than provide comprehensive support for chronic conditions (WHO, 2020). Despite significant government investment, public hospitals continue to face challenges, including inefficiencies in patient management, outdated ICT systems, and poor service delivery (Makhamara, 2017). The Health Sector Analysis Report (2013-2014) highlights issues such as lost patient files, misdiagnoses, and inadequate revenue collection systems, leading to dissatisfaction and a shift toward private healthcare. Guyatt et al. (2020) further emphasize the struggles in public hospitals, citing poor infrastructure, inadequate staffing, high patient congestion, and financial constraints as major barriers to efficient healthcare delivery. Although Kenya's Vision 2030 aims to improve healthcare access through decentralization (Omondi, 2016), service quality remains below expectations (KNBS, 2020). Innovation has been linked to improved performance across various industries. Research by Cherotich et al. (2015) on Kenyan commercial banks and Rosli and Sidek (2013) on Malaysian SMEs revealed that financial and manufacturing innovations significantly impact success. However, these studies do not address innovation in healthcare. Similarly, Deya and Laban (2019) found that technological advancements drive business growth, but their study was limited to the tech sector. Given these gaps, this study examines how innovation strategies can enhance public hospital performance in Kenya, with a focus on West Pokot County. A well-integrated healthcare system, leveraging innovative solutions, is crucial for improving efficiency, patient outcomes, and accessibility. This research aims to identify effective innovation strategies to bridge service delivery gaps and enhance healthcare provision in public hospitals.

RESEARCH OBJECTIVES

- i. The purpose of this study is to determine how public hospitals in Kenya's West Pokot County fared after implementing new product innovations.
- ii. The goal is to analyze the public hospitals in West Pokot County, Kenya, to find out how organizational innovation affects their performance.
- iii. The goal of this study is to see how public hospitals in Kenya's West Pokot County fare after implementing process innovation.
- iv. The goal of this study is to evaluate how public hospitals in Kenya's West Pokot County fared after implementing new market measures.

LITERATURE REVIEW

Theoretical Review

Diffusion of Innovation (DOI)



Rogers' Diffusion of Innovation (DOI) Theory, first introduced in 1962 and refined in 1995, explains how new ideas, activities, or products spread within a population or social system over time. The theory categorizes organizations and individuals based on their willingness to adopt innovations, classifying them as innovators, early adopters, early majority, late majority, or laggards (Benhabib, Perla & Tonneti, 2017). Adoption does not occur simultaneously across a population but follows a probability distribution, where some individuals are more inclined to embrace change than others (Wani & Wajid, 2015). Understanding the characteristics of a target audience is essential for promoting product adoption. The theory has been widely applied in fields such as communication, public health, marketing, and social work. In healthcare, it helps accelerate the adoption of new programs by identifying factors influencing adoption rates. This study applies DOI Theory to explain how hospitals can introduce and implement product, organizational, and process innovations to enhance overall performance and efficiency. By analyzing adoption patterns, healthcare institutions can optimize their strategies for integrating new innovations, ensuring greater success in improving healthcare delivery.

Resource-Based Theory (RBT)

The Resource-Based Theory (RBT), introduced by Penrose (1959), asserts that a company comprises both tangible and intangible resources, with growth constrained by its internal resources (Portillo-Trragona et al., 2018). Peteraf (1993) refined this framework to identify the unique characteristics of resources, emphasizing that a lasting competitive advantage is unattainable if resources are easily replicable. According to Miller and Shamsie (1996), an organization's performance and sectoral advantage rely on its unique resources. The Resource-Based View (RBV), further developed by Barney (1991) and Wernerfelt (1984), posits that a firm's success stems from its rare, inimitable, and non-substitutable assets (VRIN). These resources must also enhance efficiency and effectiveness. However, RBT is criticized for lacking practical solutions, making empirical validation difficult (Gardiner & Almarri, 2014). Despite this, it remains widely used to examine the influence of internal resources on organizational performance (Napshin & Marchisio, 2017). In healthcare, RBT illustrates how resource allocation and innovation impact service delivery, marketing, and overall performance, ensuring long-term success.

Empirical Studies

Product innovation, defined as the development of new or enhanced goods and services, is essential for sustained business growth (Silva, Styles & Lages, 2017). According to Deya and Laban (2019), organizations achieve competitive differentiation by modifying product designs and incorporating new technologies. Encouraging research and development (R&D) fosters innovative offerings, driving market expansion and financial performance (Karabulut, 2015). Strategic innovation, as demonstrated by Lilly and Juma (2014), enhances business performance and asset growth. Their study on commercial banks listed on the Nairobi Securities Exchange found a strong correlation between strategic innovation and financial success. Bocquet et al. (2014) further link corporate social responsibility (CSR) with product innovation, emphasizing that companies investing in CSR initiatives experience enhanced creativity, efficiency, and competitiveness.

Organizational innovation entails adopting new operational methods to improve efficiency and sustain competitiveness (Waheed et al., 2019). Byrd, Cegielski, and Hazen (2013) studied North American automobile shipping companies, revealing that leadership style significantly influences innovation-driven success. Similarly, Cherotich et al. (2015) found that innovation positively impacted Kenyan commercial banks' financial performance, while Chen, Wang, and Huang (2019) demonstrated that technical innovation capabilities enhance firm performance. In Nigeria, Bello and Adeoye (2018) confirmed that organizational learning fosters innovation, leading to improved profitability. Further, Laban and Deya (2019) emphasized that organizations adopting innovation strategies perform better than competitors, particularly in the technology sector.

Process innovation focuses on improving production methods, service delivery, and efficiency (Ballot et al., 2015). Ringim and Dantsoho (2017) assert that businesses must integrate customer insights into process innovation to maximize its benefits. Al-Sa'di, Abdallah, and Dahiyat (2017) found that knowledge management significantly influences process and product innovation, ultimately enhancing operational efficiency. In Kenya, Kariuki (2014) studied mobile telecom providers and found that strategic innovation led to superior performance. Similarly, Hilman and Kaliappen (2014) examined Malaysia's hotel sector, revealing that customer and competitor orientation strategies positively influenced firm success.

Market innovation strategies help businesses expand market share and improve financial performance (Kang, Na & Jeong, 2019). Dedkova, Ungerma, and Gurinova (2018) demonstrated that marketing innovation enhances competitiveness and profitability in manufacturing firms. Shisia et al. (2014) found that Kenyan public universities benefited from innovative advertising strategies. Cascio (2011) linked market innovation to success in public hospitals, emphasizing the importance of product, process, and relationship marketing. Additionally, Na, Kang, and Jeong (2019) identified a strong correlation between market orientation and long-term competitive advantage. Njeri (2017) investigated Safaricom Kenya Limited and found that innovation strategies, particularly in financial and market innovation, significantly improved company performance.

CONCEPTUAL FRAMEWORK

The conceptual framework depicts the relationship between the independent and dependent variables. As a result, it establishes the working definition of a variable and allows for a straightforward explanation of the study's theoretical framework (Mugenda & Mugenda, 2003). The product innovation having new product development, quality improvement, and product specifications as the indicators, organizational innovation, process innovation, and market innovation were independent variables in this study, while performance of the public hospitals was the dependent variable.

Independent variables

Innovation Strategies

Dependent variables

Performance of public hospitals

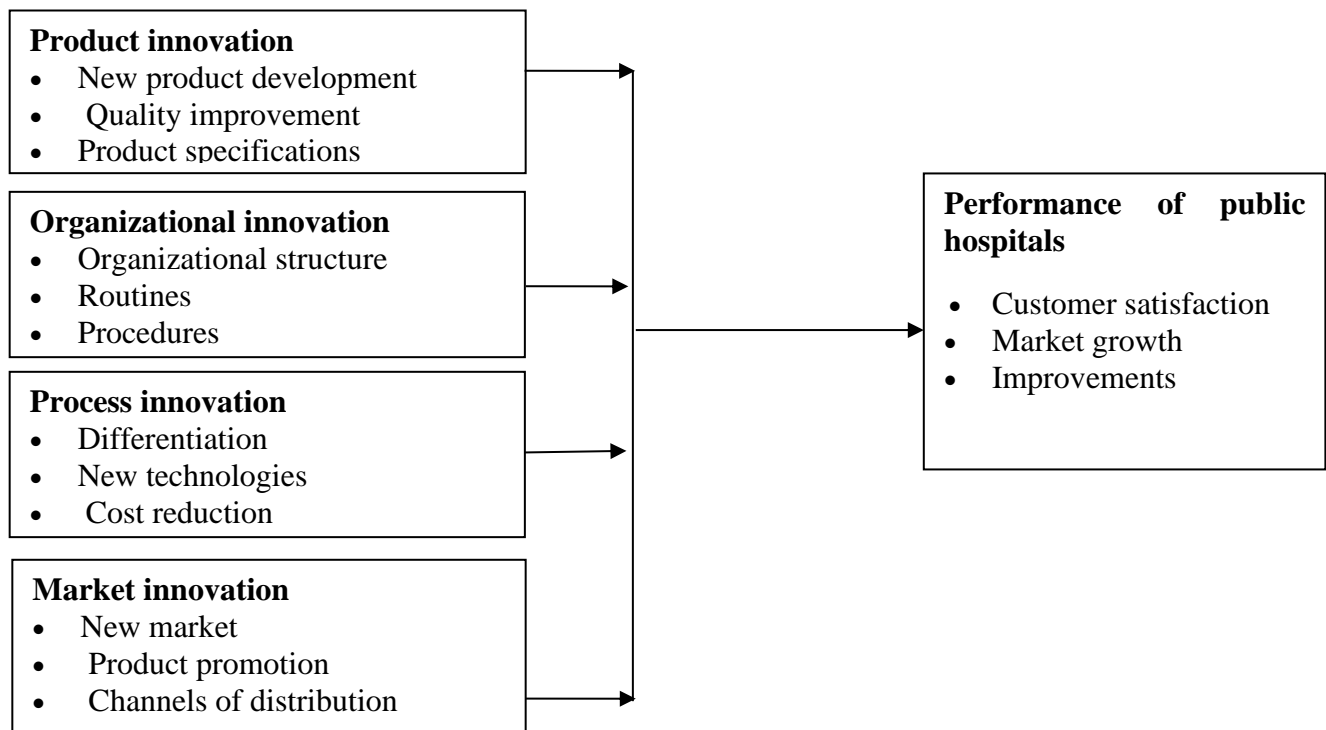


Figure 1: Conceptual Framework

Source: Author, 2023

METHODOLOGY

This study adopts a descriptive research design, as outlined by Taylor (2007), which follows a structured framework for collecting data and analyzing variables systematically. The target population consists of 130 staff members from West Pokot's County and sub-county hospitals, as defined by Ngechu (2004), who emphasizes the importance of clearly outlining the population under study. A stratified random sampling method was employed, ensuring that diverse hospital staff groups, including department heads, assistant department heads, and supervisors, were proportionally represented. Based on Cooper and Schindler's (2003) assertion that a sample size of at least 10% can



yield reliable findings, a 40% sample was selected, resulting in 52 respondents. Data was collected using structured questionnaires, a widely used and cost-effective tool for gathering large-scale information (Malhotra, Nunan & Birks, 2017). The questionnaire included both open-ended and closed-ended questions to ensure standardized responses while allowing respondents to express their opinions in detail. A five-point Likert scale was used to assess participants' perceptions of innovation's impact on healthcare services. A pilot study was conducted at Trans-Nzoia County Hospital, involving 13 participants (10% of the sample), to test and refine the questionnaire for validity and reliability. Data analysis was carried out using SPSS, employing descriptive and inferential statistical techniques such as regression analysis to explore the relationships between innovation strategies and hospital performance.

FINDINGS AND DISCUSSION

Of the 52 people who took part in the survey, 46 worked for one of the three county or sub-county hospitals, and the researchers were permitted to use their information. A response rate of 88.5% was achieved.

Pearson Correlation Analysis

This sub section presents the results, correlation analysis where the relationships between the dependent variable performance of public hospitals in West Pokot County Kenya and the independent variables represented by the Product innovation, Organizational innovation, process innovation and Market innovation was presented. Correlation analysis was employed in assessing the linearity association among the variables. The pertinent results are summarized in Table 1.

Table 1: Multiple Correlations Table

		Product innovation	Organizational innovation	Process innovation	Market innovation
Product innovation	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	46			
Organizational innovation	Pearson Correlation	.470**	1		
	Sig. (2-tailed)	.001			
	N	46	46		
Process innovation	Pearson Correlation	.081	.054	1	
	Sig. (2-tailed)	.594	.720		
	N	46	46	46	
Market innovation	Pearson Correlation	.058	.154	.517**	1
	Sig. (2-tailed)	.699	.308	.000	
	N	46	46	46	46
Performance of public hospitals	Pearson Correlation	.428**	.551**	.505**	.514**
	Sig. (2-tailed)	.003	.000	.000	.000
	N	46	46	46	46

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

* . Correlation is significant at the 0.05 level (2-tailed).

Field Data (2024)

From the Table 1 showed that product innovations were positively correlated to performance of public hospitals in West Pokot County Kenya ($r=0.428$, $p < 0.05$) and it was significant at 95% confidence level thus increase in product innovation makes performance of public hospitals in West Pokot County Kenya to increase. Sun et al. (2021) found that hospitals implementing new medical technologies and treatment options experienced improvements in patient outcomes and overall efficiency. Chang et al. (2023) found that the impact of innovation on hospital performance can vary depending on factors like the specific type of innovation, the hospital's existing resources, and the broader healthcare environment.

From the Table 1 above it shows that organizational innovation was positively correlated to performance of public hospitals in West Pokot County Kenya ($r=0.551$, $p < 0.05$) and it was significant at 95% confidence level thus increase in organizational innovation makes performance of public hospitals in West Pokot County Kenya to increase. Research by Menzel and Moehr (2015) suggested that public hospitals adopting innovative management practices, such as performance-based budgeting and employee empowerment, see positive impacts on financial performance and service



quality. Research by Scott et al. (2009) suggests that public hospitals may struggle to implement certain innovations due to budgetary constraints, bureaucratic hurdles, or resistance from staff accustomed to traditional practices. From the Table 1 above it shows that process innovation was positively correlated to performance of public hospitals in West Pokot County Kenya ($r=0.505^{**}$, $p\text{-value}<0.05$) and it was significant at 95% confidence level thus increase in process innovation makes performance of public hospitals in West Pokot County Kenya to increase. The findings showed a positive relationship between process innovation and performance of public hospitals in West Pokot County Kenya. Oliveira et al. (2020) found that hospitals implementing innovative processes, such as streamlined patient admissions or telemedicine consultations, improved patient access to care and reduced wait times.

From the Table 1 above it showed that market innovation was positively correlated to performance of public hospitals in West Pokot County Kenya ($r=0.514$, $p < 0.05$) thus significant at 95% confidence level thus increase in market innovation makes performance of public hospitals in West Pokot County Kenya to increase in the same direction. Robinson et al. (2019) highlights how public hospitals that develop innovative strategies to attract and retain patients, such as offering specialized services or convenient appointment scheduling, can enhance their market position and financial sustainability.

Multiple Regression of Performance of public hospitals in West Pokot County Kenya and Innovation strategies

Objective of this study sought was to establish the effect of innovation strategies on the performance of the public hospitals in West Pokot County Kenya. This was achieved by carrying out standard multiple regressions. The study was interested in knowing the effect of each of innovation strategies constructs on performance of public hospitals in West Pokot County Kenya when all these constructs (Market Innovation, Product innovation, Organizational innovation and process innovation) were entered as a block on the model. This aided in coming up with the coefficients of the study model as well as R square of the study hence, test the null research hypotheses further using Beta coefficients and t-statistics. The results are as shown in Table 2.

Table 2: Model Summary of Multiple Linear Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.809 ^a	.655	.621	.44758

a. Predictors: (Constant), Process innovation, product innovation, market innovation and organizational innovation

b. Dependent Variable: Performance of public hospitals in West Pokot County Kenya

Field Data (2024)

The research determined that the correlation coefficient was 0.809, as represented by R, and this was found in Table 2 which can be seen above. Because of this, the result of 0.655 was an indicator of a strong degree of prediction on performance of public hospitals in West Pokot County Kenya, which was the dependent variable in the research. It was determined that the coefficient of determination, often known as R square, was 0.655, which indicated that innovation strategies could account for 65.5% of the performance of public hospitals in West Pokot County Kenya reported. Nevertheless, the modified R square value of 0.621 offered the most accurate and accurate representation of the variances. This indicated that the support for capital management, the product innovation, and the methods of financing may account for 62.1% of the variances in the performance of public hospitals in West Pokot County Kenya. The findings also showed that there was a little difference between the R square and the adjusted R square, which indicates how well the model fits the data when it comes to forecasting the association between innovation strategies and financial success (Dhakal, 2019). In spite of this, the remaining 34.5% of fluctuations in the performance of public hospitals in West Pokot County Kenya were caused by other variables that were not included in the scope of the research.

Table 3: ANOVA Results for Multiple Linear Regression

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15.560	4	3.890	19.418	.000 ^b
	Residual	8.213	41	.200		
	Total	23.773	45			

a. Dependent Variable: Performance of public hospitals in West Pokot County Kenya



b. Predictors: (Constant), Process innovation, Product innovation, Process innovation, Market Innovation

Field Data (2024)

A significant F-statistic indicates that the regression model is statistically significant. This means that the model is able to explain a significant proportion of the variance in the dependent variable, beyond what would be expected by chance. From the ANOVA table significance of the model had a value ($F(4,41) = 19.418$, $p < 0.05$) this shows that model was significant at 95% confidence level hence the model is feasible therefore good fit for this study.

Table 4. Regression Coefficients Results for Multiple Linear Regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.508	.392		1.295	.202
Product innovation	.204	.068	.316	2.999	.005
Organizational innovation	.260	.082	.338	3.176	.003
Process innovation	.279	.084	.359	3.345	.002
Market innovation	.166	.061	.295	2.707	.010

a. Dependent Variable: Performance of public hospitals in West Pokot County Kenya

Field Data (2024)

The study findings in Table 4 revealed that holding all innovation strategies under the study constant, performance of public hospitals in West Pokot County Kenya would be 0.508. However, an introduction of product innovation would increase performance of public hospitals in West Pokot County Kenya by ($\beta=0.204$, $p\text{-value}=0.005$) and organizational innovation would enhance performance of public hospitals in West Pokot County Kenya by ($\beta=0.260$, $p\text{-value}=0.003$). Similarly, process innovation would increase performance of public hospitals in West Pokot County Kenya by ($\beta=0.279$, $p\text{-value}=0.002$ and process innovation would increase performance of public hospitals in West Pokot County Kenya by ($\beta=0.166$, $p\text{-value}=0.010$). The multiple regression model then becomes;

$$Y = 0.718 + 0.204X_1 + 0.260X_2 + 0.279X_3 + 0.166X_4$$

Where; Y= Performance of Public Hospitals in West Pokot

X1= product innovation strategy

X2= organizational innovation strategy

X3= process innovation strategy

X4= market innovation strategy

In accordance to the analysis of regression provided in Table 4, the coefficient for product innovation was established to be 0.204, $P=0.005$. This finding indicates that, while controlling for other variable in the model, a unit increase in product innovation leads to a 0,204 unit's improvement in the performance of public hospitals in West Pokot County Kenya. The coefficient has not just a positive direction but also demonstrates statistical significance, as shown by a t-statistic value of 2.999. In the field of statistics, it is generally acknowledged that a t-statistic with a value of 2 or above is considered to be statistically significant in the context of statistical inference. The p-value was less than 0.05. Bougrine and Tamimi (2018) found that product innovation was significantly and positively correlated with hospital competitiveness, suggesting that improvements in product innovation contributed to better overall performance. Strategic innovation increased growth, enhanced performance, and assets for Kenyan commercial banks, according to research by Lilly and Juma (2014). However, Kumar and Sharma (2017) could not find a significant relationship between product innovation and hospital performance.

Pursuant to the analysis of regression provided in Table 4, the coefficient for organizational innovation was established to be 0.260, $P=0.003$. This finding indicates that, while controlling for other variable in the model, a unit increase in organizational innovation leads to a 0,260 units improvement in the performance of public hospitals in West Pokot County Kenya. The coefficient has not just a positive direction but also demonstrates statistical significance, as shown by a t-statistic value of 3.176. The p-value was less than 0.05. Örtqvist and Wincent (2016) demonstrated that organizational innovation played a crucial role in achieving higher levels of organizational renewal and long-term performance. Chen, Wang, and Huang (2019) looked at the link between technical knowledge and innovation in organizations and how it impacts company results. Firm performance is affected by the acquisition and use of technical innovation skills, and the findings support the idea that organizational innovation acts as both a moderator and an



antecedent in this process. Nonetheless, Mahembe and Horn (2017) did not find a significant relationship between organizational innovation (intellectual capital) and university performance.

In regards to the analysis of regression provided in Table 4, the coefficient for process innovation was established to be 0.279, $P=0.002$. This finding indicates that, while controlling for other variable in the model, a unit increase in process innovation leads to a 0.279 units improvement in the performance of public hospitals in West Pokot County Kenya. The coefficient has not just a positive direction but also demonstrates statistical significance, as shown by a t-statistic value of 3.345. The p-value was less than 0.05. Zhang and Ho (2015) showed that process innovation (implementation of nursing best practices) led to increased job satisfaction among nurses, which could translate to better patient outcomes and overall hospital performance. Process innovation differed significantly from product innovation in that it improved performance. In addition, it was shown that the connection between performance and knowledge management was significantly mediated by process innovation alone, according to Dahiyat, Abdallah, and Al-Sa'di (2017). Nevertheless, Salge and Vera (2012) argued that too much emphasis on process innovation could distract professionals from attending to client needs, thereby lowering service quality and client satisfaction.

Finally, the coefficient for process innovation was established to be 0.166, $P=0.010$. This finding indicates that, while controlling for other variable in the model, a unit increase in process innovation leads to a 0.166 units improvement in the performance of public hospitals in West Pokot County Kenya. The coefficient has not just a positive direction but also demonstrates statistical significance, as shown by a t-statistic value of 2.707. The p-value was less than 0.05. Chandra and Lo (2017) illustrated that Lean Six Sigma, a process improvement approach, resulted in significant improvements in hospital quality. The study team of Ungerman, Dedkova, and Gurinova (2018) looked at how market innovation affects company performance. These impacts were described and then evaluated using descriptive statistics methods, and their significance was empirically validated. The study found that implementing marketing innovation methods in manufacturing organizations improves competitiveness and profitability (Dedkova, Ungerman, & Gurinova, 2018). However, Shukri, Mohd Nor and Harun (2013) presented criticisms of TQM, arguing that it focuses too heavily on process and ignores the importance of product and service innovation.

CONCLUSION

The study concluded that product innovation has significant effect on performance of public hospitals in West Pokot County Kenya. It is evident varying views on WPC health sector support's impact on product improvement and innovation-driven competitiveness. While most agree on its value, opinions diverge on product innovation's broader impact and employee recognition practices, suggesting the need for clearer communication and alignment on these issues. The study concluded that organizational innovation has significant effect on performance of public hospitals in West Pokot County Kenya. The study highlighted varied perceptions among employees regarding their workplace environment and organizational practices. While a significant portion feels appreciated by upper management and perceives ease of communication regarding innovation, there are also areas of concern, such as diverse perspectives on strategic planning and employee confidence levels.

The study concluded that process innovation has significant effect on performance of public hospitals in West Pokot County Kenya. There was a general consensus among participants regarding the health sector's commitment to continuous process improvement and the positive impact of new workflow systems on customer satisfaction. Additionally, there is acknowledgment of the importance of rewarding employees for process improvements and the effectiveness of introducing new systems in enhancing overall firm performance. The research came to a close by saying that public hospitals in West Pokot County, Kenya, are significantly impacted by market innovation. In WCP, people have a favorable impression of healthcare providers that put money into R&D, provide distinctive and high-quality goods and services, and use innovative marketing strategies.

RECOMMENDATIONS

There's a need for the management of hospitals to improve communication channels to ensure clearer understanding of the sector's initiatives and their impact on innovation-driven competitiveness. This could involve regular updates and feedback sessions with stakeholders, including healthcare providers and patients, to foster alignment with their needs and expectations. Hospital administrations should do a better job of showing appreciation for staff by establishing formal initiatives to do just that. Employee morale and productivity may both benefit from this.



To address uncertainties and ensure a clearer understanding of the health sector's commitment to continuous process improvement, it is advisable for hospital management to implement transparent communication strategies. This can involve regularly updating stakeholders on ongoing improvement efforts, sharing success stories, and providing opportunities for feedback and clarification. Promoting patient-centric approaches is essential, therefore, public hospitals management should actively engage with patients to understand their needs and preferences, and tailor market innovation strategies accordingly. This can be achieved through feedback mechanisms, surveys, and focus groups.

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