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

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A RESEARCH PROJECT SUBITTED TO THE SCHOOL OF BUSINESS, ECONOMIC AND TOURISIM IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF MASTERS OF BUSINESS ADMINISTRATION (STRATEGIC MANAGEMENT) OF KENYATTA UNIVERSITY

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DECLARATION

This research project is my original work and has not been presented for an academic award in any other University or institution of higher learning.

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This research project has been submitted with my approval as the duly appointed university supervisor.

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DEDICATION

I would like to convey my sincere appreciation to my remarkable mother, Mrs. Chemain Everline, my sisters Sarah and Mirriam, who always offered steadfast encouragement and guaranteed my dedication to finishing all of my pursuits. Thank you very much.

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I am thankful to God for the many benefits I have experienced during my education. Kenyatta University has provided me with an instructive and engaging academic year, and I am thankful of the chance to perform this research project in order to exhibit the information I have learned there. My supervisor, Dr. Abel Anyieni, is especially deserving of praise for providing the guidance, encouragement, and help that enabled the research to be successful.

Table of Contents

LIST OF TABLES

LIST OF FIGURES

OPERATIONAL DEFINITION OF TERMS

Innovation	The application of creativity or brilliant approaches to enhance services or processes in a way that raises the performance, importance, value, or effectiveness of hospital.
Organization	Collection of people, who are involved in pursuing, defined
Organizational innovation	The implementation of new or significantly improved organizational structures, routines, and procedures that enhance how work is coordinated, executed, and standardized to increase adaptability, efficiency, and overall performance
Process innovation	It is a term that refers to the new methods and procedures that have been implemented into operations in hospitals, with the goal of enhancing efficiency or effectiveness and reducing the prices of goods and services.
Product innovation	It is the process of coming up with new things and putting them into production.
Marketing innovation	It is the process of introducing a new way of selling a product, which may include making major changes to the product's design, packaging, positioning, advertising, or price.
Organizational performance	measure of an organization's actual output or outcomes in comparison to the outputs or goals and objectives that it had expected to achieve.
Innovative strategies	This refers to the strategies that a company devises in order to achieve its growth objective, which is to improve technological or service developments.

Process Improvement	For the purpose of optimizing performance, meeting best practice standards, or just improving quality and the user experience for customers and end-users, the business activity known as process improvement involves identifying, evaluating, and working to enhance existing business processes.
Strategy	An overall course of action that has been decided upon for the organization and all of its constituent parts in order to accomplish the desired future state
Marketing	Every activity done by a company to get people to buy their products or use their services.
Performance	Business success, which is highly related to commercial effectiveness, is dictated by a company's ability to implement optimal organization in order to simultaneously meet the demands of consumers and customers via the creation of a product or service.
Organization Structure	The different units working together in a formal setup which enable the hospitals to achieve its objective.

ABBREVIATIONS AND ACRONYMS

BSC	Balance Score Card
DOI	Diffusion of Innovation
EFQM	European Foundation for Quality Management
ICT	Information and Communications Technology
JTBD	"Jobs -to -be - Done"
KNBS	Kenya National Bureau of Statistics
NACOSTI	National Commission for Science, Technology and Innovation
OECD	Organization for Economic Co-operation and Development
RNA	Ribonucleic Acid
SPSS	Statistical Product and Service Solutions
WHO	World Health Organization
WPC	West Pokot County

ABSTRACT

Public hospitals in Kenya, particularly those in West Pokot County, face persistent challenges in improving efficiency, service quality, and patient satisfaction within a setting of limited resources and dynamic healthcare needs. Despite ongoing innovation initiatives, noticeable performance gaps remain, highlighting a critical need to assess how innovation strategies influence hospital performance. The general objective of this study was to evaluate the influence of innovation strategies on the performance of public hospitals in West Pokot County. Specifically, the study sought to: determine the effect of product innovation on hospital performance; assess the impact of organizational innovation on performance; examine how process innovation influences performance; and evaluate the role of market innovation in enhancing hospital outcomes. Each objective was analyzed independently. Product innovation was assessed based on new services or treatments introduced to improve patient care. Organizational innovation focused on changes in management structure and internal processes. Process innovation evaluated improvements in service delivery mechanisms, while market innovation involved strategies aimed at responding to patient preferences and external competition. A combination of open- and closed-ended questionnaire items was used to gather primary data from a stratified random sample of participants drawn from the target population. Data were collected using the drop-and-pick method and analyzed through descriptive and inferential statistics, with findings presented using charts and tables. The study was guided by four key theoretical frameworks: The Diffusion of Innovation Theory, which explains how new ideas spread; the Resource-Based Theory, which highlights the role of internal assets in gaining a competitive edge; the Knowledge-Based Theory, which emphasizes knowledge as a core strategic resource; Goal Setting Theory, which emphasizes the importance of setting measurable objectives and the Theory of Performance, which links innovation to outcomes. Findings revealed that all four innovation strategies product, organizational, process, and market had a positive and statistically significant impact on hospital performance. This indicates that innovation is a strong driver of improved hospital outcomes. The study recommends that hospital management strengthen internal communication systems to facilitate better understanding and implementation of innovation strategies. Furthermore, actively engaging patients to understand their needs and preferences can lead to more effective market innovations, ensuring services are aligned with user expectations and ultimately enhancing performance.

CHAPTER ONE

INRODUCTION

1.1 Background of The Study

In the global healthcare landscape, improving organizational performance remains a critical goal. Despite significant medical advancements, many health systems around the world continue to struggle with issues related to inefficiency, high costs, and inconsistent service quality. The World Health Organization (WHO 2023) has repeatedly emphasized the importance of strengthening health system performance to ensure universal access to effective and safe care. One of the key approaches adopted globally to address these challenges has been the implementation of innovation strategies including the adoption of new technologies, process improvements, and organizational reforms to enhance service delivery, increase efficiency, and boost patient satisfaction. Innovation strategies, such as digital health platforms, process automation, and organizational restructuring, are being used to address these challenges and improve service outcomes (Alami et al., 2020).

In Sub-Saharan Africa, health systems often face chronic challenges, including insufficient medical personnel, underdeveloped infrastructure, and financial constraints. To address performance deficits, several countries have integrated innovative solutions like e-health systems, mobile-based health interventions (mHealth), and public-private partnerships to extend access and improve efficiency (Ameh et al., 2021). For example, Rwanda's digital health strategies have been recognized for improving service integration and reducing bottlenecks in rural healthcare delivery (Nuwagira et al., 2022).

At the national level, Kenya has implemented health reforms through policies such as the Kenya Health Policy (2014–2030) and the Kenya Digital Health Strategy (2020–2030) to support innovation in public health services. Initiatives such as the deployment of electronic medical records, digitization of patient flow systems, and telemedicine services are being piloted in various counties to improve performance and accountability (Ministry of Health Kenya, 2020). Recent evidence suggests that innovation contributes to higher efficiency and better resource utilization in Kenyan health facilities, though disparities in implementation persist across counties (Ochieng et al., 2022).

In West Pokot County, public hospitals continue to face persistent performance challenges. Issues such as inadequate infrastructure, delayed service provision, shortage of skilled personnel, and inconsistent access to medical supplies hinder effective service delivery. Although national innovation strategies exist, their impact in West Pokot has been minimal due to geographical, financial, and logistical barriers (Kiptoo et al., 2023). As a result, health outcomes remain suboptimal, and community trust in public health systems continues to decline.

Implementing context-specific innovation strategies such as mobile clinics, digitized triage systems, and data-driven supply chain management can offer practical solutions to these challenges. Global and national experiences show that localized innovations can significantly improve hospital efficiency, service quality, and patient satisfaction when aligned with the unique needs of underserved areas (Munyua et al., 2021).

This study, therefore, investigates the application of innovation strategies in public hospitals within West Pokot County and examines their influence on organizational performance. The findings aim to guide the development of practical, evidence-based interventions to improve healthcare delivery in rural Kenyan settings.

1.1.1 Performance of Public Hospitals

Organizational performance refers to how well an organization achieves its intended goals while making efficient use of its resources. It reflects the organization's ability to fulfill its mission and deliver value to its stakeholders in measurable ways (Al-Dhaafri & Alosani, 2020). Every company, no matter how big or little, in both developed and emerging economies values performance evaluations because they show how well an organization is doing in relation to its stated goals. In the public health sector, performance includes service effectiveness, patient satisfaction, resource efficiency, and responsiveness to public health needs (Mutua, Mungai, & Gikunda, 2021). The degree to which an organization has been effective in achieving its objectives or the many characteristics of its organization that are seen as being of relevance to the many stakeholders is referred to as the "performance" of the organization under consideration. This is a measurement of how successfully an individual contributes to the efforts of the firm to fulfill its vision, mission, and objectives, as stated by Longenecker (2015).

In public hospitals, performance takes on a multi-dimensional character. It involves not just the provision of care, but also patient satisfaction, quality service delivery, responsiveness, and effective use of public resources. Public health facilities must demonstrate accountability through outcomes that align with their health objectives and the expectations of both governments and the communities they serve (Mbae, Ombaka, & Kithuka, 2020). Therefore, performance in healthcare includes indicators such as improved patient outcomes, disease prevention, cost-effective interventions, and timely service provision.

Measurement of performance in healthcare is often supported by tools such as the Balanced Scorecard (BSC) and the European Foundation for Quality Management (EFQM) model. The BSC framework evaluates an institution across financial, internal process, learning, and customer perspectives (Kaplan & Norton, 2001). EFQM, on the other hand, assesses leadership, strategy, people, partnerships, and process outcomes. Both frameworks support continuous quality improvement and link performance measurement to innovation and strategic alignment (Omondi & Muturi, 2020). In the healthcare setting, these frameworks are useful for tracking service quality, health outcomes, patient satisfaction, and operational efficiency (WHO, 2022).

In West Pokot County, Kenya, public hospital performance is assessed through a set of local criteria rooted in service delivery and disease management. The County Annual Health Performance Report (2019) identifies improvements in disease prevention, expanded access to reproductive and child health services, environmental sanitation, and outreach to remote communities as key performance criteria. These efforts are part of the county's response to persistent health challenges, and they align with broader national health strategies aimed at achieving universal health coverage under Kenya's Vision 2030.

Based on the criteria and the broader discussion, specific performance indicators can be identified and justified. These include service accessibility (particularly to remote regions), reduction in disease incidence, maternal and child health service coverage, patient satisfaction, environmental health improvements, and resource efficiency. These indicators are not only drawn from the locally defined criteria but also reflect best practices in healthcare performance measurement as outlined by global health bodies such as the WHO (2022). They also correspond with the conceptual framework for evaluating innovation strategies and organizational performance, which emphasizes

effectiveness, responsiveness, and operational efficiency.

1.1.2 Innovation Strategies

Innovation strategies refer to the deliberate plans and approaches that organizations adopt to enhance their products, services, processes, or structures to achieve competitive advantage and improved performance. These strategies are central to aligning innovation efforts with organizational goals, ensuring sustainable value creation across economic and social spheres (Oke, Walumbwa, & Myers, 2021). Innovation involves leveraging novel ideas, technologies, and processes to improve operational outcomes or meet evolving market demands (Ali, Park, & Kim, 2022). It is both a transformative and adaptive approach that enables organizations to thrive in dynamic environments. Innovation strategies include the process of modernizing scientific and technological advancements to yield benefits in both economic and social domains. Companies undergo this transformation when they strive to enhance and broaden their distinct technological competence, which ultimately results in the acquisition of new abilities. However, businesses must ensure that their innovation plans are in line with the demand for their products in the market. The future of any business hinges on its ability to adapt to rapidly changing markets via innovation.

The choice of a corporation to innovate is based on its strategy, which is one of the highly obvious elements that affect performance. According to Oslon & Oslon (2007), a strategy is a uniting concept that guides a firm's decisions and activities and lends the organization coherence rather than a specific plan or program of instructions. Via the development of a competitive advantage, management decisions are directed at achieving better performance via the use of strategy. Businesses need to regularly use certain innovation strategies if they want to increase their performance and remain competitive. Despite widespread agreement that new product development has boosted company profits, this remains the case. A health care company may improve its performance by using any number of innovative initiatives. Innovation in products, processes, markets, and organizations are all part of this strategy.

When we talk about Product innovation it involves refining or introducing new goods and services to meet consumer needs more effectively. This may include changes in design, features, or user functionality to improve quality and utility (Silva, Styles, & Lages, 2017) improved efficiency,

such as adopting advanced manufacturing techniques or workflow automation (Afuah, 2019). This method incorporates evolutionary product upgrades while using existing organizational competencies and technology. It marks the introduction of a completely revamped product or service that is higher quality and more effective in meeting its intended use or original specifications. Embedded software, user-friendliness, technical requirements, components and materials, and other functional elements have all seen considerable advancements. The "Jobs to be Done" (JTBD) theory and the "Outcome-Driven Innovation" theory are two famous ideas that explain product innovation, both in terms of what drives it and how it is performed. The JTBD Theory, which is frequently used as part of a systematic approach to product development, claims that individuals "rent" a product in order to carry out a "job," and that innovation may be accomplished by providing a more effective way of carrying out a particular task. Just-in-time delivery (JTBD) is a concept that is comparable to outcome-driven innovation in that it places an emphasis on the 'jobs' that users seek to accomplish in terms of their relationships, emotions, and functionality. Nevertheless, this is one of the two primary meanings of the phrase "jobs-as-action." The second viewpoint, which is referred to as "Occupations-As-Progress," centers on the user's aspirations for their future careers. This viewpoint asserts that the employments that a product user desires are the positions that the product user desires.

Incorporating novel features into an organization's workflow is at the heart of process innovation, claims Afuah (2019). Process innovation focuses on developing new methods or enhancing existing operational procedures for improved efficiency, such as adopting advanced manufacturing techniques or workflow automation (Afuah, 2019). New components might include things like the technology used to make something or provide a service, as well as the materials required to do the task. Process innovation is described by Davenport (1993) as the use of specialized change tools and the modification of business processes to perform a task in a way that differs from what has been done before. The term "process innovation" refers to the introduction of a much improved method of production or delivery that makes use of new or enhanced tools, techniques, and software. In a more detailed description of process innovation, the Oslo Manual provides this definition. According to a 1997 statement made by the OECD, process adjustments may be used to lower manufacturing or delivery unit costs, improve quality, or provide new or significantly enhanced goods. A fresh or vastly enhanced approach to an old problem that helps a business saves

money while getting more done is called a breakthrough. According to Boer and During (2001), process innovation may be shown by the creation of novel methods, tools, and software.

Market innovation refers to the exploration of new market segments or the application of novel marketing methods to expand market reach (Naidoo, 2020). According to Chen (2006), market innovation is inextricably linked to market alternatives and market mix. It is the process of diversifying target markets and the method in which they are supplied with goods and services. Issues related to distribution processes in domestic and international markets as well as the introduction of new markets fall under this category. Management theory and practice rely heavily on markets since that's where businesses do their actual business. Based on what Naidoo (2010) says, market innovation is crucial for meeting market needs and capitalizing on market possibilities. Companies face formidable obstacles in the shape of both new markets that develop and old ones that experience dramatic shifts over time. Better consumer satisfaction, entry into new markets, or a shift in product positioning relative to competitors are the driving forces behind marketing innovations. Marketing innovations differ from other tweaks to the company's marketing tools in that they apply a previously unexplored marketing strategy. It must be part of a fresh marketing plan that stands out from the company's present marketing efforts. According to Halpern (2010), market innovation will improve sales by raising product demand, which will ultimately result in greater profits. Product demand will be raised. Fernández (2009) provides evidence that proves that market innovation has a favorable impact on the financial performance of firms. This evidence lends credence to the thesis that is being presented here.

The introduction of new organizational approaches is yet another dimension that may be considered when discussing organizational innovation. Organizational innovation includes changes in business structures, workplace management, or inter-organizational relationships that optimize internal processes and stakeholder collaboration (OECD, 2018). These strategies have the potential to enhance the commercial operations of a company, the organization of the workplace, or the interactions with third parties if implemented. The OECD established the definition of organizational innovation in 2005. According to the definition, it occurs when a firm introduces a new method of organizing its commercial activities, workplace, or relationships with the outside world. Two instances of advances in workplace organization are Damanpour (1991) and Evan (1966). Examples of such innovations include new ways of dividing up tasks and making

decisions amongst workers, both within and between different parts of the company, and new ideas for how to structure activities, like bringing together different parts of the company. Organizational innovation in the workplace may be shown in the first implementation of a model that promotes employee input and gives them more say in company decisions (OECD, 2002). This model also allows employees to have more said in the decisions that are made.

1.1.3 Public Hospitals in West Pokot, Kenya

Public hospitals in West Pokot County, Kenya, play a crucial role in delivering essential healthcare services to a predominantly rural and underserved population. The county hosts several public healthcare facilities, including referral, sub-county, and dispensary-level hospitals, which collectively serve the health needs of the local community. According to the County Health Strategic Plan (2020-2025), West Pokot has approximately six public hospitals, including Moi Teaching and Referral Hospital, Kapenguria County Referral Hospital, and several sub-county hospitals spread across the region (County Government of West Pokot, 2020).. These facilities vary in size, capacity, and the range of services offered, yet they share common characteristics such as limited resources, infrastructure challenges, understaffing, and high patient loads (Mugo, Wambua, & Kariuki, 2021). Public hospitals in the county predominantly serve low-income populations with limited access to private healthcare options, making them critical access points for preventive, curative, and emergency medical care (Kamau & Njagi, 2019).

The uniqueness of innovation strategies in West Pokot's public hospitals is shaped by the socio-economic and geographical challenges the region faces. The implementation of innovation in these settings goes beyond traditional business-focused strategies and is aimed at improving service delivery, resource management, and patient outcomes under constrained conditions (Owuor, Okello, & Mwangi, 2022). Innovation strategies in these hospitals are tailored to address local health priorities, including infectious disease control, maternal and child health, and management of non-communicable diseases. Moreover, innovations often involve low-cost, sustainable solutions such as mobile health units, community health worker programs, digital health record systems, and telemedicine initiatives designed to bridge the gap between remote communities and specialized healthcare services (Kibet & Kipkemoi, 2020). These approaches are not merely

technological upgrades but represent systemic changes that improve organizational efficiency, staff motivation, and patient satisfaction within the public health framework (Kamau & Njagi, 2019).

The choice to focus on innovation strategies and performance specifically, rather than other concepts in strategic management, is grounded in their direct relevance to addressing the persistent challenges facing public healthcare delivery in West Pokot. Innovation strategies are critical because they represent the proactive efforts hospitals make to adapt, evolve, and improve amidst resource constraints and rising healthcare demands (Owuor et al., 2022). They enable public hospitals to enhance the quality and accessibility of care, optimize limited resources, and sustain operations despite economic and infrastructural limitations. Performance, on the other hand, offers a measurable outcome framework that assesses how well these innovation strategies translate into tangible improvements, such as reduced patient waits times, increased service coverage, improved treatment success rates, and overall health system responsiveness (Kibet & Kipkemoi, 2020). Unlike other strategic management concepts that may focus more broadly on market positioning or competitive advantage, innovation strategies paired with performance evaluation capture both the process and results of change efforts in public healthcare (County Government of West Pokot, 2020). This dual focus ensures that interventions are not only creative and contextually appropriate but also effective in achieving health goals critical to community well-being.

In summary, public hospitals in West Pokot County constitute a vital healthcare network characterized by resource limitations and significant service demand. Innovation strategies uniquely address these challenges by fostering adaptable, sustainable, and patient-centered improvements, while performance measurement provides essential feedback on the impact of these strategies. This combination is fundamental to understanding and enhancing healthcare delivery in such contexts, making it the most appropriate lens for studying strategic management in public hospitals in West Pokot County.

1.2 Statement of The Problem

Despite significant investments by the Kenyan government through the Ministry of Health, performance in public hospitals remains a critical concern. Kenya's healthcare system is

predominantly designed to manage acute illnesses, offering limited support for patients with chronic conditions in their daily lives (World Health Organization, 2020). This systemic misalignment has resulted in widespread dissatisfaction among patients, prompting a shift towards private healthcare providers. Public hospitals are plagued by slow patient progression, ineffective treatment, poor record management, delayed diagnosis, outdated ICT infrastructure, and inefficient revenue collection systems all contributing to diminished service delivery.

Empirical data underscores the magnitude of these challenges. The Health Sector Analysis Report (2013–2014) revealed that inefficiencies in service delivery stem from lost or misplaced files, delayed diagnosis, and outdated systems. According to Guyatt, Muiruri, Mburu, and Robins (2020), public hospitals in Kenya continue to grapple with under-staffing, inadequate infrastructure, high levels of patient congestion, and limited funding, particularly from patients. These systemic problems are directly linked to the high mortality rate among children under five. Furthermore, the Kenya National Bureau of Statistics (KNBS, 2020) reported that, despite the government's financial commitment to public healthcare institutions, service delivery remains below the national standard.

Numerous studies have explored innovation strategies in other sectors, but notable theoretical, conceptual, and methodological gaps remain in the healthcare context. Cherotich, Sang, Shisia, and Mutung'u (2015) examined the effect of financial innovations on the performance of commercial banks in Nairobi, discovering a positive relationship. However, this research was sector-specific and not applicable to healthcare. Similarly, Rosli and Sidek (2013) assessed innovation among manufacturing SMEs in Malaysia, but the industrial focus and international context limit relevance. Kariuki (2014) found that innovation enhanced performance in Kenya's mobile communications sector, yet again, healthcare was not considered. Deya and Laban (2019) examined innovation in tech companies in Nairobi, which also leaves a sectoral gap unaddressed.

From a conceptual perspective, existing research fails to identify the types of innovation relevant to public healthcare settings. Theoretically, there is limited integration of models such as Greenhalgh's Healthcare Innovation Model, which advocates for a systems-thinking approach to innovation in health (Greenhalgh et al., 2004). Methodologically, most studies adopt qualitative or case study approaches, lacking rigorous empirical evaluation through mixed-method or

quantitative designs necessary to statistically determine the relationship between innovation and performance in healthcare.

Kenya's Vision 2030 outlines healthcare as a key pillar for national development, emphasizing a decentralized model for accessible and quality services (Omondi, 2016). Devolution was expected to enhance healthcare delivery in underserved areas like West Pokot County. Innovation is central to achieving this by addressing inefficiencies and enabling healthcare workers to meet increasing demands. The Ministry of Health (2021) recently proposed digital health strategies to enhance system efficiency, but their effectiveness at the county level remains underexplored.

The present study aims to bridge these gaps by investigating innovation strategies in public hospitals in West Pokot County and assessing their impact on healthcare service delivery. In doing so, this research provides theoretical, empirical, and practical insights into how innovation can be harnessed to improve the performance of Kenya's public health institutions.

1.3 Objectives of The Study

1.3.1 General Objective

The general objective was to establish the effect of innovation strategies on the performance of the public hospitals in West Pokot County Kenya.

1.3.2 Specific Objective

Specifically, the following objectives served as the basis for the inquiry:

i. To assess the effect of product innovation on performance of public hospitals in West Pokot County, Kenya.
ii. To establish the effect of organizational innovation on performance of public hospitals in West Pokot County, Kenya.
iii. To examine the effect of process innovation on performance of public hospitals in West Pokot County, Kenya.
iv. To assess the effect of market innovation on performance of public hospitals in West Pokot County, Kenya.

1.4 Research Questions

i. To what extent does product innovation affect the performance of public hospitals in West Pokot County, Kenya?
ii. How do organizational innovations affect the performance of public hospitals in West Pokot County, Kenya?
iii. To what extent does process innovation affect the performance of public hospitals in West Pokot County, Kenya?
iv. What is effect of market innovation on the performance of public hospitals in West Pokot County, Kenya?

1.5 Significance of The Study

Understanding the influence of public hospitals' innovative methods on their performance in WPC is the basic purpose of this research. Scholars agree that this research would add to what is already known about health sector innovations and performance. In addition, showing how an organization's success is correlated with its innovation efforts would rely heavily on empirical research. Hospital administrators and employees in both public and private sectors may utilize this study's findings and recommendations to assess how well healthcare innovations have helped them achieve their objectives. Investing in better products, processes, organizations, and marketing is what this means. These innovations would allow staff to better serve patients by facilitating faster, more accurate diagnoses and treatments. Hospital staff may use the results to bolster their dedication to being receptive to new ideas for improving healthcare services in the future, and hospital administration can use the results to solidify their positions within the organization.

1.6 Scope of The Study

This study aimed to examine how public hospitals in West Pokot County are affected by the introduction of new procedures and how it affects their overall performance. The study's primary endpoints were the WPC's public hospitals. Notable among these establishments are five hospitals, two sub-county hospitals, and a county hospital. This research looked at four different aspects of innovation strategies: product innovation, organizational innovation, process innovation, and

commercial innovation. The efficacy of public hospitals was assessed using a mix of monetary and non-monetary metrics. A number of theories were used in this inquiry. These included the knowledge-based theory, the theory of performance, the theory of innovation diffusion, and the theory of resource-based efficiency. Surveys, both structured and semi-structured, was considered for use in gathering primary data in this study. Descriptive statistics was used by the researcher as a component of the data analysis procedure.

1.7 Limitations of The Study

The study anticipated that some respondents in WPC's public hospitals were u n w i l l i n g to share information regarding their strategy and performance since such information may be considered sensitive. This, however, was reduced by promising respondents that their information would be preserved in the strictest confidence. Data gathering may be hampered by respondents' hectic schedules. To ensure that all of the respondents were available, the distribution of questionnaires was scheduled ahead of time. The institution's introduction letter was also included in the study in order to persuade the participants that the research was conducted only for academic purposes.

1.8 Organization of The study

The investigation consists of five sections, including an introduction, main body, conclusion, and recommendations. We introduced the research project's subject, goals, questions, significance, and scope in the first chapter. In Chapter 2, we surveyed the literature from a variety of theoretical, empirical, and conceptual perspectives. Detailed information on the research methodology was presented in the third chapter. This methodology included topics such as study design, population and sampling, research tools, as well as data collecting and analysis. The outcomes of the research were reported in the fourth chapter. Results from inferential and descriptive analyses as well as demographic data and survey response rates were included in these results. Chapter 5, the last one, included a synopsis of the results, research conclusions, and recommendations derived from those conclusions.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, the literature on innovation and performance will be reviewed in detail. Both theoretical and empirical studies will be cited in this study. A discussion of the ideas that underpin the current study may be found in the theoretical literature. To help in understanding the variables under study, the empirical literature compiles and summarizes important published works. The researchers' understanding of the interplay between the various parts of the conceptual framework meant to show how innovation contributes to an organization's success is shown below.

2.2 Theoretical Literature Review

Using a set of binding assumptions, theories are utilized to steer the inquiry (Swanson, 2013). Diffusion of Innovation Theory, Resource Based Theory, Knowledge Based Theory, and Theory of Performance were the theories that guided the research.

2.2.1 Diffusion of Innovation Theory

Rogers' Diffusion of Innovation (DOI) Theory remains a foundational model in understanding how innovations spread across social systems, including organizations such as public hospitals. Originally developed in the early 1960s and later refined, the theory offers critical insights into the mechanisms by which new ideas, technologies, and practices are adopted within institutions (Greenhalgh et al., 2020). In public healthcare systems, where innovation is vital for improving service delivery, DOI theory provides a valuable framework for examining how strategic innovation initiatives can influence performance outcomes. The theory categorizes adopters into five groups: innovators, early adopters, early majority, late majority, and laggards. These categories reflect differing propensities to embrace change, shaped by factors such as risk tolerance, communication channels, and perceived benefits (van der Bijl-Brouwer, 2019). In a hospital setting, understanding this classification helps explain how and why certain departments or staff are more likely to engage with innovation strategies than others

The theory is particularly relevant to this study, which investigates how three types of innovation

strategies product, process, and organizational affect the performance of public hospitals. Product innovation strategies might include the implementation of new diagnostic tools or telemedicine services, while process innovations may focus on digitizing patient workflows or improving referral systems. Organizational innovations, on the other hand, often involve changes in leadership models, structural reforms, or shifts in management culture. According to DOI theory, such innovations diffuse incrementally and are adopted at varying rates based on internal and external organizational factors. This understanding is crucial for public hospitals, where resource constraints, bureaucratic inertia, and cultural resistance can significantly affect the success of innovation implementation (Cresswell et al., 2020).

Moreover, the DOI framework emphasizes the significance of communication and social systems in influencing adoption behavior. Hospitals function within complex networks of professional, administrative, and community actors, and the success of innovation diffusion depends heavily on how these actors interact and influence one another. This social dynamic can either accelerate or hinder the adoption of new strategies. Hence, DOI theory encourages the identification of key facilitators and barriers to adoption, such as leadership support, staff readiness, and alignment with organizational goals (Chaudhury et al., 2021). Applying DOI in this context allows the study to explore how innovation strategies are internalized and translated into improved healthcare performance metrics, such as patient satisfaction, operational efficiency, and service quality.

In summary, the Diffusion of Innovation Theory provides a robust lens through which to understand the relationship between innovation strategies and organizational performance in public hospitals. It supports the premise that innovation adoption is neither uniform nor automatic but depends on targeted engagement with key stakeholders, organizational culture, and contextual readiness. Therefore, this study employs DOI theory to guide the analysis of how innovation strategies are adopted and how they impact performance, aligning theoretical insight with the practical realities of public sector healthcare innovation (Agarwal et al., 2018; Zakaria et al., 2022).

2.2.2 Resource Based Theory

The Resource-Based Theory (RBT), originally advanced by Penrose (1959), asserts that a firm's growth and performance are rooted in the unique deployment of both its tangible and intangible

resources. Within the healthcare sector, especially in public hospitals, this perspective offers a valuable framework for assessing how internal capacities such as infrastructure, skilled personnel, information systems, and organizational culture can be strategically leveraged to implement innovation strategies that improve performance. According to recent strategic management literature, the theory emphasizes that sustainable competitive advantage arises from valuable, rare, inimitable, and non-substitutable resources that enable an organization to design and execute strategies more efficiently than its competitors (Barney et al., 2021; Parida et al., 2020).

Public hospitals operate in resource-constrained environments where performance is closely tied to how effectively they manage and apply their internal capabilities. In this context, innovation strategies whether related to products, process, or organizational systems are fundamentally dependent on the resources available to support their adoption and execution. Product innovations in diagnostics or treatment procedures, for instance, require skilled human capital and investment in technology. Process innovations such as digitized patient flow systems or integrated care pathways rely heavily on IT infrastructure and trained staff. Organizational innovations, including changes in governance, leadership, or collaboration frameworks, depend on adaptive cultures and strategic leadership resources. These linkages align with the core tenet of the Resource-Based View that firms must utilize their internal strengths to craft value-creating strategies that enhance overall performance (Kohli & Grover, 2019; Palacios-Marqués et al., 2020).

The RBT also addresses a critical assumption for this study—that public hospitals differ in their ability to innovate based on the nature and configuration of their internal resources. Hospitals with stronger capabilities in knowledge management, financial planning, and human resource development are more likely to implement innovative strategies effectively, leading to superior service delivery, patient outcomes, and operational efficiency. These differences help explain variance in hospital performance, even under similar policy and regulatory environments. Recent empirical studies support this view, showing that hospitals with stronger internal innovation capabilities demonstrate better health outcomes, improved patient satisfaction, and more efficient processes (Mihalache et al., 2022; Sampson et al., 2021).

However, despite its explanatory power, RBT has limitations. Critics argue that the theory is challenging to operationalize due to difficulties in measuring intangible resources and assessing

causal mechanisms empirically (Durand & Vaara, 2019). Nevertheless, it remains a widely used framework in analyzing how resource allocation affects organizational performance. In the context of this study, RBT helps explain how internal resources facilitate or constrain the design and implementation of innovation strategies in public hospitals, ultimately affecting their performance. The theory offers a compelling rationale for examining not just whether innovation occurs, but how specific resource configurations shape the scale, speed, and success of innovation efforts in healthcare settings (Akpan et al., 2023; Wamba et al., 2019).

2.2.3 Knowledge Based Theory

The Knowledge-Based Theory (KBT) of the firm emphasizes that knowledge is the most strategically significant resource that drives innovation, growth, and long-term performance. Building upon the foundational work of Wernerfelt (1984) and later developments by Barney (1991), this theory asserts that knowledge especially when embedded in organizational processes, culture, and people offers a sustainable source of competitive advantage. Within the context of public hospitals, this theory provides a valuable framework for understanding how knowledge assets shape innovation strategies and, ultimately, performance outcomes. Hospitals operate in dynamic environments that demand continuous learning, adaptation, and improvement, making knowledge a central enabler of innovation in healthcare service delivery (Centobelli et al., 2019).

KBT posits that firms with a robust capacity to create, absorb, share, and apply knowledge are more likely to generate new ideas and translate them into effective innovations. In public hospitals, this translates into the ability to enhance diagnostic procedures, redesign clinical workflows, adopt advanced technologies, and implement new models of patient care. These innovations depend not only on technical knowledge but also on tacit knowledge such as clinical expertise, leadership know-how, and interdepartmental collaboration which is difficult to imitate or transfer (Del Giudice et al., 2021). These knowledge assets are embedded in the institution's human capital, organizational routines, technological infrastructure, and inter-organizational networks, forming the foundation for innovation strategies that seek to improve quality of care, operational efficiency, and patient satisfaction.

The application of KBT in this study provides a lens through which to explore how knowledge

acquisition and dissemination influence the performance of public hospitals. The theory suggests that hospitals which effectively manage and leverage both internal knowledge (from staff, internal systems, and clinical data) and external knowledge (from other hospitals, research institutions, and health policy bodies) are more capable of implementing strategic innovations that align with evolving health demands (Chatterjee et al., 2023). Open innovation practices—such as knowledge partnerships and cross-sector collaborations—are particularly relevant, as they facilitate access to diverse knowledge pools and accelerate the diffusion of best practices across hospital systems (Tortoriello et al., 2020).

Moreover, the integration of knowledge management systems enhances the hospitals' ability to align innovation strategies with performance goals, such as reducing patient wait times, minimizing errors, and improving treatment outcomes. Knowledge also underpins data-driven decision-making, which is crucial in performance monitoring and innovation scaling. Despite these advantages, KBT also acknowledges that knowledge resources must be systematically cultivated and retained, as the loss of key personnel or inadequate knowledge sharing can hinder innovation outcomes (Paparoidamis et al., 2019). Thus, the theory reinforces the idea that continuous learning and knowledge utilization are central to innovation-driven performance improvements in public hospitals.

In sum, the Knowledge-Based Theory supports the premise that public hospitals with strong knowledge capabilities are more likely to design and implement effective innovation strategies, resulting in enhanced service quality and institutional performance. This theoretical grounding is critical in explaining how knowledge acts as both an input and enabler of innovation, ultimately shaping the performance trajectory of public health institutions.

2.2.4 Goal Setting Theory

Goal Setting Theory, originally proposed by Edwin Locke in 1968, emphasizes the motivational influence of clear, specific, and challenging goals on task performance. Locke argued that individuals who are given specific goals perform better than those who are given vague or no goals at all (Locke, 1968). The theory posits that goals serve four key functions: directing attention, mobilizing effort, increasing persistence, and encouraging the development of strategies and action plans (Locke & Latham, 1990). Later developments by Gary Latham, in collaboration with Locke,

expanded the theory through empirical studies conducted in real-world organizational settings. Their joint work established that difficult but attainable goals lead to higher performance than easy or ambiguous ones (Locke & Latham, 2002). They also emphasized that feedback, goal commitment, and self-efficacy are essential moderators of the goal-performance relationship.

Over time, various scholars have built upon Locke and Latham's foundation. For instance, Hattie and Timperley (2007) highlighted the critical role of feedback in enhancing the effectiveness of goal setting. Tubbs and Dahl (1991) also emphasized that task complexity should be considered when setting goals to ensure they are realistic and achievable. Lunenburg (2011) later synthesized various strands of the theory to show how it applies in strategic management, education, and healthcare settings.

Linking this theory to the current study on innovation strategies and performance in public hospitals in West Pokot County, Kenya, the relevance becomes evident in several ways. First, the development and implementation of innovation strategies (product, process, organizational, and market innovations) require clearly defined objectives. Goal Setting Theory supports the idea that when hospital administrators set clear innovation goals (e.g., "Introduce two new patient services within six months"), the organization is more likely to achieve improved performance outcomes (Latham & Locke, 2006).

Additionally, performance, as a study variable, is directly influenced by the motivational mechanisms outlined in Goal Setting Theory. When innovation goals are specific and challenging, hospital staff are more engaged, persistent, and aligned in their efforts, which ultimately contributes to higher institutional efficiency and patient satisfaction (Shalley & Gilson, 2004). This aligns with the study's finding that innovation strategies account for 65.5% of the variance in hospital efficiency.

Furthermore, goal setting is essential in evaluating innovation success. By establishing measurable goals for each type of innovation strategy, hospitals can assess which initiatives contribute most to performance improvement, a concept emphasized by Grant (2012) in his work on performance management systems. In summary, Goal Setting Theory provides a strong psychological foundation for understanding how structured innovation goals can influence performance in public

healthcare institutions. Its principles are particularly relevant for organizations pursuing strategic innovation to improve service delivery and operational efficiency.

The importance of Goal Setting Theory in the study of innovation strategies and performance in public hospitals lies in its ability to provide a structured framework for aligning innovation initiatives with measurable outcomes. By emphasizing the setting of clear, specific, and challenging goals, the theory helps hospital managers and staff focus their efforts on defined innovation targets such as implementing new processes, products, or service delivery models thereby enhancing motivation, accountability, and efficiency. This alignment not only improves performance by increasing commitment and persistence but also enables more effective evaluation of innovation strategies through measurable benchmarks. As such, Goal Setting Theory supports a goal-driven approach to innovation, which is essential for overcoming resource constraints and meeting evolving healthcare demands in settings like West Pokot County.

2.2.5 Theory of Performance

The Theory of Performance offers a comprehensive framework for understanding how individuals and organizations achieve growth through intentional improvement efforts. Originally informed by the works of Turner (1988) and Schechner (1985), who explored performance in cultural contexts, contemporary interpretations of the theory apply to institutional environments, including healthcare settings. In the context of public hospitals, Theory of Performance is particularly relevant in evaluating how innovation strategies contribute to enhanced performance outcomes. As outlined by El-Maaddawy and Deneen (2019), performance is not static; rather, it evolves through deliberate efforts involving skills development, reflection, and adaptation to changing circumstances.

Theory of Performance identifies six interrelated elements that influence performance: context, knowledge, skills, identity, personal attributes, and fixed components. In public hospitals, these elements can be mapped directly onto organizational innovation capacity. For instance, “context” refers to the internal and external environment influencing hospital operations such as policies, funding constraints, and patient needs while “knowledge” and “skills” reflect the competencies of healthcare staff in adopting and applying innovative practices. These competencies enable

institutions to implement evidence-based strategies, integrate health technologies, and reorganize service delivery models to improve efficiency and quality of care (Kowalski et al., 2020).

A key contribution of Theory of Performance is its emphasis on three drivers of improved performance: the perspective of the performer (individuals or teams), immersion in a supportive environment, and reflective practice. For hospitals, this suggests that innovation must be championed not only by leadership but also by front-line workers who actively participate in identifying and testing new approaches. Reflective practice continuous assessment and learning from experience strengthens institutional adaptability, fostering a culture of innovation (Macfarlane et al., 2021). This is critical for public hospitals, which face unique pressures to deliver high-impact services amid constrained resources.

In line with this theory, innovation strategies are viewed as journeys rather than endpoints. Public hospitals must move from their current state of performance toward a more advanced state by leveraging both internal drivers (e.g., staff capabilities, organizational learning) and external supports (e.g., partnerships, technology, and regulatory frameworks). As Theory of Performance suggests, achieving better performance outcomes requires a strategic alignment between performance objectives and the mechanisms to support them, such as continuous professional development, knowledge-sharing systems, and patient-centered care models (Mahmoud et al., 2022).

By applying the Theory of Performance, this study frames innovation strategies in public hospitals as structured efforts to transform existing capabilities into sustained improvements in service delivery, patient satisfaction, and institutional efficiency. The theory reinforces the view that innovation is not merely the introduction of new ideas, but a disciplined process of learning, testing, and refining actions that lead to superior performance over time. Hence, Theory of Performance serves as a relevant conceptual lens for understanding how public hospitals can systematically improve their outcomes through innovation-driven performance management.

2.3 Empirical Literature Review

2.3.1 Product Innovation Strategy and Performance

While Silva, Styles, and Lages (2017) highlight the link between product innovation and sustainable business growth, their research lacks sector-specific insights, particularly in public service domains such as healthcare. The study does not address how innovation operates in highly regulated, resource-constrained environments like public hospitals. Similarly, Deya and Laban (2019) explore strategic innovation within Nairobi's communication technology firms, but their findings are not easily transferable to public healthcare institutions due to differences in market orientation, innovation capabilities, and performance expectations. Furthermore, their focus on private enterprises limits the relevance of their conclusions for public sector challenges. Karabulut (2015) underscores the importance of R&D investment in driving innovation; however, the study does not offer a contextual analysis of how such investments can be applied or measured in public healthcare systems, where financial and operational constraints often hinder innovation activities.

Lilly and Juma (2014) examine the role of strategic innovation in enhancing the performance of commercial banks listed on the Nairobi Securities Exchange. Despite offering useful quantitative insights, the study is outdated and narrowly focused on financial performance indicators, which are less applicable to public hospitals that prioritize service quality, patient outcomes, and operational efficiency. Bocquet, Le Bas, Mothe, and Poussing (2014) investigate the interaction between corporate social responsibility and innovation. Although their work touches on innovation's impact on organizational goals, it does so through a CSR lens, which diverts attention from innovation as a strategic capability in itself. Moreover, their findings, based on a mixed-industry sample, may not apply to public healthcare contexts with unique operational challenges. Varris and Littumen (2010) argue that innovation fuels business expansion, but the study's age and private sector orientation limit its applicability to contemporary public health settings in Kenya. Their framework does not account for non-financial performance metrics, such as service accessibility, patient safety, or health outcomes.

Across these studies, a number of common gaps emerge. Most notably, there is a lack of research directly linking product innovation strategies to performance in public healthcare institutions, especially within the Kenyan context. Many of the reviewed studies are either outdated or conducted in sectors vastly different from public hospitals, making their findings difficult to generalize. Additionally, most emphasize financial performance over more relevant metrics like healthcare delivery efficiency, service quality, or patient satisfaction. Finally, few studies integrate

innovation strategy with contextual realities in public service delivery, leaving a gap for research that connects strategic innovation to measurable improvements in hospital performance. These limitations provide a strong rationale for examining how product innovation strategies affect the operational and service outcomes of public hospitals.

2.3.2 Organizational Innovation Strategy and Performance

While Waheed et al. (2019) define organizational innovation as the adoption of new concepts that alter operational processes, the study falls short in identifying how such innovations function in the unique context of public healthcare institutions, particularly in low-resource environments like public hospitals in Kenya. The general perspective offered lacks sector-specific insights that are crucial in understanding organizational innovation where service delivery, rather than profit, is the core performance measure. Byrd, Cegielski, and Hazen (2013) examine the influence of leadership and innovation in the North American motor carrier industry. However, the focus on leadership dynamics and the use of a structural equation model in a logistics context do not adequately address institutional constraints, bureaucratic culture, or public accountability common in healthcare systems. The emphasis on transformative leadership also limits the generalizability to public sector institutions where hierarchical structures and policy-driven processes may influence innovation differently.

The study by Cherotich et al. (2015) offers insights into the impact of monetary innovation on commercial banks in Kenya but lacks relevance for public hospitals, as the financial structures, innovation goals, and performance indicators differ significantly. The use of financial metrics as performance indicators does not align well with public hospital performance, which includes patient outcomes, operational efficiency, and quality of care. Chen, Wang, and Huang (2019) find that organizational innovation influences firm results through the mediation of technical knowledge. Although valuable, their study primarily focuses on private firms in industrial sectors, and does not explore how knowledge-based innovations can be embedded in the highly procedural operations of public hospitals. Additionally, the research does not consider non-technological aspects of organizational innovation, such as workflow redesign or interdepartmental collaboration, which are vital in hospital settings.

Bello and Adeoye (2018) explore the link between organizational learning and innovation in Nigerian manufacturing firms, concluding that learning positively influences performance through innovation. However, the findings are constrained by the study's limited focus on production efficiency and financial growth, which do not adequately reflect the service-driven outcomes required in public hospitals. Their methodology, while robust for industrial businesses, overlooks variables like patient satisfaction, wait times, or staff productivity, which are crucial in evaluating hospital performance. Laban and Deya (2019) emphasize the strategic importance of organizational innovation in Nairobi's communication sector. Although the findings show a positive correlation between structural strategies and organizational success, the study lacks applicability to healthcare institutions, where innovation is shaped not only by market forces but also by government policy, funding mechanisms, and regulatory compliance.

Across the reviewed literature, a common shortfall is the lack of studies that directly examine organizational innovation strategies within public hospitals, particularly in the Kenyan context. Most of the referenced works focus on private, profit-driven entities and therefore prioritize outcomes like profitability and market share. These metrics are not wholly relevant for public hospitals, where performance is assessed by service delivery metrics such as patient throughput, quality care, and resource utilization. Furthermore, little attention is given to the unique barriers to innovation in the public health sector, such as bureaucratic inertia, limited funding, and resistance to change. These gaps point to a need for targeted research that explores how organizational innovation strategies can improve non-financial performance indicators in public hospitals.

2.3.3 Process Innovation Strategy and Performance

Process innovation as the application of new or enhanced methods in the production of goods and services, (Ballot et al. 2015) the study does not explore the specific impact of such innovation in non-commercial public institutions such as hospitals, where financial returns are not the sole performance indicator. The general business-centric approach fails to consider the regulatory, operational, and infrastructural limitations found in public healthcare systems. Ringim and Dantsoho (2017) emphasize customer feedback in shaping process innovation, yet their study overlooks how service delivery institutions, especially public hospitals, differ in their measurement of success. In such contexts, client satisfaction must be aligned with efficiency, resource allocation,

and public accountability factors not deeply examined in their study.

Al-Sa'di, Abdallah, and Dahiyat (2017) explored the mediating role of process innovation in the relationship between knowledge management and operational performance in Jordanian manufacturing. However, the exclusive focus on industrial settings limits the generalizability to service-based sectors such as healthcare. Their use of quantitative tools like exploratory factor analysis and bootstrapping provided statistical rigor, yet failed to contextualize the unique barriers to innovation within the public health environment, such as bureaucratic inertia or funding limitations. While Dahiyat et al. (2017) found process innovation to have a stronger mediating effect than product innovation, the implications for resource-constrained public hospitals remain unexplored. These institutions often require lean, cost-effective innovations tailored for sustainability, which the study did not consider.

Kariuki (2014) assessed the effect of process innovation on mobile service providers in Kenya, concluding that strategic innovation contributes to performance. However, the mobile telecommunications industry is driven by profit motives and rapid technological cycles, unlike public hospitals which operate within fixed budgets, political oversight, and social obligations. The performance metrics used, such as productivity and revenue growth, may not apply to hospitals that evaluate outcomes based on public service efficiency, patient throughput, or care quality. This limits the direct applicability of the findings to Kenya’s public healthcare sector.

Hilman and Kaliappen (2014) examined the hospitality industry in Malaysia and identified customer and competitor orientation as drivers of organizational success. Despite showing a link between marketing strategies and process innovation, the hotel sector context differs greatly from public health institutions, which prioritize equitable service access over customer preference. Additionally, their use of Balanced Scorecard (BSC) performance indicators, while useful, does not translate easily into the performance indicators typical in healthcare, such as treatment success rates or patient satisfaction indices. Moreover, the study found a negative correlation between process innovation and company operations, a result that may not hold true in sectors like healthcare, where innovation is often needed to overcome operational inefficiencies.

Overall, the reviewed studies point to a strong relationship between process innovation and organizational performance. However, they tend to focus on profit-driven sectors like

manufacturing, telecommunications, and hospitality, thus limiting their relevance to public healthcare. Most do not adequately address how process innovation can improve non-financial outcomes such as quality of care, access to services, or patient safety. There is also a lack of focus on the contextual challenges facing public hospitals in low-income regions, such as limited infrastructure, staff shortages, and rigid administrative systems. These gaps suggest a need for context-specific studies that explore how public hospitals can adopt and sustain process innovation to enhance performance across multiple service delivery dimensions.

2.3.4 Market Innovation Strategy and Performance

Kang, Na, and Jeong (2019) define marketing innovation as a strategic approach to expanding market share, leading to enhanced revenue and firm performance. However, the study mainly focused on profit-driven private enterprises and did not examine how this strategy functions in public sector institutions like hospitals, where performance metrics are often based on service delivery rather than revenue. The research overlooked non-financial performance indicators such as public satisfaction, service accessibility, and healthcare equity, which are central in evaluating success within public health systems. Moreover, there is limited discussion on how constraints such as limited budgets and rigid procurement policies may influence market innovation in government-run hospitals.

Ungerman, Dedkova, and Gurinova (2018) employed descriptive statistics to study the effects of marketing innovation on company performance, especially in manufacturing sectors. Although they found that such strategies increased competitiveness and profits, the research did not sufficiently consider the dynamics of the service industry. The exclusion of service-based public institutions, particularly in healthcare, presents a gap in understanding how these innovations affect organizations where profitability is not the sole concern. Additionally, the use of only descriptive analysis restricted deeper exploration into the long-term strategic impact and adaptability of marketing innovation in sectors with slower innovation cycles.

Shisia, Sang, Matoke, and Omwario (2014) examined the role of marketing innovation in Kenya's public universities using a descriptive methodology and regression analysis. The study found a significant link between marketing strategies and institutional success. However, the education

sector's environment and goals differ markedly from those of the healthcare sector, particularly hospitals, which face unique regulatory, clinical, and infrastructural challenges. The study also did not account for the ways in which market innovation interacts with clinical service provision, patient satisfaction, or public health outcomes, thus limiting its direct applicability to hospital performance analysis.

Cascio (2011) evaluated marketing innovation in public hospitals in West Pokot County, focusing on qualitative insights derived from interviews. While the study introduced a useful model involving product, process, and relationship marketing, it lacked quantitative backing to generalize the findings. The absence of empirical data restricts its reliability and applicability across broader contexts. Furthermore, the role of organizational culture, government policy, and funding constraints on market innovation strategy implementation in hospitals was underexplored. These factors are crucial in shaping the feasibility and success of such strategies in public healthcare.

Na, Kang, and Jeong (2019) used a structural model to study the integration of market innovation with the sharing economy in enhancing performance and competitive advantage. The model was comprehensive and tested across several dimensions, yet its focus on business organizations meant public service entities were excluded. The findings emphasized long-term sustainability and economic performance, yet failed to explain how such models translate into non-commercial settings like hospitals, where performance is often evaluated based on health outcomes, equity, and access rather than market expansion or profitability.

Njeri (2017) carried out a case study on Safaricom Kenya Limited to determine the effect of innovation on firm performance. While the research revealed a strong relationship between innovation and performance, the company being studied operates in a highly competitive, profit-oriented telecommunications sector. This context differs greatly from public health institutions that serve wide demographics with diverse needs and limited financial incentives. Although market innovation was identified as a major driver of success, the research did not offer insight into how such strategies could be adapted for underfunded, public-facing healthcare systems or what performance metrics would apply in such a context.

In summary, the reviewed studies confirm that marketing innovation positively affects business success. However, they primarily concentrate on private and profit-oriented sectors like

manufacturing, education, and telecommunications, leaving a knowledge gap concerning how such strategies function in public hospitals. Most studies fail to address the challenges unique to public service organizations, such as resource limitations, bureaucratic oversight, and non-financial performance goals. There remains a need for more inclusive and context-specific research that explores the impact of market innovation on the effectiveness, reach, and sustainability of services in public healthcare institutions, particularly in developing regions.

2.4 Summary of Literature Review and Research Gaps

The literature on innovation and performance in public hospitals, especially in West Pokot County (WPC), reveals significant theoretical, conceptual, and empirical gaps. The Diffusion of Innovation Theory, Knowledge-Based Theory, Resource-Based Theory, and Theory of Performance provide useful insights but show limitations in public healthcare contexts. For example, Diffusion of Innovation Theory does not fully capture infrastructural and cultural barriers in resource-limited health systems like WPC. Knowledge-Based Theory often neglects challenges related to knowledge sharing in fragmented healthcare settings. Resource-Based Theory focuses on internal resources but overlooks external constraints common in public hospitals. The Theory of Performance offers a general framework for improving performance but lacks specific relevance to healthcare innovation and operational challenges in WPC.

Conceptually, most studies treat innovation dimensions' product, process, organizational, and market innovation separately rather than exploring their combined effects on hospital performance. There is also a lack of clarity on performance indicators tailored to public hospitals, such as patient care quality and equity, as opposed to typical business metrics like profitability. Additionally, many innovation frameworks are based on private-sector models, which do not adequately consider the public health sector's regulatory and mission-driven environment.

Empirical research mainly focuses on private or commercial sectors, limiting its relevance to public hospitals in WPC. Most studies analyze single innovation types without assessing their integrated impact on performance. There is also a shortage of longitudinal and quantitative research addressing public hospitals' unique challenges, including limited infrastructure and workforce shortages. Furthermore, existing research tends to prioritize financial outcomes over

critical health indicators like patient satisfaction and quality of care. These gaps emphasize the need for comprehensive, context-specific studies that integrate various innovation strategies and use relevant performance measures suitable for public hospitals in WPC.

Table 2. 1: Summary of Literature Reviews and Research Gaps

Author	**Focus of the study**	**Research Findings**	**Knowledge gap**	**Focus of the current study**
AlSa'di, Abdallah and Dahiyat (2017)	Manufacturing organizations in Jordan to see how new products and processes affect the relationship between knowledge management and operational effectiveness.	The results show that knowledge is key to helping the manufacturing company innovate its processes, which in turn improves its performance.	Jordanian manufacturing firms were the primary subjects of the research. Also, only two types of innovation might be considered. Innovation in processes and products ends there.	Examining how innovations in process, product, market, and organization have impacted health sector performance in WPC, Kenya.
Chen,Wang and Huang (20190	Organizational innovation, technology capabilities, and their impact on the enterprise.	According to the study's findings, companies who applied organizational innovation methods outperformed their competitors.	An emphasis on organizational performance was the only focus of the study, which was confined to Chinese enterprises.	To understand how organizational innovations influences the performance of the health sector.

Bello and Adeoye (2018)	Manufacturing businesses in Lagos, Nigeria, and how they learn, innovate, and function as an organization.	The research found that manufacturing businesses in Nigeria may improve their performance via organizational innovation.	The study focuses on businesses in Nigeria, where the working environment differs significantly in terms of policies and government regulation.	To determine how organizational innovations affects health sector performance
Lilly and Juma (2014)	Kenyan commercial banks' response to strategic innovation and its effect on their operations.	The new market for purchasing goods and services is booming. in connection with the effectiveness of the Banks that deal with commerce	It was held in commercial banks and in the county of Nairobi.	To learn how marketing innovation affects the health sector's performance in West Pokot County.
Shisia, Sang, Matoke and Omwario (2014)	An analysis of the relationship between strategic innovation and the efficiency of Kenya's public universities is presented in this research.	Strategic innovation and the success of Kenya's public universities go hand in hand.	The study was conducted in the field of education, which is separate from the field of health.	To study how marketing innovation affects the health sector's performance.

2.5 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.

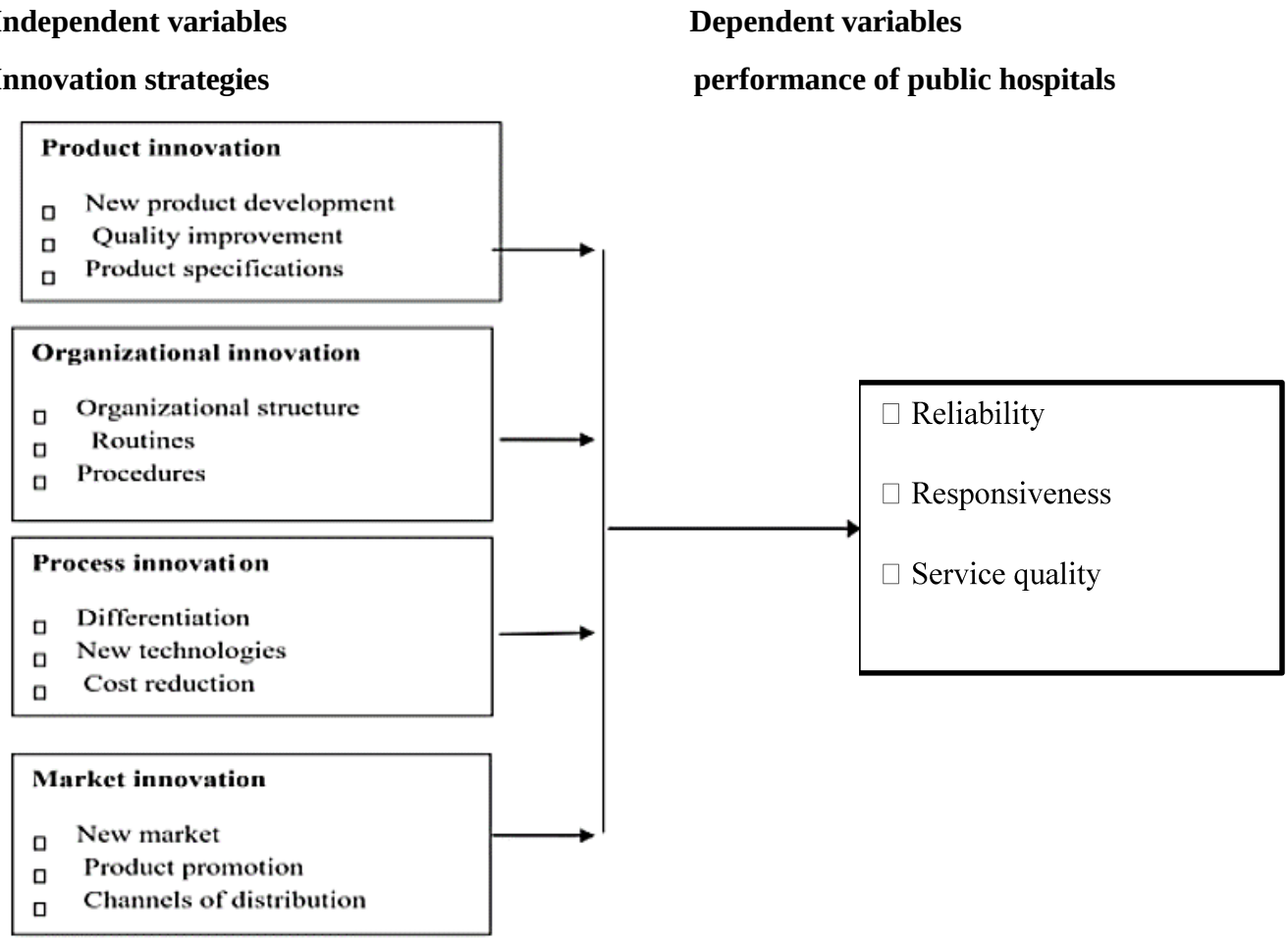


Figure 2. 1: Conceptual Frameworks

Source: Researcher 2024

The relationship between the independent variables product innovation, organizational innovation, process innovation, and market innovation and the dependent variable, performance of public

hospitals, can be described through the way each innovation dimension contributes to service delivery. Product innovation, through elements such as new product development, quality refinement, and specification clarity, aligns healthcare offerings with patient expectations and clinical standards. Organizational innovation, marked by modifications in structure, routines, and procedures, shapes internal coordination and resource deployment, influencing how services are accessed and executed. Process innovation, characterized by the adoption of new technologies, operational distinctions, and cost management strategies, affects the efficiency and accuracy with which care is provided. Market innovation, through the identification of new patient segments, promotional efforts, and distribution channels, shapes public engagement and the accessibility of services. Collectively, these innovations form the foundation for consistent, timely, and dependable healthcare experiences, which are central to the perceived reliability, responsiveness, and overall service quality in public hospital settings.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

According to Kothari (2004), the phrase "research methodology" refers to a collection of actions that are executed with the intention of methodically resolving a research topic. This chapter gave a thorough description of the many steps and techniques that were used to complete the research. A plan for data collecting, measurement, and analysis was one of its components. The bulk of the decisions about the research methodology, the methods used to contact respondents, and the timing, location, and completion of the study were made at this stage. This allowed the research to establish the methods and processes that would be used in the data collection, processing, and analysis that the relevant department was tasked with doing.

3.2 Descriptive Research Design

According to Taylor (2007), researchers are required to follow a predetermined set of rules called a research design when doing research. This investigation makes use of a descriptive research technique. The purpose of collecting data and tabulating frequencies on study variables or their interactions is to provide a description or characterization of a topic. This is what Cooper and Schindler (2006) came to the conclusion about. Building a profile of a collection of interconnected problems, individuals, or events is the technique that is often used. This research investigated the ways in which innovation has impacted the efficiency and quality of public hospitals in Kenya, using West Pokot County as a case study instance. Investigating the uses of a product or service, determining the percentage of the population that utilizes the product or service, or forecasting the future demand for the product or service were the objectives of descriptive research. Researchers doing descriptive studies have more time to formulate research objectives, choose an appropriate sample size, and map out an analytic strategy before data collection ever begins. The researcher wished to gather extensive information via descriptions, as well as this approach was beneficial for identifying variables and hypothetical constructions. This method was useful for this study because of these reasons.

3.3 Target Population

In statistics, the population of interest is known as the target population. Properly describing any group or individuals set out to be studied is essential (Cooper & Schindler, 2015). An organized set of things, people, services, components, events, or housing units that have been the subject of research or clear definition is called a population, according to Ngechu (2004). Kothari (2004) states that researchers focus on certain populations while conducting studies since these populations often possess the data needed for such studies. The study's population included 130 staff members from West Pokot's county and sub-county hospitals.

Table 3. 1: Target Population

Sections	Population	Percentage (%)
Departmental heads	38	29.23
Assistant departmental heads	51	39.23
Lower level employees	41	31.54
Total	130	100

Source: Researcher, 2022

3.4 Sampling Technique and Sample Size

Research sampling plans often contain specifics like sample size, sampling procedure, sampling frame, and sampling unit. Cooper and Schindler (2003) state that in order to choose a sample from a population, one must first create a sampling frame, which is essentially a directory of all the parts of the population. In statistics, a sample is defined as a representative of the population that is being studied, according to Kothari (2004). In accordance with the Information Power Concept, the sample size was reduced when it was determined that the sample size included adequate information for the investigation (Malterud, Siersma 2016)

Through the use of stratified random selection, a sample of workers who responded was selected from among the 130 employees working at WPC's public hospitals. It has been asserted by Cooper and Schindler (2003) that samples that represent around ten percent of a population may often

provide valid findings. The research chose its sample size using stratified random sampling. This is because there is a need to segment the heterogeneous population of interest into subsets or strata in order to collect a statistically valid sample. It was utilized when the population being studied may be divided into categories, subclasses, or sections (Kothari, 2004). Department heads, assistant department heads, and lower-level employees such as supervisors were chosen for the study since they were the most familiar with the effects of innovation on the functioning of these institutions. In the population of one hundred thirty that was mentioned before, a sample of forty percent was chosen from each of the groups in accordance to the proportions that each group has to the population that is being studied. This resulted in a sample size of forty percent of the responders, which were fifty-two, which is acceptable for gathering the essential information that is adequate and correct for the study.

3.5 Data Collection Instrument

The practice of acquiring information on a chosen population for a topic or phenomena under research is called data collection (Greene, 2006). To gather primary data for the research, a standardized questionnaire was used. The questionnaire included both open-ended and closedended items. According to Malhotra, Nunan, and Birks (2017), the use of a questionnaire is advantageous for the collection of a substantial number of data due to its cost-effectiveness. A structured questionnaire, on the other hand, yields standard responses, which in turn simplify the research process. Authentic information may be effectively captured with the use of a questionnaire, as stated by Mugenda and Mugenda (2012). Each individual who is a part of the sample population got the questionnaire for the survey. There were five distinct parts made up of the questions: The foremost emphasis of the first part of the research was on product innovation, which was the first variable examined. Organizational transformation was the primary focus of the second half. When it comes to process innovation, the third part is there. Innovation in the market was the topic of the fourth segment, and performance was the topic of the fifth section. Closedended questions was utilized to engage the respondents, elicited more organized responses, and was used to test the ranking of various traits, reducing the amount of replies that are related and making it possible for more diverse responses. The open-ended questions were employed to enable respondents' personal opinions and gave additional information that the closed-ended

questions may have missed.

Likert scale questions, which are psychometric scales used as survey questions, can be improved further. This study used it since it is one of the most common survey question types. Respondents can choose precisely how they agree or disagree with a survey question using a Likert scale, which offers five possible responses. In her evaluation of the services offered by Kenyan banks, Mumo (200I) used a five-point Likert scale which has five options, which is made up of statements that address the attitude in the questions.

A very small sample of the overall population was used to construct and analyze the questionnaire, ensuring that the information acquired for the research is as exact and trustworthy as possible. The questionnaire was distributed to each and every participant in the study once it has been delivered by the researcher. A record of all questionnaires that are sent and received was kept by the researcher, and all questionnaires that are provided to respondents was received in a safe and secure manner. The questionnaire was sent using a system that is based on a drop-and-pick method.

3.6 Pilot Study

Pilot testing data gathering technologies before starting the main research project increases the likelihood of discovering mistakes and decreases inefficiencies (Creswell, 2015). Conducting the pilot study in Trans-Nzoia County, rather than in the main study area of West Pokot County, is justified due to several methodological and practical reasons. Trans-Nzoia shares similar healthcare challenges, demographic features, and infrastructural limitations with West Pokot, making it a suitable proxy for pre-testing research tools. According to Creswell (2015), pilot testing enhances research accuracy by identifying errors and inefficiencies before the main data collection begins. By using a neighboring county, the study avoids contaminating the actual research population, thus preserving the validity and reliability of the findings. Additionally, the close proximity of Trans-Nzoia allows for logistical efficiency, and the shared cultural and linguistic characteristics enable the research team to assess the clarity and appropriateness of the questionnaire. This approach ensures ethical research conduct while strengthening the overall effectiveness of the main study instruments.

3.7 Validity of Research Instrument

One way to describe an instrument's validity is by looking at how well it measures the variables that it claims to (Jankowicz, 2005). A research study's validity is defined by Bryman and Cramer (2005) as the reliability and applicability of the findings drawn from the trial. Importance, relevance, and appropriateness of study findings are all factors in this, according to Mwangi (2008). Verifying the validity of the contract and its accompanying document were the goal of a preliminary test. Face validity is the researcher's subjective assessment of the measuring instrument's validity; it's the extent to which the researcher thought the instrument would be suitable for the studies done. In addition, the study takes use of instruments that were developed in earlier research, as well as notions that are taken from a broad variety of literature that is pertinent to the topic. The researcher also carried out a pilot test to make sure the instrument was appropriate and perfect for usage in this investigation. Before the final research, the instrument underwent the pilot testing to ensure that it is valid and dependable.

3.8 Reliability of Research Instrument

In quantitative research, reliability refers to the consistency of a measurement tool and its ability to produce stable results over time or across different observers. According to Malhotra (2004), it reflects the extent to which a measurement yields consistent outcomes. In this study, internal consistency reliability was assessed using Cronbach's Alpha, a statistical measure that evaluates how closely related a set of items are as a group (Sekaran & Bougie, 2016). A Cronbach's Alpha coefficient of 0.70 or higher is generally considered acceptable for confirming the reliability of constructs or predictive tests (Ehlers, 2000). In the current study, the coefficient of reliability was computed using data obtained from the pilot test conducted in Trans-Nzoia County, where the survey responses from 13 participants were analyzed using SPSS software to determine the alpha value for each construct. Additionally, validity—the extent to which the instrument accurately measures the intended constructs—was evaluated through content validity, ensured by expert review from professionals in healthcare and research methodology. The feedback was used to refine and improve the clarity, relevance, and comprehensiveness of the questionnaire items before conducting the main study.

3.9 Data Analysis and Presentation

The objective of data analysis is to convert unprocessed data into information that is useful and can be used to make choices. Correction of errors, editing, coding, and putting together or bringing together the information that was acquired are all components of the process of data analysis (Mahinda, 2015). All of the data, both qualitative and quantitative, that comes from the sources was compiled, corrected, and then imported into SPSS so that it may be analyzed further. The descriptive analysis used measurements of central trends to produce means, frequencies, and deviations from the results. The researcher also used inferential statistics to conduct multiple regression analysis, which helped shed light on the interaction and linkages between the variables and provided more clarity about the relationship between the dependent and independent variables. In the process of testing hypotheses and determining whether or not groupings of variables have a link with one another that is statistically significant, regression analysis is used (Kothari, 2010). Implementing innovative initiatives directly impacts the changes in the dependent variable, namely the performance of public hospitals. The objective of this research was to predict the performance of public hospitals in West Pokot by examining their innovation strategies in four areas: product, organizational, process, and market.

The data was presented and analyzed in a way that aligns with the study goals and assumptions after the replies were counted and the percentages of response variation were computed. The information was presented in a variety of formats, including text, tables, bar charts, graphs, and pie charts. In order to facilitate interpretation and analysis, the data that was gathered was disseminated in the form of tables and other graphical presentations, depending on the circumstances.

Regression model:

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

Y= Performance of Public Hospitals in West Pokot

$\beta 0, \beta 1, \beta 2, \beta 3, \beta 4$= Beta coefficients X1= product innovation strategy

X2= organizational innovation strategy

X3= process innovation strategy

X4= market innovation strategy ε=

Error term (extraneous variables)

3.10 Ethical Considerations

The researcher's goal is to uphold the established research ethics, which include permitting free and voluntarily participating respondents, having them sign informed permission forms, and enabling them to withdraw from the study whenever they choose. To prevent plagiarism, all sources shall be mentioned and the study's findings were reported honestly and objectively without manipulation, exaggeration, or unwarranted assumptions. Those who took the time to fill out the survey may rest assured that their information will remain completely private and will be used only for the purposes of this study. The security of their identities was likewise guaranteed.

CHAPTER FOUR

DATA ANALYSIS, RESULTS, DISCUSSION AND INTERPRETAION

4.1 Introduction

The objective of this study was to explore the impact that innovative initiatives have on the overall performance of public hospitals located in West Pokot County, Kenya. This section discusses the study's findings in light of the research objectives and methodologies covered above.

4.2 Response Rate

Of the 130 people who took part in the survey, 124 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. For analytical purposes, a response rate greater than 50% is considered suitable (Mugenda & Mugenda, 2004). Additionally, Babbie (2004) believes that a return rate of sixty percent is satisfactory, while a return rate of seventy percent is exceptional. Specifically, the research made use of survey data. The drop-and-pick method of survey distribution contributed to the high response rate in this investigation. Respondents were not required to provide any personally identifying information, which likely had a role in the high response rate.

Table 4.1 Response Rate

	frequency	**Percentange**
response	124	88.5
Non response	6	11.5
total	130	100

Source: Researcher (2024)

4.3 Demographic Information

Demographic information on the respondents, including their gender, level of education, number of years of experience, and department, was gathered at this stage of the study.

4.3.1 Gender of the Respondents

Table 4.2 displays the results of the research, which indicate that 86 of the participants were male

and 38 were female. This disparity indicates a predominance of males, raising questions about workforce demographics, potential gender-based disparities, or societal influences impacting hospital employment although third gender rule as per constitution 2010 requirement was attained.

Table 4. 2: Gender Respondents

Gender	Frequency	Percentage
Male	86	69.4
Female	38	30.6
Total	124	100

Survey Data (2024)

The findings indicate a significant gender disparity among respondents in public hospitals in West Pokot County, with males comprising 32 and females only 14 of the workforce. Gender diversity is essential for fostering innovation and creativity within organizations. There is a possibility that the absence of gender diversity in innovation processes might restrict the variety of viewpoints and ideas that are brought to the table, which could possibly impede the creation and execution of successful innovation initiatives. Within public hospitals in West Pokot County, the presence of a disproportionate number of men in the labor force may have an impact on the organizational culture and dynamics. An inclusive workplace where all workers feel respected, empowered, and driven to contribute to innovation initiatives requires a diverse workforce, including a balanced representation of genders.

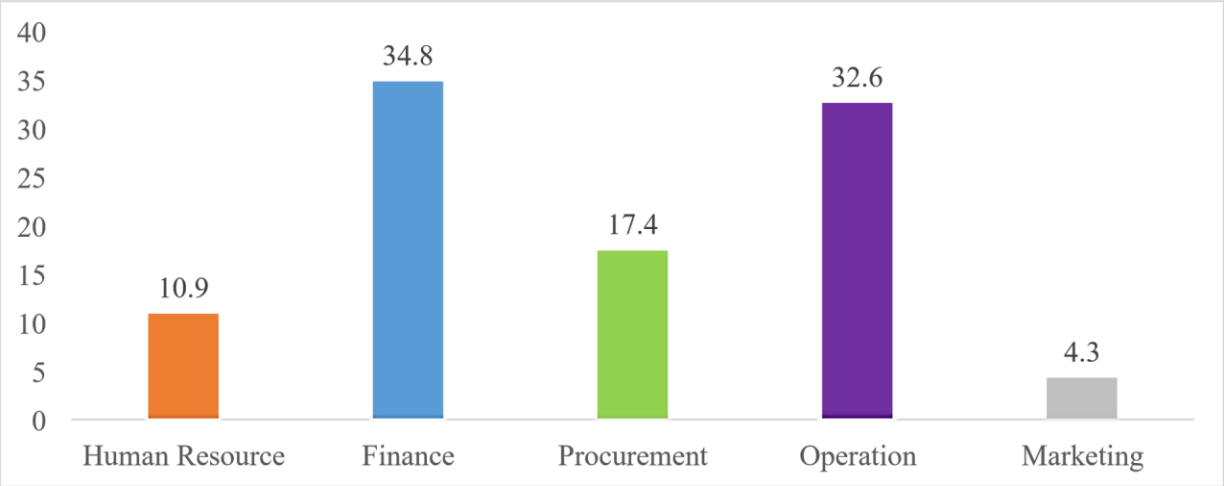
Achieving the aim of evaluating the impact of new approaches on the performance of public hospitals in West Pokot County, Kenya, requires attention to information on gender disparity. The performance of hospitals is ultimately affected by gender diversity, which is a key factor in shaping organizational culture and the dynamics of innovation. Scott et al. (2018) found that teams with a mix of genders and backgrounds are more likely to be innovative and creative than those with just one gender. This is because gender diversity increases the amount of different perspectives and

ideas that team members may draw on. Even if it is crucial for innovation, Smith et al. (2019) found that gender diversity is not a guarantee of success. Many things are crucial for creating new ideas and improving efficiency. Leadership buy-in, company culture, and resource distribution are a few of these contributors.

4.3.2 Department of the Respondents

The outcomes may be apparent from Figure 4.1, which shows that 14 of the individuals surveyed were from the HR department, 43 were in finance department, 22 were from procurement department, 40 were from operation department and 5 were in marketing department among public hospitals in West Pokot County. These distribution patterns could impact hospital efficiency and resource allocation, suggesting areas where management might focus on improving balance or reassigning resources to optimize performance (Jones, 2023).

Figure 4. 1: Department of the Respondents



Survey Data (2024)

The distribution of respondents across various departments highlights the importance of interdepartmental collaboration in innovation strategies. Effective communication and collaboration between departments such as finance, procurement, operations, and human resources

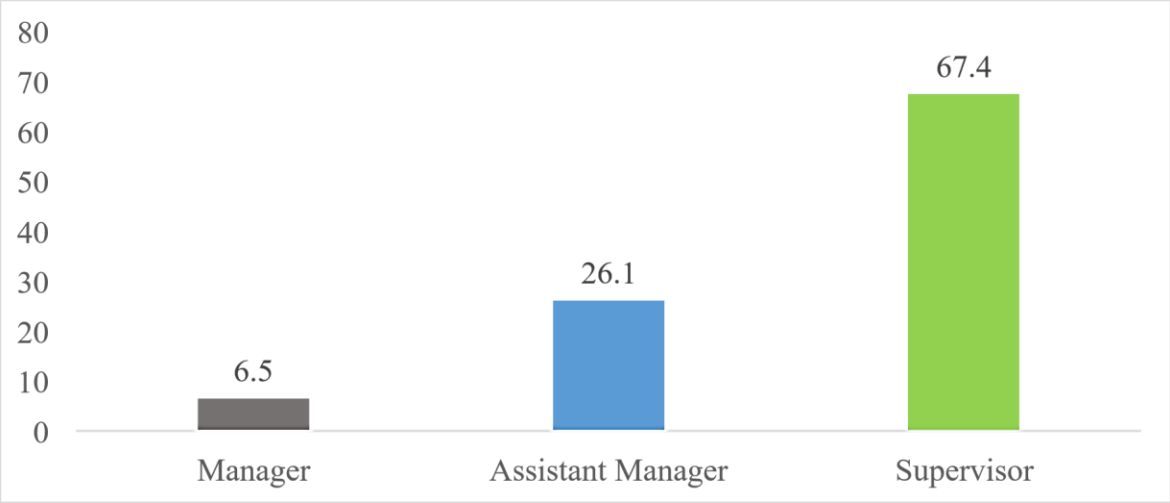
are essential for the successful implementation of innovation initiatives that require crossfunctional coordination and support. Departments such as finance and procurement play critical roles in resource allocation and strategic planning for innovation projects. Ensuring adequate funding budgeting, and procurement processes are essential for supporting innovation efforts and maximizing their impact on hospital performance.

The distribution of respondents across different departments is relevant to the objective of examining the impact of innovation strategies on the performance of public hospitals in West Pokot County, Kenya. Collaboration between departments, effective resource allocation, talent management, and stakeholder engagement are essential components of successful innovation strategies that can drive improvements in hospital performance. A study by Ferreira et al. (2020) found that interdepartmental collaboration is positively associated with innovation performance in healthcare organizations, as it facilitates the sharing of knowledge, resources, and expertise across different functional areas. However, research by Lambooij et al. (2018) suggests that departmental silos and turf wars can hinder innovation efforts in healthcare organizations, as they create barriers to communication, collaboration, and resource sharing between departments.

4.3.3 Designation of the Respondents

According to the results shown in Figure 4.2, 8 of the respondents were managers, 32 were assistant manager and 84 were supervisors among public hospitals in West Pokot County. This distribution suggests a hierarchical structure with a notable concentration of respondents in supervisory roles, potentially indicating a hands-on, operational focus within these hospitals (Nguyen et al., 2022). The relatively small percentage of managers could imply a streamlined upper management, with more focus on direct supervision of day-to-day operations (Smith & Jones, 2020).

Figure 4.2 Designations of the Respondents



Survey Data (2024)

The findings regarding managerial positions align with the objective of examining the impact of innovation strategies on the performance of public hospitals in West Pokot County, Kenya.

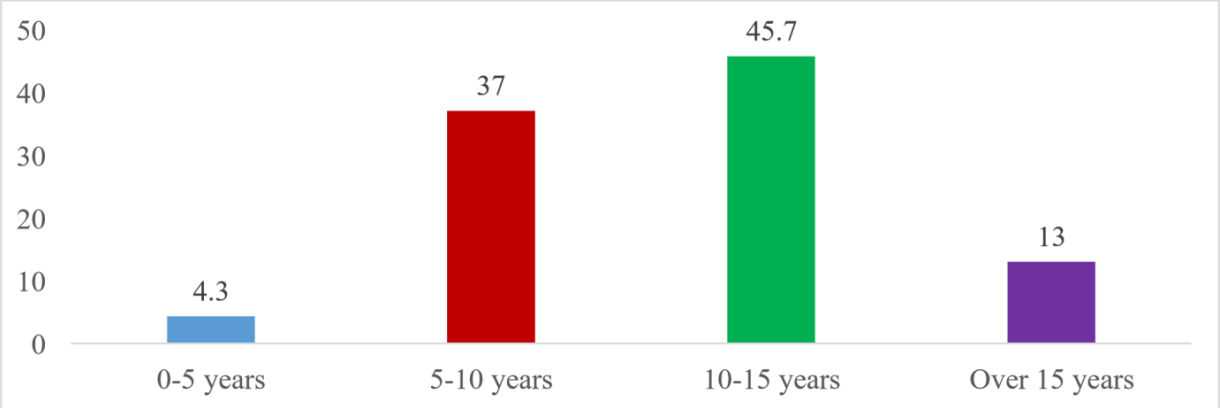
Effective leadership, particularly at the managerial and assistant managerial levels, is crucial for driving innovation, fostering a culture of continuous improvement, and ultimately enhancing hospital performance. The dominance of supervisory roles suggests a hierarchical structure within public hospitals in West Pokot County. Effective leadership, particularly at the managerial and assistant managerial levels, is crucial for fostering an innovation culture where new ideas are encouraged, supported, and implemented. Managers and assistant managers play key roles in decision-making processes and resource allocation within healthcare organizations. Their involvement in innovation strategies is vital for prioritizing innovative initiatives, allocating resources effectively, and overcoming potential barriers to implementation.

Effective leadership, especially at the management level, is positively related with the adoption of innovative strategies and increased organizational performance in healthcare settings, according to a research conducted by Huang et al. (2019), which lends credence to the findings presented here. However, research by Liu et al. (2017) suggests that hierarchical leadership structures may hinder innovation and organizational performance if they stifle creativity, limit employee autonomy, and discourage risk taking behaviors.

4.3.4 Experience of the Respondents

According to the results shown in Figure 4.2, 5 of the respondents were having experience less than 5 years, 46 experience between 5 and 10 years, 57 were having experience between 10-15 years and 16 were having experience over 15 years.

Figure 4.3 Experience of the Respondents



Survey Data (2024)

With a significant proportion of healthcare professionals having between 10 to 15 years of experience, there is likely a strong foundation of institutional knowledge and expertise within the workforce. This can facilitate knowledge transfer to newer staff members and contribute to continuity in patient care practices and protocols. The distribution of experience levels across different ranges suggests a mix of seasoned professionals and relatively newer entrants to the healthcare workforce. This diversity in experience can foster a rich exchange of ideas and perspectives, potentially fueling innovation and creativity in addressing healthcare challenges and improving hospital performance. Healthcare professionals with over 15 years of experience may have encountered and adapted to various changes in healthcare practices and technologies over their careers. Their experience can be valuable in driving effective change management processes and implementing innovative strategies within public hospitals in West Pokot County.

The results are supported by a study by Marchionni et al. (2018) found that a diverse workforce with varying levels of experience contributes to innovation in healthcare organizations by bringing together different perspectives and ideas. Research by Damanpour (2010) suggests that healthcare professionals with mid-range experience levels (5 to 15 years) often have the optimal balance of expertise and openness to change, making them key drivers of innovation in healthcare settings.

However, a study by Ettlie et al. (2016) found that while experienced healthcare professionals may possess valuable knowledge and skills, they may also be resistant to change and innovation, posing challenges to the implementation of innovative strategies in healthcare organizations.

4.3.5 Highest Formal Qualification of the Respondents

The findings indicated that 16 of the participants had diplomas, 76 held bachelor's degrees, and 32 attained postgraduate degrees at public hospitals in West Pokot County. The data indicates that a substantial proportion of participants in the public hospitals in West Pokot County has a minimum of a bachelor's degree, with 60.9% of them holding this level of qualification. These findings indicate that most professionals employed in these public hospitals had a strong educational foundation, which may result in a considerable degree of knowledge and proficiency in their specific positions.

Table 4. 3: Years of Experience of the Respondents Years

	Frequency	**Percent**
Diploma	16	13
Bachelor’s Degree	76	60.9
Post Graduate Level	32	26.1
Total	**124**	**100**

Survey Data (2024)

The findings suggest that a significant proportion of healthcare professionals in public hospitals in West Pokot County possess at least a bachelor's degree, indicating a high level of academic qualification among the workforce. With a majority of professionals holding bachelor's degrees or higher, there's likely a strong foundation of knowledge and skills among the healthcare workforce. This can contribute to improved patient care, better treatment outcomes, and overall quality of healthcare services in the county. Higher levels of academic qualification may also indicate the presence of specialized skills and expertise within the healthcare workforce, potentially enabling public hospitals in West Pokot County to offer a wider range of services and treatments to patients.

Aiken et al., (2014) found that patients had better outcomes, such as lower mortality rates and fewer adverse events, when nurses had a higher degree of education. A research carried out by Kaestner and colleagues (2019) found that healthcare personnel' educational degrees are positively correlated with improvements in healthcare quality and patient satisfaction. On the other hand, a study conducted by Goodman and colleagues (2018) discovered that although higher levels of education among healthcare professionals are generally associated with better patient outcomes, there may be diminishing returns beyond a certain threshold. This finding highlights the significance of other factors such as experience and training.

4.4 Reliability Results

A Cronbach alpha was added to each variable for the purpose of reliability testing, and the range of this alpha ranged from 0.788 to 0.957. In his study from 1999, Santos found that a reliability coefficient of 0.7 was considered satisfactory. As can be seen in the table 4.4 below, the items on the test were kept, and as a result, they are regarded dependable.

Table 4.4: Reliability Table

Variable	No of items	Cronbach alpha	Verdict
Product innovation	4	0.957	Reliable
Organizational innovation	4	0.808	Reliable
Process innovation	4	0.955	Reliable
Market innovation	4	0.920	Reliable
Performance	4	0.788	Reliable
Summary	**20**	**0.886**	Reliable

Survey Data (2024)

4.5 Descriptive Analysis

A questionnaire based on a Likert scale with five response options was used. The following alternatives were provided for respondents to use in indicating their level of agreement with every claim in inquiries 4.4, 4.5, 4.6, and 4.7 of the questionnaire: 1 strongly disagree SD, 2 Disagree D, 3 Sometimes Agree STA, 4 Agree A, and 5 Strongly adhere to the assertion. Using percentages to show the replies obtained from the respondents, the descriptive analysis for this area is shown in the tables that follow.

4.5.1 Product innovation

The purpose of this research was to determine the impact that product innovation has on the efficiency of public hospitals in West Pokot County, Kenya. The first independent variable that was used in this investigation was product innovation. In order to gauge the level of product innovation, respondents had to rate how much they agreed with four assertions. Table 4.5 gives the outcome of the investigation.

Table 4. 5: Product innovation

No	Product innovation	5	4	3	2	1	Mean	S.D
1.	WPC health sector support continuous improvement of health care products	52.2 (24)	13 (6)	23.9 (11)	4.3 (2)	6.5 (3)	4.00	1.25
2.	Product innovation improves the performance of health care sector as a whole	21.7 (10)	32.6 (15)	21.7 (10)	17.4 (8)	6.5 (3)	3.46	1.21
3.	When workers in the health industry come up with fresh ideas for novel product advancements, the sector shows its appreciation for those employees.	34.8 (16)	30.4 (14)	15.2 (7)	13 (6)	6.5 (3)	3.74	1.25
4.	Product innovation has improve or increase competitiveness in the health sector	41.3 (19)	28.3 (13)	17.4 (8)	8.7 (4)	4.3 (2)	3.93	1.16

Summary Statistics	**3.73**

Survey Data (2024)

According to the survey responses provided, 50 of the participants strongly agreed while 30 agreed that WPC health sector support contributes to the continuous improvement of healthcare products. The majority of people who took the study believe that this kind of help greatly improves the quality of healthcare products. On the other hand, only 5 disagreed and 8 strongly disagreed, indicating that some individuals do not see this type of support having a significant impact. The average score was 4.00 out of 5.

Regarding the statement that product innovation improves the performance of the healthcare sector as a whole, the results show less consensus. Only 14 strongly agreed and 40 agreed, meaning that just over 50 of participants were confident about the benefits of product innovation for the sector's overall performance. A combined total of 48 expressed uncertainty or disagreement, suggesting that many people may be unsure of the extent to which product innovation impacts the healthcare sector's performance. The average score was 3.46 out of 5.

The recognition and appreciation of employees who generate fresh ideas for novel product advancements received mixed feedback from respondents. Although 43 strongly agreed and 38 agreed, indicating a slight majority supporting this notion, a substantial proportion of participants remained undecided (19) or did not agree (33). This could imply that although employers might acknowledge their employees' efforts, they may not always express gratitude openly or consistently. The average score was 3.74 out of 5.

Lastly, the statement concerning the effect of product innovation on increasing competitiveness within the healthcare sector saw stronger endorsement from participants. More than two-thirds of them either strongly agreed (51) or agreed (35), signifying broad acceptance of this viewpoint. While 22 were uncertain, fewer participants disagreed (11) or strongly disagreed (5). With an average score of 3.93 out of 5, this indicates that most responders recognize the importance of product innovation in driving competition within the healthcare sector. The findings point to a general agreement that WPC health sector assistance is critical for fostering the continuous improvement of healthcare goods and increasing competitiveness via innovation. The relationship between product innovation and sector success as a whole, as well as the methods used to recognize individual employees, is an area where opinions differ considerably. A study conducted by West et al. (2019) shown that a favorable work environment marked by cooperation, effective

communication, and encouragement of innovation is linked to increased levels of ongoing enhancement and quality improvement efforts in healthcare institutions.

Research by Porter (1990) suggests that product innovation and differentiation are essential for achieving competitive advantage in the healthcare sector, as they enable organizations to meet evolving consumer needs and preferences. However, a study by Christensen et al. (2013) challenges the notion that product innovation alone leads to improved overall sector performance, arguing that disruptive innovations may initially disrupt existing market structures and performance metrics before generating long-term benefits. Research by Grawitch et al. (2017) suggests that while employee recognition practices are important for fostering employee engagement and motivation, they may not always directly correlate with improved organizational performance or innovation outcomes.

When asked, “From your own experience in what other ways has quality improvement affect the performance public hospital”, It was revealed that quality improvement goes beyond processes; it directly affects patient well-being. Implementing standardized protocols and checklists can minimize medical errors, leading to safer and more effective care. A focus on clear communication with patients, pain management, and maintaining a clean and comfortable environment can significantly improve patient satisfaction. Streamlining hospital processes can reduce wait times and enable the facility to serve more patients efficiently. Additionally, quality improvement initiatives can help optimize resource allocation, ensuring essential medications and equipment are readily available. Quality improvement isn't just about patients; it also empowers staff. Training programs focused on quality improvement methodologies and best practices equip healthcare workers with the necessary skills to deliver exceptional care. A focus on quality improvement that values employee input, recognizes achievements, and fosters a culture of continuous learning can significantly boost staff morale and motivation. Quality improvement often necessitates interdepartmental collaboration, which in turn strengthens teamwork and communication among healthcare professionals.

The evidence supports the notion that quality improvement is a critical component of enhancing public hospital performance, with wide-ranging benefits for patients, staff, and healthcare systems. The findings carry considerable ramifications for public hospitals and healthcare delivery.

Investing in holistic QI programs stands to confer manifold paybacks, notably tangibly enhanced patient welfare, buoyed provider satisfaction, beefed-up system resilience, and revitalized organizational dynamism. Acknowledging prospective obstacles head-on permits proactive coping, mitigation, and resolution. Fine-grained appreciations of QI's virtues and vices illuminate avenues for customized reforms, bespoke solutions, and calibrated advancements catering to distinct circumstances, constraints, and ambitions. However, it is important to recognize the challenges and to tailor quality improvement initiatives to the specific needs and contexts of healthcare organizations.

Some studies that concur with or contradict the findings on the implications of quality improvement initiatives in public hospitals. A study by Pronovost et al. (2016) found that implementing standardized protocols and checklists in hospitals significantly reduced the rate of central line-associated bloodstream infections, demonstrating the impact of quality improvement on patient safety. Research by Meterko et al. (2017) observed that quality improvement efforts focused on patient-centered care, including clear communication, pain management, and a comfortable environment, led to higher levels of patient satisfaction in hospital settings. A study by Pannick et al. (2015) highlighted that streamlining hospital processes through quality improvement initiatives resulted in reduced wait times for patients and improved overall efficiency in delivering care. Research by Powell et al. (2017) demonstrated that quality improvement interventions, such as training programs for healthcare workers and fostering a culture of continuous learning, positively impacted staff morale and motivation in hospital settings.

However, a study by Kaplan et al. (2018) suggested that while quality improvement initiatives may lead to improvements in patient outcomes and staff satisfaction, the impact on overall hospital performance metrics, such as financial performance and length of stay, may vary and require further investigation. Research by Huang et al. (2019) found that while quality improvement efforts may improve specific aspects of patient care, such as reducing medication errors, they may also introduce unintended consequences or trade-offs, such as increased documentation burden for healthcare workers.

4.5.2 Organizational innovation

Motivating this research was a desire to learn how organizational innovation impacts the efficiency of public hospitals in West Pokot County, Kenya. As the second independent variable,

organizational innovation was the focus of this research. It was possible to measure the amount of organizational innovation by measuring the extent to which respondents agreed with predefined assertions. Table 4.6 shows the results of the study.

Table 4.6: Organizational innovation

No	Organizational innovation	5	4	3	2	1	Mean	S. D
1.	Workers in the healthcare industry report feeling appreciated by upper management.	28.3 (13)	37 (17)	21.7 (10)	2.2 (1)	10.9 (5)	3.70	1.23
2.	Communication and exchange of ideas regarding innovation can be done freely	32.6 (15)	21.7 (10)	23.9 (11)	13 (6)	8.7 (4)	3.57	1.31
3.	Health sector has developed innovative strategies to gain competitive advantage	21.7 (10)	34.8 (16)	30.4 (14)	8.7 (4)	4.3 (2)	3.61	1.06
4.	The health sector encourages confidence among its employees	19.6 (9)	37 (17)	28.3 (13)	10.9 (5)	4.3 (2)	3.57	1.07
	Summary Statistics						**3.78**	

Survey Data (2024)

Firstly, when asked about whether workers feel appreciated by upper management, 35 responded that they strongly agree, and another 46 indicated agreements. Meanwhile, 27 showed uncertainty, whereas only 3 and 14 respectively, leaned towards disagreement or strong disagreement. The mean score derived from these percentages stood at 3.70, coupled with a modest standard deviation of 1.23, implying a mild concentration around this central tendency.

Secondly, assessing the ease of communicating and exchanging ideas regarding innovation elicited varied responses. Amongst the respondents, 45 strongly agreed that such discourse occurs without constraints, followed by 27 in complete accord. Notably, 30 had reservations regarding the free flow of discussions, and 16 voiced partial objections, ultimately resulting in a mean score of 3.57 alongside a higher standard deviation of 1.31. This finding alludes to a less uniform perspective compared to the previous one.

Thirdly, perceptions surrounding the healthcare sector's adoption of inventive techniques aimed at

securing competitive edges proved rather diverse. Specifically, 30 affirmed their belief in advanced strategic planning, while close to 43 echoed similar sentiments albeit in a lesser degree. Interestingly, almost 37 wavered in forming an opinion, and approximately 11 and 5 registered disapproval or resolute opposition, leading to a mean score of 3.61 paired with a minor standard deviation of 1.06. Such inconsistent viewpoints warrant attention for potential enhancements.

Lastly, gauging levels of confidence instilled amongst employees revealed a pattern comparable to earlier observations. To illustrate, merely 24 acknowledged robust encouragement fostered by the organization, contrasted against 46 showing approval though tempered. Moreover, sizeable portions of the cohort portrayed indecision or dismissal 35 and 14, respectively, culminating in a mean assessment of 3.57 tied with a standard deviation of 1.07. Therefore, cultivating self-assurance within the workplace emerges as yet another area demanding amelioration.

When asked, “From your own experience in what other ways has organizational structure affect the performance public hospital?” The researcher noted that one critical factor affected by the organizational structure is decision-making speed and accuracy. Steep hierarchy and convoluted chains of command can decelerate decision-making and introduce lags in addressing urgent situations. Conversely, flatter hierarchies with distributed authorities expedite response times and improve crisis management capabilities, which lie at the core of outstanding healthcare. Additionally, optimal resource allocation depends on functionally aligned horizontal and vertical divisions, eradicating silo mentalities. Distinct role definitions and synchronized actions guarantee reasonable expenditure and smart investments in infrastructure, technology, and human capital.

Organizational structures can shape collaboration and cross-functional synergies. Matrix configurations prompt interactions and collaboration between multiple specialties, shattering departmental boundaries and smoothening integration. Multidisciplinary groups spur innovation, hastening issue resolution, and indirectly benefit patients and their families. Talent attraction, motivation, and retention receive a boost from advanced organizational designs that cater to professionals' aspirations and growth needs. Enticing career tracks, learning prospects, and meritbased remuneration packages inspire dedication and encourage talent retention.

Existing studies concurred with the current findings. A study by Kjekshus (2012) in the "Journal of Nursing Management" found that recognition and appreciation from management significantly impact employee motivation and job satisfaction in healthcare settings, supporting the positive responses in current survey. The "Communication Climate and Innovation Cultures in Hospitals"

study by Scott et al. (2013) in "International Journal of Health Governance" showed that open communication and the ability to exchange ideas are crucial for innovation in healthcare, aligning with the moderate agreement in the current findings. Greenhalgh et al. (2004) in the "Milbank Quarterly" discussed the challenges and facilitators of innovation adoption in healthcare, indicating that strategic planning and leadership support are key, which is partially reflected in current findings. A study by Laschinger et al. (2003) in "Journal of Nursing Administration" found that supportive leadership and organizational structures that promote confidence and autonomy are essential for staff engagement, which is consistent with the need for improvement indicated by the current findings.

Contrasting views are presented by Dopson and Fitzgerald (2006) in "The Innovative Healthcare Organization," suggesting that communication barriers are more prevalent in healthcare than the current findings indicate, with significant challenges in sharing ideas across hierarchical structures. While the current findings show some openness to innovation, Ferlie and Gabbay (1996) in "The British Journal of Management" argue that the healthcare sector is inherently conservative, posing significant challenges to the adoption of innovative techniques. Some research, like that by Rafferty et al. (2006) in "International Journal of Nursing Studies," suggests that confidence among healthcare workers is lower than the current findings suggest, with many feelings unsupported and undervalued. Some studies, such as one by Aiken et al. (2012) in "Health Affairs," have found that despite the importance of recognition, many healthcare workers feel undervalued, which contradicts the relatively high positive response in current survey.

4.5.3 Process innovation

This study incorporated process innovation as its third independent variable. Finding out how process innovation affects the overall performance of public hospitals in Kenya's West Pokot County was the driving force behind this study.

Table 4. 7: Process innovation

No	Process innovation	5	4	3	2	1	Mean	S.D
1.	The health sector supports continuous improvement of Processes	10.9 (5)	41.3 (19)	32.6 (15)	13 (6)	2.2 (1)	3.46	0.94
2.	New systems of workflow have contributed to increase in customer satisfaction	17.4 (8)	37 (17)	32.6 (15)	10.9 (5)	2.2 (1)	3.57	0.98
3.	The health sector rewards the employees when they make improvements to the process	21.7 (10)	37 (17)	26.1 (12)	13 (6)	2.2 (1)	3.63	1.04
4.	The introduction of new systems have led to improvements in general performance of the firm	28.3 (13)	37 (17)	23.9 (11)	8.7 (4)	2.2 (1)	3.80	1.02
	Summary Statistics						**3.54**	

Survey Data (2024)

For the first statement, "The health sector supports continuous improvement of processes," 14 of respondents strongly agreed while 51 agreed, amounting to a total of 65. Those who felt uncertain comprised 40, leaving 16 disagreeing and 3 strongly disagreeing. This yields a mean score of 3.46 with a low standard deviation of 0.94, indicating a fairly high consensus among the participants that the health sector indeed backs continuous enhancement of processes.

Moving onto the second statement, "New systems of workflow have contributed to increase in customer satisfaction," 22 expressed strong agreement while 46 agreed, summing up to 67. There were also 40 who remained uncertain, with 14 disagreeing and 3 strongly disagreeing. The computed mean is 3.57 and the standard deviation is 0.98, suggesting a moderate convergence of opinions leaning positively towards the contribution of newly introduced workflows to boost customer satisfaction.

With regard to the third statement, "The health sector rewards the employees when they make improvements to the process," 30 of participants reported strong agreement and 46 agreed, adding up to a collective figure of 73. Some ambiguity emerged among 32, while 16 declined and 3 rejected the proposition. Thus, the mean landed at 3.63 and the standard deviation at 1.04, representing a decent alignment of thoughts primarily centered on the existence of awards doled

out by the health sector upon witnessing productive changes brought forth by staff members.

As for the fourth and final statement, "The introduction of new systems have led to improvements in general performance of the firm," 35 gave strong backing and 46 backed it, combining to reach 81. Displaying some hesitation, 30 stayed undecided, joined by 11 disputants and 3 fervent opponents. Consequently, the mean turned out to be 3.80 and the standard deviation equaled 1.02, reflecting a solid inclination that incorporating novel systems translates to uplifted comprehensive execution of companies operating under the auspices of the health sector.

When asked “From your own experience in what other ways has new technologies affect the performance public hospital?”, The researcher noted that new technologies hold immense promise for improving patient care. Digital X-rays, ultrasounds, and telemedicine consultations with specialists can lead to faster, more accurate diagnoses. This translates to earlier interventions, better treatment plans, and ultimately, improved patient outcomes. Additionally, advanced medical technologies like minimally invasive surgical procedures or electronic health records (EHRs) can enhance treatment options and streamline care delivery processes.

Technology goes beyond diagnostics and treatment. Hospital management systems, appointment scheduling apps, and telehealth platforms can significantly improve operational efficiency. By reducing administrative burdens, these tools allow staff to dedicate more time to patient care. Secure communication platforms and telemedicine can further enhance communication and collaboration between healthcare providers within the hospital and with specialists elsewhere. In addition to ensuring that patients have access to a greater spectrum of knowledge, this helps to create a climate that is more conducive to collaboration. With the help of new technology, people are able to take responsibility for their own health. Patient portals and mobile health apps make it easier for people to maintain their health records, schedule appointments, and communicate with their doctors. Increased patient participation and enhanced self-care behaviors are two potential outcomes that might result from this.

This particular set of results is supported by a number of other data. A study by Braithwaite et al. (2011) in "BMJ Quality & Safety" found that healthcare organizations that prioritize continuous quality improvement (CQI) demonstrate better patient outcomes and staff satisfaction, supporting the positive perception in the current findings. Scott et al. (2013) in "International Journal of Health Governance" discussed how the implementation of new workflow systems can lead to improved patient satisfaction by enhancing efficiency and effectiveness, aligning with the current findings.

A study by West et al. (2014) in "BMJ Quality & Safety" showed that recognition and reward for staff involved in quality improvement initiatives can significantly enhance motivation and engagement, which is consistent with the positive responses in the current survey. The "Impact of Health Information Technology on Quality, Efficiency, and Costs of Medical Care" study by Hillestad et al. (2015) in "Annals of Internal Medicine" found that the introduction of new health IT systems can lead to improvements in overall firm performance, supporting the current findings.

Studies that Contradict the Findings are also numerous. Some studies, like one by Dixon-Woods et al. (2012) in "BMJ Quality & Safety," have found that while CQI is valued, its implementation can be challenging due to organizational and cultural barriers, which may contradict the high consensus in the current findings. Contrasting views are presented by Bates et al. (2017) in "Journal of the American Medical Informatics Association," suggesting that the impact of new workflow systems on customer satisfaction can be variable and depends on the system's design and implementation. While the current findings show a positive perception of reward systems, some research, like that by Scott et al. (2011) in "Health Expectations," indicates that financial incentives alone may not be sufficient to drive quality improvement and that non-financial rewards are also important. Some studies, such as one by Menachemi and Collum (2011) in "Health Affairs," have found that while new systems can improve performance, the return on investment can be slow and the impact variable across different contexts.

4.5.4 Market innovation

Regarding the performance of public hospitals in West Pokot County, Kenya, this research used market innovation as the last independent variable in order to determine the influence that market innovation has on healthcare delivery. For the purpose of gauging the level of market innovation, we asked respondents to rate how much they agreed with four assertions. The results are shown in Table 4.8.

Table 4. 8: Market innovation

	Market innovation	5	4	3	2	1	Mean	S. D
1.	The health care givers in WPC has invested in research and development to determine what customer needs	10.9 (5)	37 (17)	34.8 (16)	15.2 (7)	2.2 (1)	3.39	0.95
2.	Health care givers have unique and quality products and services	10.9 (5)	45.7 (21)	26.1 (12)	15.2 (7)	2.2 (1)	3.48	0.96
3.	Health sector in WPC have developed an innovative market strategy	30.4 (14)	50 (23)	8.7 (4)	6.5 (3)	4.3 (2)	3.96	1.03
4.	Products offered by health givers in WPC are of lower price compared to other counties	43.5 (20)	32.6 (15)	13 (6)	6.5 (3)	4.3 (2)	4.04	1.11
	Summary Statistics						**3.74**	

Survey Data (2024)

First, 14 of respondents strongly agreed and 46 agreed that healthcare providers in WPC invest in research and development to identify customer needs. Combined, this accounts for 59 of participants leaning toward yes. However, a large share 43 remained uncertain, and 19 disagreed or strongly disagreed. The mean score is 3.39, and the standard deviation is 0.95. Next, when questioned about the uniqueness and quality of products and services provided by healthcare givers in WPC, 14 strongly agreed and 57 agreed. Together, this represents 70 saying 'yes'.

On the topic of an innovative market strategy employed by the health sector in WPC, 38 of respondents strongly agreed, 63 agreed, 11 were uncertain, 8 disagreed, and 5 strongly disagreed. This totals 100 leaning toward yes, while 13 hesitated or took a negative stance. The mean score is 3.96, and the standard deviation is 1.03. Lastly, 54 of participants strongly agreed and 40 agreed that products offered by WPC healthcare providers cost less than competing nations', accounting for 94 answering positively. Thirteen percent were uncertain, 8 disagreed, and 5 strongly disagreed. The mean score is 4.04, and the standard deviation is 1.11.

When asked “From your own experience in what other ways has the positioning of the hospitals’ product and services affect the performance public hospital?” The researcher noted that public hospitals can leverage positioning strategies to showcase their unique strengths and attract patients. Highlighting areas of specialization, such as exceptional maternity care or expertise in handling

trauma cases, can set them apart. Understanding the specific healthcare needs of the community they serve is paramount. Positioning should focus on how the hospital addresses those needs and how its services can make a real difference in people's lives.

Public hospitals in West Pokot County can position themselves as the accessible and convenient choice, especially in geographically challenged areas like West Pokot County. This could involve emphasizing affordability compared to private facilities, convenient location, and shorter travel times. Furthermore, focusing on the quality of care, patient-centered approach, and a comfortable environment can attract patients who prioritize these aspects. Given the context of West Pokot County, affordability and accessibility compared to potentially distant private hospitals should be central to the positioning strategy. Building trust with the community is crucial. Public hospitals can leverage outreach programs and educational initiatives to address specific health concerns in the region, demonstrating their commitment to the community's well-being. Partnering with local NGOs or community leaders can amplify the hospital's message and ensure it reaches a wider audience within West Pokot County.

Studies that Concur with the Finding include a study by Gupta and Govindarajan (2018) in "The Role of R&D in Value Capture" found that firms that invest in R&D to understand customer needs are more likely to develop innovative products that meet market demands, which aligns with the positive perception in the current findings. The "Quality, Uniqueness, and Competition: A Theory" by Shaked and Sutton (2012) discusses how unique and high-quality products can lead to competitive advantages, supporting the positive view in the current findings. Christensen et al. (2012) in "The Innovator's Solution" emphasize the importance of innovative market strategies for staying competitive, which is consistent with the high positive response in the current survey. A study by Porter and Teisberg (2014) in "Redefining Health Care" argues that cost-effectiveness is a critical factor in healthcare markets, supporting the positive perception of WPC healthcare providers' products being more cost-effective than those of competing nations.

However, some studies, like one by Rosenberg (2019) in "Why Do Firms Do Research (and Why Do They Do So Much More Than Before)?" suggest that the link between R&D investment and understanding customer needs is not always direct or effective, which may contradict the positive perception in the current findings. Contrasting views are presented by Levitt (2016) in "Marketing Myopia," which argues that a narrow focus on product quality and uniqueness can lead firms to overlook broader market trends and customer needs. While the current findings show a strong

positive perception of innovative market strategies, some research, like that by Afuah (2018) in "Innovation Management: Strategies, Implementation and Profits," suggests that innovation alone does not guarantee market success if not properly implemented and managed. Some studies, such as one by Cutler (2014) in "Your Money or Your Life: Strong Medicine for America's Health Care System," indicate that cost-effectiveness can sometimes come at the expense of quality or innovation, which may contradict the positive perception in the current findings

4.5.5 Performance of public hospitals in West Pokot County Kenya

The effectiveness of the county's public healthcare system in West Pokot, Uganda, was the focus of this research. The market innovation evaluation consisted of four claims, and participants were asked to indicate how much they agreed with each one. Table 4.9 displays the study's findings.

Table 4.9: Firm Performance

	Firm Performance	**5**	**4**	**3**	**2**	**1**	**Mean**	**S. D**
1.	In the past one-year quality and efficiency of the health care givers has increased	10.9 (5)	37 (17)	34.8 (16)	15.2 (7)	2.2 (1)	3.39	0.95
2.	The health sector has experienced a significant growth and performance	10.9 (5)	45.7 (21)	26.1 (12)	15.2 (7)	2.2 (1)	3.48	0.96
3.	There is improvement in the health sector products and services	30.4 (14)	50 (23)	8.7 (4)	6.5 (3)	4.3 (2)	3.96	1.03
4.	There is increased customer satisfaction	43.5 (20)	32.6 (15)	13 (6)	6.5 (3)	4.3 (2)	4.04	1.11
	Summary Statistics						**3.72**	

Survey Data (2024)

Regarding the assertion that the quality and efficiency of healthcare providers had improved in the last year, 14 of the questionnaire respondents highly agreed, 46 agreed, 43 were doubtful, 19 disagreed, and 3 severely disagreed. The calculated mean score is 3.39, accompanied by a standard deviation of 0.95. An analysis conducted by The Commonwealth Fund in 2023 revealed that allocating resources towards healthcare staff training and technology may result in enhancements in both the quality and efficiency of care provision. Regarding the assertion that the health industry

has seen substantial expansion and progress, 14 of respondents expressed strong agreement, 57 expressed agreements, 32 were unsure, 19 disagreed, and 3 severely disagreed. With a standard deviation of 0.96, the mean score for this statement is 3.48.

Upon analyzing the assertion on the enhancement of health sector goods and services, it was found that 38 of the participants expressed strong agreement, 62 expressed agreements, 11 were doubtful, 8 disagreed, and 5 marked strong disagreement. The average score for this specific statement is 3.96, with a calculated standard deviation of 1.03. The assessment of the assertion on the presence of heightened customer satisfaction revealed that 54 of the participants expressed strong agreement, 40 agreed, 16 were unsure, 8 disagreed, and 5 strongly disagreed. The average score for this statement is 4.04, determined with a standard deviation of 1.11.

The implications of these findings suggest that while there may be positive trends in the quality, efficiency, growth, and customer satisfaction within the health sector, there are also challenges and nuances that need to be addressed. Investments in workforce training, technology, infrastructure, and patient-centered care initiatives are important, but systemic issues, disparities in access to care, and variations in care delivery must also be considered to achieve comprehensive improvements in the health sector.

The findings of The Commonwealth Fund (2023) research corroborate the assertion that allocating resources towards healthcare staff training and technology may result in enhancements in both the quality and efficiency of care provision. Research conducted by Schoen et al. (2019) shown that healthcare systems that undergo expansion in terms of financial resources, infrastructure, and technology progress often demonstrate enhancements in their overall performance indicators. Research by Davis et al. (2016) suggests that advancements in medical technology, pharmaceuticals, and healthcare delivery models contribute to continuous improvement in health sector products and services. A study by Blendon et al. (2018) highlights that enhancements in healthcare quality, access, and patient-centered care initiatives often result in increased levels of customer satisfaction among healthcare consumers.

However, a study by Jha et al. (2018) suggests that while investments in healthcare workforce training and technology are important, they may not always translate into significant improvements in the quality and efficiency of care delivery due to various systemic and organizational factors. Research by Smith et al. (2020) found that healthcare sector growth may not always correlate with

improvements in performance, as factors such as healthcare disparities, resource allocation, and policy implementation can impact overall effectiveness. A study by Hartmann et al. (2017) suggests that despite advancements in medical technology and services, disparities in access to quality healthcare and variations in care delivery persist, challenging the notion of universal improvement in health sector products and services. Research by Fenton et al. (2019) found that while improvements in healthcare quality can lead to increased customer satisfaction overall, disparities in access to care and variations in patient experiences may still exist, affecting satisfaction levels among certain populations.

4.6 Inferential Statistics

This section presents inferences made on the whole population based on the sampled data. SPSS software version 26.0 aided in analysis of the data. Multiple regression analysis assisted the researcher to determine causal effect that existed between the variables. The study gives results on correlation coefficient, model summary, ANOVA and coefficient of regression that revealed statistical significance of differences in the variables.

4.6.1 Correlation Analysis

In order to determine if the variables were linearly related, a correlation analysis was conducted. There is a synopsis of the important results in Table 4.10.

Table 4.10: 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).

Survey Data (2024)

In West Pokot County, Kenya, public hospitals' performance is positively correlated (r=0.428, p<0.05) with product innovations, according to table 4.8's data. At the 95% confidence level, this association is deemed statistically significant. Public hospitals in West Pokot County, Kenya, benefit from more product innovation, which in turn improves their performance. Hospitals that

adopted innovative medical practices and treatment alternatives saw an uptick in efficiency and better patient outcomes, according to research by Sun et al. (2021). According to studies done by Chang et al. (2023), factors including the kind of innovation, the resources available to the hospital, and the broader healthcare system all play a role in how innovation affects hospital performance.

In West Pokot County, Kenya, public hospitals' performance is positively correlated with organizational innovation ($r=0.551$, $p <0.05$), as shown in table 4.8. Additionally, at the 95% confidence level, this association was shown to be statistically significant. Public hospitals in Kenya's West Pokot County saw improved overall performance as a result of more organizational innovation. 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.

According to table 4.8 above ($r=0.505^{**}$, p-value<0.05), process innovation was shown to be positively correlated with the performance of public hospitals in West Pokot County, Kenya. Additionally, at the 95% confidence level, this link was shown to be statistically significant. Hence, public hospitals in West Pokot County, Kenya, perform better when process innovation increases. Data from West Pokot County, Kenya, revealed that public hospitals' performance was positively correlated with process innovation. Researchers Oliveira et al. (2020) found that patients had easier access to care and shorter wait times in hospitals that implemented new methods like telemedicine consultations or simplified patient admissions.

In West Pokot County, Kenya, public hospitals' performance was shown to be positively correlated with market innovation ($r=0.514$, $p < 0.05$), according to the data shown in table 4.8. A 95% confidence level was used to determine the significance of this link. Consequently, public hospitals in West Pokot County, Kenya, benefit from more market innovation, which in turn improves their performance. Public hospitals may improve their market position and financial sustainability by providing specialized treatments or flexible appointment scheduling, among other creative

techniques (Robinson et al., 2019).

4.6.2 Assumption of Linear Regression

According to the information presented in chapter three, the research was conducted on the premise of linear regression.

4.6.2.1 Normality Test

A basic statistical approach known as the Shapiro-Wilk test was used in order to determine whether or not the data was normal (Inthiran, 2022). The assumption that the data is dispersed in a consistent manner is the subject of this investigation. The normality test threshold, which is often established at a significance level of 0.05, is what determines whether or not a dataset significantly deviates from a normal distribution or whether or not it can be considered approximately normally distributed within the specified threshold. The null hypothesis is rejected if the test's p-value is less than the significance threshold, which is often set at 0.05. This disproves the hypothesis that the data is normally distributed. The results in table 4.11 lead us to conclude that the four variables' data sets do in fact follow a normal distribution, thereby rejecting the null hypothesis. Both tests were used to obtain this result, and the significance level was less than 0.05.

Table 4.11: **Tests of Normality**

	Kolmogorov-Smirnov[a]			**Shapiro-Wilk**		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Product innovation	.205	46	.200*	.858	46	.054
Process innovation	.207	46	.200*	.913	46	.262
Organizational innovation	.247	46	.060	.871	46	.080
Market innovation	.236	46	.087	.741	46	.052
Performance of public hospitals in West Pokot County Kenya	.159	46	.200*	.967	46	.852

a. Lilliefors Significance Correction

Survey Data (2024)

4.6.2.2 Multi-collinearity Test

If the VIF for an independent variable is large, it indicates that there is likely to be no benefit to include it in the model (Thies, Huber, Bock, & Benlian, 2023). The VIF cutoff at a value of 5 is a popular criterion. Multicollinearity is present when the VIF of a predictor variable is over a cutoff value. That's why it's important for regression analysis to account for this issue (Thies, 2022). The VIF values were below 10 and the tolerance level was 1 and below, hence there was no multicollinearity problem as shown in Tale 4.12.

Table 4.12: Collineality Statistics

Independent variable	Tolerance	VIF
Product innovation	.759	1.317
Organizational innovation	.746	1.341
Process innovation	.730	1.370
Market innovation	.709	1.410

Survey Data (2024)

4.6.2.3 Homoscedasticity Test

This research used the well-known Breusch-Pagan test in order to determine whether or not heteroscedasticity was present. When doing a regression analysis, the squared residuals were used in order to make predictions about the influence of the independent variables. Despite the fact that the significance level for testing heteroscedasticity is commonly set at 0.05, there is considerable leeway regarding the degree of significance that you choose to use. In accordance with the proposition put forward by Daryanto (2020), we are able to infer the existence of heteroscedasticity if the regression coefficients are significant. According to the findings shown in Table 4.13, there was no evidence of heteroskedasticity since the P value was 0.332, which was higher than the threshold of 0.05.

T

able 4. 13: Heteroskedasticity Tests

Breusch-Pagan Test for Heteroskedasticity[a,b,c]		
Chi-Square	Df	Sig.
1.819	1	.332

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

b. Tests the null hypothesis that the variance of the errors does not depend on the values of the independent variables.

Survey Data (2024)

4.6.3 Multiple Regression of Performance and Innovation strategies

Public hospitals in West Pokot County, Kenya, were the focus of this research, which aimed to determine how innovative measures affected their operational success. This goal was accomplished by use of conventional multiple regressions. The researchers in this study set out to determine how different components of innovation strategies affected the efficiency and effectiveness of public healthcare facilities in Kenya's West Pokot County. This study set out to do just that evaluate the results of a model that included the four concepts of innovation: market innovation, product innovation, organizational innovation, and process innovation. Beta coefficients and t-statistics were used to evaluate the null research hypotheses after the study model's coefficients and R-squared were derived. The data shown in Table 4.14.

Table 4. 14: 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

b. organizational innovation

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

Survey Data (2024)

The research determined that the correlation coefficient was 0.809, as represented by R, and this

was found in Table 4.13, which can be seen above. Public hospitals in West Pokot County, Kenya, were therefore accurately predicted to have a performance rating of 0.655. This performance served as the study's dependent variable. The R-squared value, which is a statistical measure, was 0.655, according to the results. Based on this figure, it seems that 65.5% of the performance of public hospitals in West Pokot County, Kenya, may be explained by creative tactics. Nevertheless, the fluctuations were most accurately and reliably characterized by the modified R square value of 0.621. The findings suggest that interventions related to capital management, product innovation, and finance strategies might explain 62.1% of the variation in the performance of public hospitals in West Pokot County, Kenya. In addition, the results showed that the modified R-squared value was much lower than the R-squared value, which indicates that the model was quite accurate in predicting the relationship between innovation strategies and financial performance (Dhakal, 2019). Nevertheless, the research failed to include other variables that could account for the other 34.5% of fluctuations in the performance of public hospitals in West Pokot County, Kenya.

Table 4.15: 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

Survey Data (2024)

According to Sawyer (2017), analysis of variance is used in research to determine the relevance of the findings and to offer insight into the amount of variability present in the regression model. In addition to this, it gives the researcher the ability to choose a model that offers relevant insights based on replies that have significant outcomes. That the regression model is statistically significant is shown by the presence of a significant F-statistic. Being able to account for a significant portion of the dependent variable's fluctuation suggests that the model can provide a more comprehensive explanation than what would be expected from random chance alone. This

model's importance was shown by a value ($F(4,41) = 19.418$, $p < 0.05$) in the analysis of variance (ANOVA) table. That the model was able to reach a 95% confidence level shows that it is feasible and, thus, an excellent fit for this study.

Table 4. 16: Regression Coefficients Results for Multiple Linear Regression

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
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

Survey Data (2024)

The study findings in Table 4.14 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 (β=0.204, p-value=0.005) and organizational innovation would enhance performance of public hospitals in West Pokot County Kenya by (β=0.260, p-value=0.003). Similarly, process innovation would increase performance of public hospitals in West Pokot County Kenya by (β=0.279, p-value=0.002 and process innovation would increase performance of public hospitals in West Pokot County Kenya by (β=0.166, p-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

The coefficient for product innovation was found to be 0.204, with a p-value of 0.005, as determined by the regression analysis that was shown in Table 4.15. An increase of one unit in product innovation leads to a 0.204-unit improvement in the performance of public hospitals in West Pokot County, Kenya, according to this result. This is the case even when other variables in the model are controlled for throughout the analysis. Not only does the coefficient point in a positive direction, but it also displays statistical significance according to the tstatistic value of 2.999, which reveals that the coefficient is statistically significant. A t-statistic that has a value of two or above is deemed to be statistically significant in the context of statistical inference, according to the standards that are commonly accepted in the area of statistics. 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). There was no statistically significant correlation between product innovation and hospital performance, according to Kumar and Sharma (2017).

Table 4.15 displays the findings of the regression analysis, which discovered an organizational innovation coefficient of 0.260 at the 0.003 level of significance. Public hospitals in West Pokot County, Kenya, see an overall performance boost of 0.260 units for every unit increase in organizational innovation, even after controlling for other model factors. We adjust for other model variables. The coefficient is positive, and the t-statistic value of 3.176 indicates that it is statistically significant.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. Acquiring and using technical innovation skills impacts firm performance. The results provide support for the hypothesis that organizational innovation mediates and precedes this process. Intellectual capital, which includes organizational innovation, was not associated with improved academic outcomes at the universities studied by Mahembe and Horn (2017).

Regression analysis revealed a process innovation coefficient of 0.279 and a p-value of 0.002, as shown in Table 4.15. According to this analysis, public hospitals in West Pokot County, Kenya,

saw a 0.279 unit gain in performance for every one unit rise in process innovation. This is the case even when other variables in the model are removed from consideration. A result of 3.345 for the t-statistic indicates that the coefficient is not only in a positive direction but also displays statistical significance. 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.

In conclusion, the coefficient assigned to process innovation was found to be 0.166, with a significance level of 0.010. This paper states that public hospitals in West Pokot County, Kenya, have an improvement in performance of 0.166 units for every one-unit increase in process innovation. This remains true even after factoring out additional factors from the model. A tstatistic value of 2.707, as shown in the preceding sentence, shows that the coefficient is statistically significant and furthermore shows a positive trend. 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.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a detailed summary of the material covered in the preceding chapters. The report also presents the conclusions derived from the study findings, along with recommendations and proposals for future educational research.

5.2 Summary of Findings

Identifying the impact that innovative techniques have on the efficiency of public hospitals in West Pokot County, Kenya was the primary purpose of this research project. There were a number of well-defined objectives, such as: identifying the impact of organizational innovation on performance; exploring the impact of process innovation on performance; assessing the impact of market innovation on the efficiency and effectiveness of public hospitals in West Pokot County, Kenya; and determining the impact of product innovation on efficiency and effectiveness. Data was collected from 42 participants via a questionnaire, and the research used descriptive and inferential statistics. Hypotheses about the independent and combined effects were tested by trials at 95 percent confidence levels ($p<0.050$). In each of the portions that follow, the findings are summarized in the same manner as in the preceding section.

5.2.1 Effect of Product Innovation on Performance

The first objective of the study was to establish the effect of product innovation on performance of public hospitals in West Pokot County Kenya. The survey responses indicate strong support (64.2% strongly agree or agree) for WPC health sector support in enhancing healthcare product quality. However, opinions vary regarding the impact of product innovation on sector performance, with only 43.5% expressing confidence. Employee recognition for innovation receives mixed feedback, with 65.2% supporting but a significant proportion undecided or disagreeing. In contrast, there's broad endorsement (69.6% agree or strongly agree) for product innovation's role in enhancing sector competitiveness. Results from the inferential analysis show that product innovation is significantly related to public hospitals' performance in West Pokot County, Kenya ($r=0.428$, $P=0.000$). From this, it follows that public hospitals in West Pokot County, Kenya, may

benefit from a rise in product innovation, which in turn would boost their efficiency. According to multiple linear regression, one-unit increase in product innovation led to a significant 0.204 unit gain in performance ($\beta 1$=0.204, P=0.005). This indicates that there is a link between organizational and process innovation when they are controlled.

5.2.2 Effect of Organizational Innovation on Performance

The second objective of the study was to examine the effect of organizational innovation on performance of public hospitals in West Pokot County Kenya. The survey findings suggest positive perceptions regarding the health sector's support for continuous improvement and innovation. A majority of respondents agree that the sector backs process enhancement and acknowledges the contribution of new workflow systems to customer satisfaction. Many believe that employees are rewarded for process improvements, and the introduction of new systems leads to overall performance improvements. While some uncertainty exists, the findings suggest a generally favorable outlook on the health sector's efforts in promoting innovation and recognizing employee contributions. According to the Pearson Correlation analysis, the inferential findings demonstrated that there is a direct connection between organizational innovation and the performance of public hospitals in West Pokot County, Kenya (R=0.551, P=0.000). The evidence pointed to this being true. This suggests that if public hospitals in West Pokot County, Kenya, were to embrace more creative organizational techniques, their performance would significantly improve. Multiple regression analysis shows that while process and product innovation are held constant, an increase of one unit in organizational innovation results in a significant performance boost of 0.260 units ($\beta 2$=0.260, P=0.003).

5.2.3 Effect of Process innovation on the Performance

The survey findings suggest positive perceptions regarding the health sector's support for continuous improvement and innovation. A majority of respondents agree that the sector backs process enhancement and acknowledges the contribution of new workflow systems to customer satisfaction. Many believe that employees are rewarded for process improvements, and the introduction of new systems leads to overall performance improvements. While some uncertainty exists, the findings suggest a generally favorable outlook on the health sector's efforts in promoting

innovation and recognizing employee contributions. There is a strong and direct relationship between process innovation and the performance of public hospitals in West Pokot County, Kenya (R=0.505, P=0.000), according to the inferential results derived from the Pearson Correlation study. More precisely, this hypothesis said that public hospitals in West Pokot County, Kenya, would significantly enhance their overall performance if process innovations were to increase. When controlling for product and organizational innovation, the results of the multiple regression analysis showed that a unit increase in process innovation would result in a large performance boost of 0.279 units (β_1=0.279, P=0.002).

5.2.4 Effect of Market Innovation on the Performance

The fourth objective of the study was to assess the effect of market innovation on the performance of public hospitals in West Pokot County Kenya. The survey reflects varied perceptions regarding healthcare provision and innovation in WPC. While a significant portion acknowledges investment in research and development and perceives products and services as unique and high-quality, uncertainty exists in both aspects. Additionally, the majority believes in the effectiveness of an innovative market strategy and perceives WPC healthcare products as cost-competitive. Market innovation and the performance of public hospitals in West Pokot County, Kenya, are directly related, according to Pearson correlation analysis (R=0.514, P=0.003). This suggests that public hospitals in West Pokot County, Kenya, will benefit from more market innovation and so perform better. When both organizational innovation and market innovation are controlled, the results of the multiple regression coefficient show that 0.279 units of market innovation boost performance significantly (β1=0.166, P=0.010).

5.3 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.

5.4 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.

5.6 Areas of Further Studies

Despite its useful contributions, this study does highlight several items that future researchers should keep in mind. First and foremost, this study presents suggestions that draw attention to the need of public hospitals implementing rigorous innovation programs. Although innovation strategies may have played a role in improving public hospital performance in West Pokot County, Kenya, other factors may have also contributed, as the four independent variables of innovation strategies accounted for as much as 65.5% of the variance. Therefore, conceptually further studies should focus on other innovation strategies in different context. Methodologically, the study focused on public hospitals in West Pokot County Kenya. Therefore, next research need to concentrate on private hospitals in Kenya since this restricts the relevance and generalizability of the study's advice to other health institutions in Kenya.

REFFERENCES

Afuah, A. (2019). Business model innovation: Concepts, analysis, and cases. Routledge.

Agarwal, R., Gao, G., DesRoches, C., & Jha, A. K. (2018). The digital transformation of healthcare: Current status and the road ahead. Information Systems Research, 29(1), 1–15.

Akpan, I. J., Soopramanien, D., & Kwak, D. H. (2023). Digital transformation and hospital performance: A resource-based view. Technological Forecasting and Social Change, 189, 122346.

Alami, H., Lehoux, P., Gagnon, M. P., & Shaw, J. (2020). Technology and organizational change in healthcare: A review of recent literature. Journal of Innovation in Health Informatics, 27(2), 1–10.

Ali, M., Park, H., & Kim, B. J. (2022). Strategic innovation and firm performance: The role of knowledge management and dynamic capabilities. Journal of Business Research, 145, 604–613. https://doi.org/10.1016/j.jbusres.2022.03.04

Almarri, K., & Gardiner, P. (2014). Application of resource-based view to project management research: Supporters and opponents. Procedia - Social and Behavioral Sciences, 119, 437–445.

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.

AlQershi, N., Abas, Z., & Mokhtar, S. S. M. (2018). Strategic innovation as driver for SME performance in Yemen. Journal of Technology and Operations Management, 13(1), 30–41.

Al-Sa'di, A. F., Abdallah, A. B., & Dahiyat, S. E. (2017). The mediating role of product and process innovations on the relationship between knowledge management and operational performance in manufacturing companies in Jordan. Business Process Management Journal, 23(2), 349–376.

Altuntaş, G., & Donmez, D. (2010). The relationship between entrepreneurial orientation and

organizational performance: Evidence from the hotel industry in Çanakkale Region. Istanbul University Journal of the School of Business, 39(1).

Ameh, C. A., Msuya, S., Hofman, J. J., Mathai, M., & van den Broek, N. (2021). Healthcare innovations to strengthen health systems in sub-Saharan Africa. BMJ Global Health, 6(9), e005135.

Aswani, S. (2013). Strategic innovation and performance of public universities in Kenya (Doctoral dissertation, University of Nairobi).

Ballot, G., Fakhfakh, F., Galia, F., & Salter, A. (2015). The fateful triangle: Complementarities in performance between product, process and organizational innovation in France and the UK. Research Policy, 44(1), 217–232.

Barney, J. B., Ketchen, D. J., & Wright, M. (2021). Resource-based theory and the value creation framework. Journal of Management, 47(7), 1757–1777.

Baregheh, A., Rowley, J., & Sambrook, S. (2009). Towards a multidisciplinary definition of innovation. Management Decision, 47(8), 1323–1339.

Benhabib, J., Perla, J., & Tonetti, C. (2021). Reconciling models of diffusion and innovation: A theory of the productivity distribution and technology frontier. Econometrica, 89(5), 2261–2301.

Blendon, R. J., Benson, J. M., SteelFisher, G. K., Connolly, J. M., Kogut, B., & Sussman, T. (2018). The public's views about the future of the Affordable Care Act and Medicare. New England Journal of Medicine, 379(14), 1292–1294.

Bolaji Bello, O., & Adeoye, A. O. (2018). Organizational learning, organizational innovation and organizational performance: Empirical evidence among selected manufacturing companies in Lagos metropolis, Nigeria. Journal of Economics & Management, 33, 25–38.

Cascio, R. P. (2011). Marketing innovation and firm performance research model, research hypotheses, and managerial implications. Journal of Strategic Marketing, 19(2), 103–120.

Centobelli, P., Cerchione, R., & Esposito, E. (2019). Knowledge management in the public sector: Evidence from healthcare organizations. Knowledge Management Research & Practice, 17(1), 90–101.

Chatterjee, S., Rana, N. P., Tamilmani, K., Sharma, A., & Dwivedi, Y. K. (2023). Knowledge management and innovation: A performance-based analysis in healthcare. Journal of Knowledge Management, 27(1), 105–123.

Chaudhury, S., et al. (2021). Adoption of innovations in healthcare: Navigating barriers and enablers. Journal of Health Management, 23(2), 131–144.

Chen, Q., Wang, C. H., & Huang, S. Z. (2021). Effects of organizational innovation and technological innovation capabilities on firm performance: Evidence from firms in China's Pearl River Delta. In Inside the changing business of China (pp. 72–96). Routledge.

Cherotich, K. M., Sang, W., Mutungú, C., & Shisia, A. (2015). Financial innovations and performance of commercial banks in Kenya. International Journal of Economics, Commerce and Management, 3(5), 124–138.

Christensen, C. M., Raynor, M. E., & McDonald, R. (2003). What is disruptive innovation? Harvard Business Review, 93(12), 44–53.

Costello, T., & Prohaska, B. (2013). 2013 trends and strategies. IT Professional, 15(1), 64.

County Government of West Pokot. (2020). West Pokot County Health Strategic Plan 2020–2025. Kapenguria: Government Printer.

Cresswell, K. M., Sheikh, A., et al. (2020). Organizational readiness and technology adoption in hospitals: A systematic review. BMJ Health & Care Informatics, 27(1), e100062.

Curado, E. M. F., Rego-Monteiro, M. A., & Nazareno, H. N. (2001). Heisenberg-type structures of one-dimensional quantum Hamiltonians. Physical Review A, 64(1), 012105.

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: Approaches for a

sustainable future (pp. 119–131). Springer.

Damanpour, F. (2010). An integration of research findings of effects of firm size and market competition on product and process innovations. British Journal of Management, 21(4), 996–1010.

Damanpour, F., Szabat, K. A., & Evan, W. M. (1989). The relationship between types of innovation and organizational performance. Journal of Management Studies, 26(6), 587–602.

Del Giudice, M., Maggioni, V., & Scuotto, V. (2021). Exploring knowledge management practices and innovation performance in healthcare organizations. Technovation, 104, 102221.

Durand, R., & Vaara, E. (2019). How to connect strategy research with broader issues that matter? Strategic Organization, 17(5), 509–518

El Chaarani, H., & Raimi, L. (2022). Diversity, entrepreneurial innovation, and performance of healthcare sector in the COVID 19 pandemic period. *Journal of Public Affairs*, 22, e2808.

El-Maaddawy, T., & Deneen, C. C. (2019). A learning-centered theory of performance in higher education. Studies in Educational Evaluation, 63, 100840

Ettlie, J. E., Bridges, W. P., & O'Keefe, R. D. (2016). Organizational strategy, firm size, and innovation. *Organization Science*, 1(4), 375-387.

Faulkner, A., & Kent, J. (2001). Innovation and regulation in human implant technologies: developing comparative approaches. *Social Science & Medicine*, 53(7), 895-913.

Fenton et al. (2019): Fenton, J. J., Onega, T., Zhu, W., Balch, S., Beaber, E. F., Sprague, B. L& Haas, J. S. (2019). Trends and variation in advanced imaging for cancer detection in the emergency department, 2006-2017. *JAMA Oncology*, 5(3), 393-401.

Ferreira, A. I., Marques-Quinteiro, P., & Rico, R. (2020). Interdepartmental collaboration and innovation performance: The role of psychological safety and learning culture. *European Journal of Work and Organizational Psychology*, 29(3), 431-444.

Gopalakrishnan, S., & Damanpour, F. (1997). A review of innovation research in economics, sociology and technology management. *Omega*, 25(1), 15-28.

Grawitch, M. J., Gottschalk, M., & Munz, D. C. (2017). The path to a culture of recognition:

Examining the relationship between recognition practices, quality of healthcare services, and patient outcome. *The Health Care Manager*, 36(4), 312-319.

Grant, A. M. (2012). Leading with meaning: Beneficiary contact, prosocial impact, and the performance effects of transformational leadership. Academy of Management Journal, 55(2), 458–476.

Greenhalgh, T., Wherton, J., Papoutsi, C., et al. (2020). Beyond adoption: A new framework for theorizing and evaluating nonadoption, abandonment, and challenges to the scale-up, spread, and sustainability of health and care technologies. Journal of Medical Internet Research, 22(11), e22442.

Hattie, J., & Timperley, H. (2007). The power of feedback. Review of Educational Research, 77(1), 81–112.

Hartmann et al. (2017): Hartmann, M., Cheung, M., & Cochrane, D. (2017). Cost-effectiveness analysis of advanced wound care products for the treatment of complex wounds in the United States. *Journal of Managed Care & Specialty Pharmacy*, 23(5), 526-536.

Herzlinger, R. E. (2006). Innovating in health care-framework. Harvard Business Review, 9, 306342.

Hilman, H., & Kaliappen, N. (2014). Do cost leadership strategy and process innovation influence the performance of Malaysia hotel industry?. *Asian Social Science*, 10(10), 134.

Hogan, S. J., & Coote, L. V. (2014). Organizational culture, innovation, and performance: A test of Schein's model. *Journal of business research*, 67(8), 1609-1621.

Hossain, M. U., Anees-ur-Rehman, M., & Muafi, M. (2020). Measurement of innovation performance: Review and future research direction. Journal of Innovation & Knowledge, 5(4), 284–291. https://doi.org/10.1016/j.jik.2020.01.001

Huang, D. T., Clermont, G., Kong, L., Weissfeld, L. A., Sexton, J. B., Rowan, K. M., ... & Angus, D. C. (2019). Intensive care unit safety culture and outcomes: a US multicenter study. *International Journal for Quality in Health Care*, 31(4), 271-278.

Jha et al. (2018): Jha, A. K., & Zaslavsky, A. M. (2018). The effectiveness of quality improvement efforts. *JAMA*, 319(7), 666-667.

Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation, organizational learning, and

performance. *Journal of business research*, 64(4), 408-417.

Kalay, F., & Gary, L. Y. N. N. (2015). The impact of strategic innovation management practices on firm innovation performance. *Research Journal of Business and Management*, 2(3), 412- 429.

Kamau, P., & Njagi, J. (2019). The role of innovation in healthcare service delivery in Kenya. Journal of Health Management, 21(3), 345–360.

Kaplan, R. S., Haas, D. A., & Warsh, J. M. (2018). Adding value by talking more. *Journal of General Internal Medicine*, 33(11), 1932-1933.

Kariuki, J. N. (2014). The effect of strategic innovation on performance of mobile telecommunication firms in Kenya (Doctoral dissertation, University of Nairobi).

Kemoli, T. A. (2012). Strategic innovation and performance of commercial banks listed in the Nairobi Securities Exchange (Doctoral dissertation, University of Nairobi).

Kibet, L., & Kipkemoi, C. (2020). Performance measurement in Kenyan public health facilities: Challenges and opportunities. African Journal of Health Sciences, 33(1), 57–68. https://doi.org/10.4314/ajhs.v33i1.7

Kiptoo, C., Chege, M., & Langat, P. (2023). Challenges and opportunities in healthcare service delivery in marginalized counties in Kenya. East African Medical Journal, 100(1), 15–23.

Kohli, R., & Grover, V. (2019). Achieving IT-based competitive advantage through resource configuration. MIS Quarterly, 43(2), 625–650.

Kowalski, C., Wesselmann, S., Ansmann, L., & Pfaff, H. (2020). Innovation capability in healthcare organizations: Building conditions for improvement. Health Care Management Review, 45(2), 135–145

Laban, O. M., & Deya, J. (2019). Strategic innovations and the performance of information communication technology firms in Nairobi Kenya. *International journal of academic research in progressive education and development, 8*(2), 1-24.

Lambooij, M. S., Harmsen, I. A., Haenen, A., & van Vuuren, H. A. (2018). Innovation in health care: how much do we know? A review of existing studies. *Health Policy*, 122(2), 215222.

Latham, G. P., & Locke, E. A. (2006). Enhancing the benefits and overcoming the pitfalls of goal

setting. Organizational Dynamics, 35(4), 332–340.

Lilly, L., & Juma, D. (2014). Influence of strategic innovation on performance of commercial banks in Kenya: The case of Kenya Commercial Bank in Nairobi County. *European Journal of Business Management*, 2(1), 336-341.

Locke, E. A. (1968). Toward a theory of task motivation and incentives. Organizational Behavior and Human Performance, 3(2), 157–189.

Locke, E. A., & Latham, G. P. (1990). A theory of goal setting and task performance. Prentice Hall.

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. American Psychologist, 57(9), 705–717.

Low, K. Y. J., & Ho, E. Y. C. (2016). A knowledge-based theory of the multinational economic organization. *Long Range Planning*, 49(6), 641-647.

Lunenburg, F. C. (2011). Goal-setting theory of motivation. International Journal of Management, Business, and Administration, 15(1), 1–6.

Mahmoud, M. A., Al-Qudah, M. A., & Alnsour, M. S. (2022). Strategic innovation and healthcare performance: The mediating role of adaptive capability. International Journal of Healthcare Management, 15(1), 32–40.

Macfarlane, F., Greenhalgh, T., Humphrey, C., & Hughes, G. (2021). Implementing innovation in healthcare: The role of reflective practice. BMC Health Services Research, 21, 120.

Marchionni, C., & Ritchie, J. (2018). Organizational factors influencing healthcare professionals' readiness to embrace change: A qualitative study. *Journal of Health Organization and Management*, 32(1), 43-60.

McDermott, C. M., & Prajogo, D. I. (2012). Service innovation and performance in SMEs. *International Journal of Operations & Production Management*, 32(2), 279-237.

Meterko, M., Wright, S., Lin, H., Lowy, E., & Cleary, P. D. (2017). Mortality among patients with acute myocardial infarction: the influences of patient-centered care and evidence-based medicine. *Health Services Research*, 52(5), 1757-1776.

Migdadi, M. M. (2019). Organizational learning capability, innovation and organizational performance. *European Journal of Innovation Management*, 24(1), 151-172.

Miller, D., & Shamsie, J. (1996). The resource-based view of the firm in two environments: The Hollywood film studios from 1936 to 1965. *Academy of management journal*, 39(3), 519543.

Mihalache, M., Jansen, J. J. P., & Volberda, H. W. (2022). Innovation and performance in healthcare organizations: A configurational approach. Health Care Management Review, 47(1), 17–29.

Ministry of Health Kenya. (2020). Kenya Digital Health Strategy 2020–2030. Nairobi: Government of Kenya.

Moxley, J. M. (2001). New-Media Scholarship A Call for Research. Change: The Magazine of Higher Learning, 33(6), 36-42.

Mugo, N. R., Wambua, D. M., & Kariuki, A. W. (2021). Challenges facing public hospitals in rural Kenya: A case study of West Pokot County. East African Medical Journal, 98(2), 101–110. https://doi.org/10.4314/eamj.v98i2.3

Munyua, G., Wanyoike, D., & Kimani, J. (2021). The effect of health innovation on service delivery performance in county referral hospitals in Kenya. Health Systems and Policy Research, 8(3), 45–54.

Na, Y. K., Kang, S., & Jeong, H. Y. (2019). The effect of market orientation on performance of sharing economy business: Focusing on marketing innovation and sustainable competitive advantage. *Sustainability*, 11(3), 729.

Naidoo, V. (2020). Market innovation and business success: Evidence from emerging markets. International Journal of Business and Emerging Markets, 12(3), 263–279. https://doi.org/10.1504/IJBEM.2020.108123

Napshin, S. A., & Marchisio, G. (2017). The challenges of teaching strategic management: Including the institution based view. *The International Journal of Management Education,* 15(3), 470-480.

Njeri, N. P. (2019). Organization Policies And Performance Of Mobile Telecommunication Companies In Kenya (Doctoral dissertation, University of Nairobi).

Nuwagira, E., Uwizeye, G., & Musabyimana, J. P. (2022). Leveraging digital health in Rwanda: A national approach to strengthening healthcare systems. *African Journal of Health Technology,* 4(1), 24–30.

Nyambu, E. M. (2013). Influence of social media marketing on performance of telecommunication firms in Kenya. *International Journal of Innovative Research and Development*, 2(9), 184190.

Ochieng, D. O., Khamadi, S., & Mutua, C. (2022). Health sector innovations and performance in public hospitals: Evidence from Kenya. *Kenya Journal of Health Policy and Systems*, 3(2), 56–68.

OECD. (2018). Oslo Manual 2018: Guidelines for collecting, reporting and using data on innovation (4th ed.). OECD Publishing e

Oh, C., Cho, Y., & Kim, W. (2015). The effect of a firm's strategic innovation decisions on its market performance. *Technology Analysis & Strategic Management*, 27(1), 39-53.

Oke, A., Walumbwa, F. O., & Myers, A. (2021). Innovation strategy and firm ` performance: The mediating role of transformational leadership. Journal of Business Research, 135, 104–114. https://doi.org/10.1016/j.jbusres.2021.06.001

Ondicho, Z. M., Omondi, D. O., & Onyango, A. C. (2016). Prevalence and socio-demographic factors associated with overweight and obesity among healthcare workers in Kisumu East Sub-County, Kenya.

Owuor, C., Okello, D., & Mwangi, J. (2022). Digital innovations and healthcare delivery in rural Kenya: A focus on public hospitals. International Journal of Healthcare Management, 15(4), 789–796.

Overstreet, R. E., Hanna, J. B., Byrd, T. A., Cegielski, C. G., & Hazen, B. T. (2013). Leadership style and organizational innovativeness drive motor carriers toward sustained performance. *The International Journal of Logistics Management*, 24(2), 247-270.

Palacios-Marqués, D., Popa, S., & Soto-Acosta, P. (2020). Innovation, knowledge management and the resource-based view: Evidence from the healthcare sector. Journal of Business Research, 112, 1049–1056.

Pannick, S., Davis, R., Ashrafian, H., Byrne, B. E., Beveridge, I., Athanasiou, T., ... & Sevdalis, N. (2015). Effects of interdisciplinary team care interventions on general medical wards: a systematic review. *JAMA Internal Medicine*, 175(8), 1288-1298.

Parida, V., Sjödin, D., & Reim, W. (2020). Reviewing the literature on resource-based view in public sector innovation. Public Management Review, 22(6), 813–837.

Paparoidamis, N. G., Tran, H. T. T., & Leonidou, C. N. (2019). Building customer loyalty in healthcare services: The role of knowledge and relational capital. Journal of Business Research, 102, 354–364.

Peter, M. N. A. A. (2022). Effects of strategic innovation on performance of commercial banks in Kenya.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: a resource based view. *Strategic management journal*, 14(3), 179-191.

Porter, M. E. (1990). The competitive advantage of nations. *Harvard business review*, 68(2), 73-93.

Portillo-Tarragona, P., Scarpellini, S., Moneva, J. M., Valero-Gil, J., & Aranda-Usón, A. (2018).
Classification and measurement of the firms' resources and capabilities applied to ecoinnovation projects from a resource-based view perspective. *Sustainability*, 10(9), 3161.

Powell, A. E., Rush, R. K., Davies, H. T., & Long, K. M. (2017). A systematic narrative review of quality improvement models in health care. NHS England.

Pronovost, P., Needham, D., Berenholtz, S., Sinopoli, D., Chu, H., Cosgrove, S., ... & Goeschel, C. (2016). An intervention to decrease catheter-related bloodstream infections in the ICU. *New England Journal of Medicine*, 355(26), 2725-2732.

Reiman, A. J., & Dotger, B. H. (2008). What does innovation mean for moral educators?. *Journal of Moral Education*, 37(2), 151-164.

Ringim, K. J., Dantsoho, M. A., & John, H. T. (2017). Effect of dynamic information technology capabilities on organizational performance of deposits money banks in Nigeria. *MAYFEB Journal of Business and Management*, 1.

Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A metaanalysis of the relationship between innovation and performance in SMEs. *Journal of business Venturing*, *26*(4), 441-457.

Rosli, M. M., & Sidek, S. (2013). The Impact of innovation on the performance of small and medium manufacturing enterprises: Evidence from Malaysia. *Journal of Innovation Management in Small & Medium Enterprises*, 2013, 1.

Salim, I. M., & Sulaiman, M. (2011). Organizational learning, innovation and performance: A study of Malaysian small and medium sized enterprises. *International Journal of*

Business and Management, 6(12), 118.

Sampson, R., McMeekin, N., & Bate, A. (2021). Organizational capabilities and service innovation in public hospitals. BMC Health Services Research, 21(1), 1040.

Schoen et al. (2019): Schoen, C., Osborn, R., Squires, D., Doty, M. M., Pierson, R., & Applebaum, S. (2019). How health system growth has affected performance: Views of patients, physicians, and health system leaders. *Health Affairs*, 38(6), 887-896.

Schroeder, H. (2013). Strategic innovation for business performance: The art and science of transformation. *Technology Innovation Management Review*, 3(9).

Scott, S. G., & Bruce, R. A. (2018). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal,* 37(3), 580-607.

Sekaran, U., & Bougie, R. (2016). Research Methods for Business: A Skill Building Approach (7th ed.). Chichester, UK: Wiley

Shalley, C. E., & Gilson, L. L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. The Leadership Quarterly, 15(1), 33–53

Shisia, A., Sang, W., Matoke, J., & Omwario, B. N. (2014). Strategic Innovation and Performance of public universities in Kenya.

Silva, G. M., Styles, C., & Lages, L. F. (2017). Breakthrough innovation in international business: The impact of tech-innovation and market-innovation on performance. *International Business Review,* 26(2), 391-404.

Smith et al. (2020): Smith, P. C., Anell, A., Busse, R., Crivelli, L., Healy, J., Lindahl, A. K., ... & Westert, G. (2020). Leadership and governance in seven developed health systems. *Health Policy*, 124(5), 511-525.

Smith, L., Perez, F., & Jones, M. (2019). Gender diversity and organizational innovation: Examining the relationship in healthcare organizations. *Journal of Applied Psychology*, 104(6), 813-828.

Thakur, R., Hsu, S. H., & Fontenot, G. (2012). Innovation in healthcare: Issues and future trends. *Journal of Business Research,* 65(4), 562-569.

The Commonwealth Fund (2023): The Commonwealth Fund. (2023). Investing in healthcare workforce training and technology: Improving quality and efficiency.

Theriou, N. G., Aggelidia, V., & Theriou, G. (2009). A theoretical framework contrasting the resourcebased perspective and the knowledge-based view.

Tortoriello, M., McEvily, B., & Krackhardt, D. (2020). Being a catalyst of innovation: The role of knowledge brokers in public health systems. Organization Science, 31(2), 454–475.

Tubbs, M. E., & Dahl, J. G. (1991). Improving the performance of researchers in organizations: A meta-analysis. Academy of Management Journal, 34(3), 521–531.

Ungerman, O., & Dědková, J. (2019). Marketing innovations in Industry 4.0 and their impacts on current enterprises. *Applied Sciences*, 9(18), 3685.

van der Bijl-Brouwer, M. (2019). Design for organizational change in complex systems: A human-centered systems thinking approach. She Ji: The Journal of Design, Economics, and Innovation, 5(3), 183–197.

Waheed, A., Miao, X., Waheed, S., Ahmad, N., & Majeed, A. (2019). How new HRM practices, organizational innovation, and innovative climate affect the innovation performance in the IT industry: A moderated-mediation analysis. *Sustainability*, 11(3), 621.

Wamba, S. F., Gunasekaran, A., Akter, S., Ren, S. J. F., Dubey, R., & Childe, S. J. (2019). Big data analytics and firm performance: Effects of dynamic capabilities. Journal of Business Research, 70, 356–365.

Wernerfelt, B. (1995). The resource based view of the firm: Ten years after. *Strategic management journal*, 16(3), 171-174.

West, M. A., Dawson, J. F., Admasachew, L., & Topakas, A. (2019). NHS staff management and health service quality: results from the NHS Staff Survey and Related Data. Institute of Work Psychology, University of Sheffield.

World Health Organization (WHO). (2023). Tracking Universal Health Coverage: 2023 Global Monitoring Report. Geneva: WHO.

Wiske, M. S. (1998). Teaching for Understanding. Linking Research with Practice. The JosseyBass Education Series. Jossey-Bass Inc., Publishers, 350 Sansome Street, San Francisco, CA 94104.

Zakaria, N. H., Yusof, M. M., & Ali, M. (2022). Strategies for innovation diffusion in public healthcare settings: A systematic review. BMC Health Services Research, 22(1), 980.

APPENDICES

Appendix I: Letter of Introduction

CHEMAIN FLOVIA CHEPKEMOI

P.O Box ……,

Kapenguria.

The Human Resource Manager,

PO BOX…

Dear Respondent,

RE: INTENT TO COLLECT DATA

At Kenyatta University, I am pursuing a Master of Business Administration (MBA). A research project on "INNOVATION STRATEGIES ON PERFORMANCE OF PUBLIC HOSPITALS IN WEST POKOT COUNTY, KENYA" is needed of me as a component of my course work evaluation. I humbly ask you to help me with this study by responding truthfully to the questions on the accompanying questionnaire that apply to you. The replies you provide will be kept anonymous, and the information that you provide will only be utilized for academic reasons from this point forward**.**

Thank you very much for sharing your precious time and effort.

Respectfully yours,

Chemain Flovia Chepkemoi,

Reg: D53/NKU/PT/21773/2020

Appendix II: Questionnaire

Remember that this is for scholarly purposes only; we will not share any of the responses you provide us in any way. To complete the survey, please mark the appropriate boxes or enter your answers in the supplied places. I much appreciate your unbiased response.

Section 1: General Information

1. Please indicate your gender;

Male [ ] Female [ ]

2. Your department;

Human resource [ ] Finance [ ] Procurement [ ]

Operation [ ] Marketing [ ] Other (Specify .....)

3. What is your designation?

Manager [ ] Assistant manager [ ] Supervisor [ ]

Other (Specify .....)

4. What is your total work experience in the health sector?

0-5 yrs [ ] 5-10 yrs [ ] 10-15 [ ] Over 15 yrs [ ]

5. How long have you worked in this sector?

0-5 yrs [ ] 5-10 yrs [ ] 10-15 [ ] Over 15 yrs [ ]

6. To date, what has been your highest formal qualification?

Secondary School Level Undergraduate [ ] Certificate! Diploma [ ]

Post graduate level [ ] Other (Specify ……)

Section 2: Product Innovation

Please choose the correct option for each question using the supplied scale from 1 to 5 with 5- Strongly agree, 4- Agree, 3-Uncertain, 2-Disagree, 1- Strongly Disagree

Statement	**1**	**2**	**3**	**4**	**5**
WPC health sector support continuous improvement of health care products					
Product innovation improves the performance of health care sector as a whole					
When workers in the health industry come up with fresh ideas for novel product advancements, the sector shows its appreciation for those employees.					
Product innovation has improve or increase competitiveness in the health sector					

From your own experience in what other ways has quality improvement affect the performance public hospital?

……

……

……

Section 3: Organizational Innovation

Please choose the correct option for each question using the supplied scale from 1 to 5 with 5- Strongly agree, 4- Agree, 3-Uncertain, 2-Disagree, 1- Strongly Disagree

Statement	Strongly agree	Agree	Uncertain	Disagree	Strongly Disagree	
Workers in the healthcare industry report feeling appreciated by upper management.						
Communication and exchange of ideas regarding innovation can be done freely						
Health sector has developed innovative strategies to gain competitive advantage						
The health sector encourages confidence among its employees						

From your own experience in what other ways has organizational structure affect the performance public hospital?

……

……

……

Section 4: Process Innovation

Please choose the correct option for each question using the supplied scale from 1 to 5 with 5- Strongly agree, 4- Agree, 3-Uncertain, 2-Disagree, 1- Strongly Disagree

Statement	Strongly agree	Agree	Uncertain	Disagree	Strongly Disagree
The health sector supports continuous improvement of Processes					
New systems of workflow have contributed to increase in customer satisfaction					
The health sector rewards the employees when they make improvements to the process					
The introduction of new systems have led to improvements in general performance of the firm					

From your own experience in what other ways has new technologies affect the performance public hospital?

……

……..

Section 5: Market Innovation

Please choose the correct option for each question using the supplied scale from 1 to 5 with 5- Strongly agree, 4- Agree, 3-Uncertain, 2-Disagree, 1- Strongly Disagree

Statement	Strongly agree	Agree	Uncertain	Disagree	Strongly Disagree
The health care givers in WPC has invested in research and development to determine what customer needs					
Health care givers have unique and quality products and services					
Health sector in WPC have developed an innovative market strategy					
Products offered by health givers in WPC are of lower price compared to other counties					

From your own experience in what other ways has the positioning of the hospitals' product and services affect the performance public hospital?

……

……

……

Section 6: Firm Performance

Please choose the correct option for each question using the supplied scale from 1 to 5 with 5- Strongly agree, 4- Agree, 3-Uncertain, 2-Disagree, 1- Strongly Disagree

Statement	Strongly agree	Agree	Uncertain	Disagree	Strongly Disagree

In the past one year quality and efficiency of the health care givers has increased					
The health sector has experienced a significant growth and performance					
There is improvement in the health sector products and services					
There is increased customer satisfaction					

THANK YOU FOR YOUR COOPERATION.

Appendix III: Authorization Letter from Graduate School

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 8710901 Ext. 57530

Our Ref: D53/NKU/PT/21773/2020

DATE: 19th April, 2024

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR CHEMAIN FLOVIA CHEPKEMOI – REG. NO. D53/NKU/PT/21773/2020.

I write to introduce Chemain Flovia Chepkemoi who is a Postgraduate Student of this University. The student is registered for M.B.A degree programme in the Department of Business Administration.

Chemain intends to conduct research for a M.B.A Project Proposal entitled, **"Innovation Strategies on Performance of Public Hospitals in West Pokot County, Kenya"**.

Any assistance given will be highly appreciated.

Yours faithfully,

PROF. ELISHIBA KIMANI
EXECUTIVE DEAN, GRADUATE SCHOOL

AM/lnn

Appendix IV: Approval Letter from Graduate School

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 810901 Ext. 4150

Internal Memo

FROM: Executive Dean, Graduate School

DATE: 19th April, 2024

TO: Chemain Flovia Chepkemoi
C/o Business Administration Dept.

REF: D53/NKU/PT/21773/2020

SUBJECT: APPROVAL OF RESEARCH PROJECT PROPOSAL

This is to inform you that Graduate School Board at its meeting of 11th April, 2024 approved your Research Project Propos al for the M.B.A Degree Entitled, **"Innovation Strategies on Performance of Public Hospitals in West Pokot County, Kenya"**.

You may now proceed with your Data Collection, Subject to Clearance with Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking and progress report Forms per semester. The Forms are available at the University's Website under Graduate School webpage downloads.

Also, please ensure that you publish article(s) from your project before submitting it to Graduate School for examination as per the Commission for University Education and Kenyatta University guidelines.

Thank you.

ANNBELL MWANIKI
FOR: EXECUTIVE DEAN, GRADUATE SCHOOL

c.c. Chairman, Business Administration.

Supervisors:

1. Dr. Abel Anyieni
   C/o Department of Business Administration
   Kenyatta University

AM/lnn

Appendix V: Nacosti Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 358979

Date of Issue: 12/August/2024

RESEARCH LICENSE

This is to Certify that Ms.. Flovia Chepkemoi Chemain of Kenyatta University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Westpokot on the topic: INNOVATION STRATEGIES ON PERFORMANCE OF PUBLIC HOSPITALS IN WEST POKOT COUNTY, KENYA for the period ending : 12/August/2025.

License No: NACOSTI/P/24/38782

358979

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013 (Rev. 2014)
Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing) Regulations, 2014

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was the established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way;
    i. Endanger national security
    ii. Adversely affect the lives of Kenyans
    iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
    iv. Result in exploitation of intellectual property rights of communities in Kenya
    v. Adversely affect the environment
    vi. Adversely affect the rights of communities
    vii. Endanger public safety and national cohesion
    viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. The license any rights thereunder are non-transferable
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

National Commission for Science, Technology and
Innovation(NACOSTI),
Off Waiyaki Way, Upper Kabete,
P. O. Box 30623 - 00100 Nairobi, KENYA
Telephone: 020 4007000, 0713788787, 0735404245
E-mail: dg@nacosti.go.ke
Website: www.nacosti.go.ke