

**DYNAMIC CAPABILITIES, ORGANIZATIONAL
STRUCTURE AND PERFORMANCE OF REFERRAL
HOSPITALS IN KENYA**

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**Dynamic Capabilities, Organizational Structure and Performance of
Referral Hospitals in Kenya**

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the Degree of Doctor of Philosophy in Business Administration
(Strategic Management) of the Jomo Kenyatta University of
Agriculture and Technology**

DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

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DEDICATION

To my wife Evelyn and my daughters Brenda and Dr. Vanessa for the sacrifice, care, love, concern, encouragement, support and enthusiasm.

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ABBREVIATIONS AND ACRONYMS

BSC	Balance Scorecard
DC	Dynamic Capabilities
HRM	Human Resource Management
ICT	Information and Communication Technology
INGOs	International Non-Governmental Organizations
JCI	Joint Commission International
JKUAT	Jomo Kenya University of Agriculture and Technology
KM	Knowledge Management
KMPDU	Kenya Medical Practitioners, Pharmacists and Dentists Union
KNUN	Kenya National Union of Nurses
NACOSTI	National Commission for Science, Technology and Innovation
NHI	National Health Insurance
PCP	Primary Care Provider
PPPs	Public-Private Partnerships
RBV	Resource-Based View
RHWs	Reproductive Health Workers'
SMEs	Small and Medium Enterprises
TAT	Technology Acceptance Theory
UAE	United Arab Emirates
VIF	Variance Inflation Factor
WHO	World Health Organization

DEFINITION OF OPERATIONAL TERMS

Dynamic capabilities: Refers to the deliberate creation, extension, or modification of resource base in an organization including ICT capability, knowledge management capability, strategic collaboration and talent management capability (Baía & Ferreira, 2024).

ICT capability: This is the use of information and communication technologies for communication, consultation, and payments to enhance efficient and effective service delivery (Dayel, Debrah & Mulyata, 2020).

Knowledge management capability: This refers to an organization's ability to acquire, store, and share knowledge to support the effective achievement of its goals (Migdadi, 2022).

Organizational Performance: This is the way in which referral hospitals make use of their tangible and intangible resources to achieve their goals, measured in terms of efficiency in service delivery, turnaround time and customer satisfaction index (Jama & Mohamud, 2024).

Organizational structure: This refers to the way an organization is designed, organized, and arranged to achieve its goals and objectives, which is characterized by chain of command, span of control and work specialization (Balogun, 2022).

Referral hospitals: These are tertiary or specialized healthcare facilities, like county referral hospitals and national referral hospitals, that provide advanced care for patients with complex or severe conditions (Ministry of Health, 2021).

Strategic collaboration: This refers to cooperative arrangements between healthcare organizations involving equipment leasing agreements, partnerships in training, and sharing of medical information while each organization maintains its independence (Čirjeviskis, 2024).

Talent management capability: This is the process of attracting, developing, and retaining talent to enhance organizational value and achieve business goals (Kongrode, Aujirapongpan & Ru-Zhue, 2023).

ABSTRACT

The healthcare sector in Kenya faces challenges such as inadequate financing, limited medical supplies, workforce shortages, low patient satisfaction, and long waiting times, which hinder service delivery and overall productivity. While dynamic capabilities have been linked to organizational performance in private sector firms, their effect in Kenyan referral hospitals remains underexplored. Therefore, this study aimed to evaluate the relationship between dynamic capabilities and the organizational performance of referral hospitals in Kenya. Specifically, it investigated how knowledge management capability, strategic collaboration capability, talent management capability, ICT capability, and organizational structure relate to the performance of referral hospitals in Kenya. The study was anchored on knowledge-based theory, systems theory, resource-based view theory, technology acceptance theory and dynamic capability theory. Using descriptive research design and explanatory research design, the study targeted 47 county referral hospitals and 6 national referral hospitals in Kenya. The target population included CEOs/Chief Administrators, Medical/Clinical Services In-Charges, and Nursing In-Charges from both county and national referral hospitals. Due to the manageable size of the target population, a census was conducted, meaning all individuals within the target group were involved in the study. Primary data was gathered through semi-structured questionnaires, and a pilot test was performed to ensure the reliability and validity of the research instrument. Both qualitative and quantitative data was generated in the research. Both descriptive and inferential statistics were used to analyse quantitative data with the help of Statistical Package for Social Sciences (SPSS version 24). Descriptive statistics included frequency distributions, means, standard deviations, and percentages, with findings presented in charts, graphs and tables. Qualitative data were processed through thematic analysis and presented in prose form. The relationships between independent and dependent variables were explored using multivariate regression and correlation analyses. The study found that knowledge management capability, strategic collaboration capability, talent management capability, and ICT capability each had a positive and significant effect on the organizational performance of referral hospitals in Kenya. The study also found that organizational structure had statistically significant moderating effect on the relationship between knowledge management capability, strategic collaboration capability, talent management capability and ICT Capability on the organizational performance of referral hospitals in Kenya. The study recommends several strategies to enhance strategic collaboration in Kenyan referral hospitals, such as establishing clear frameworks for partnerships, improving infrastructure, and offering comprehensive training. To improve talent management, hospitals should enhance compensation packages, invest in development programs, and benchmark against industry standards. In knowledge management, partnering with educational institutions and investing in knowledge-sharing tools is essential. For ICT capability, hospitals should upgrade infrastructure, ensure cybersecurity, and provide continuous training. Lastly, to improve organizational structure, decentralizing decision-making, fostering leadership development, and reducing bureaucracy are key to enhancing hospital performance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

A nation's health system holds paramount importance as it serves as the backbone for the well-being of its populace, impacting various facets of societal development (Shi & Singh, 2022). Accessible and quality health service delivery is crucial, as it not only safeguards individual health but also fosters economic productivity, social stability, and overall prosperity. Ensuring equitable access to healthcare services, irrespective of socio-economic status or geographical location, reduces health disparities and promotes social justice and cohesion. Quality healthcare delivery, encompassing timely diagnosis, effective treatment, and preventive measures, not only saves lives but also reduces the burden of disease on individuals and the healthcare system. Importantly, delivering healthcare that meets patients' expectations enhances customer satisfaction, which reinforces trust, encourages consistent utilization of services, and improves health outcomes (Adhikari, Mishra & Schwarz, 2022). Moreover, high-quality and responsive health services facilitate early intervention, mitigate health risks, enhance productivity, and contribute to the long-term sustainability and resilience of the nation.

According to Alisyah and Susilowati (2022), performance in the health sector can be assessed using indicators such as economy, efficiency, turnaround time, effectiveness, and equity. Compared to developed countries, public healthcare performance in low-income and developing nations has been poor, with slow progress in meeting population health needs. Additionally, hospitals in many developing countries face challenges such as limited funding, insufficiently skilled staff, outdated equipment, and inadequate information systems, all of which negatively affect patient care (Mbau et al., 2022). Beyond operational efficiency, customer satisfaction has emerged as a critical performance measure, reflecting patients' experiences, trust, and willingness to utilize services. The need to enhance effectiveness, adapt to economic pressures, improve efficiency, and respond to patient expectations underscores the importance of

implementing Dynamic Capabilities (DC) in healthcare to strengthen service delivery and improve both organizational and patient-centered outcomes.

Kero and Bogale (2023) indicate that dynamic capability involves a firm's capability to purposefully adapt an organization's resource base. It also involves firms' ability to integrate, reconfigure and build internal and also external competences to tackle promptly changing environments. Moreover, it assists in explaining ways in which organizations enhance as well as sustain performance within promptly changing environments through creating, modifying or extending their resource base via investment as well as other organizational interventions (Bojesson & Fundin, 2021). The most common dynamic capabilities in health facilities include knowledge management capability strategic collaboration capability, talent management capability and ICT capability.

However, despite the adoption of dynamic capabilities, an organization's structure plays a critical role in shaping its operational efficiency and overall performance, including in health facilities (Ochie et al., 2022). Key structural dimensions such as chain of command, span of control, and work specialization determine how tasks are coordinated, responsibilities allocated, and employee skills applied. A clearly defined chain of command promotes effective decision-making, accountability, and clarity in reporting, while an optimal span of control enables managers to supervise staff efficiently without being overextended. Work specialization allows employees to focus on specific tasks, develop expertise, and improve efficiency. Conversely, rigid hierarchies, excessive centralization, or poorly designed specialization can restrict flexibility, impede communication, and hinder the optimal use of dynamic capabilities, thereby negatively affecting organizational performance (Kero & Bogale, 2023).

Organizational structure is included in this study as a moderating variable because it can influence the strength and direction of the relationship between dynamic capabilities and organizational performance. The expectation is that a supportive structure, characterized by clear lines of authority, balanced managerial oversight, and effective task specialization, will enhance the effectiveness of dynamic capabilities, enabling organizations to adapt, innovate, and achieve higher performance outcomes (Lewis, 2025). Conversely, an inflexible or poorly designed structure may weaken this

relationship by limiting the ability of the organization to sense opportunities, seize resources, learn, or transform processes effectively. Therefore, understanding the moderating role of organizational structure helps to clarify under what conditions dynamic capabilities most positively influence performance, providing actionable insights for designing structures that maximize the value of organizational capabilities.

1.1.1 Dynamic Capabilities

Dynamic capabilities refer to an organization's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments. Rooted in the work of Teece, Pisano, and Shuen (1997), the concept emphasizes that competitive advantage is not only derived from possessing valuable resources but also from how effectively an organization adapts and renews those resources over time. Dynamic capabilities are commonly conceptualized through three core processes: sensing opportunities and threats in the environment, seizing opportunities through appropriate investments and decisions, and transforming or reconfiguring organizational resources and routines to maintain alignment with changing conditions (Pundziene & Geryba, 2023). These processes enable organizations to remain agile, innovative, and responsive in dynamic and uncertain contexts.

In organizational settings such as healthcare institutions, dynamic capabilities play a critical role in enhancing performance outcomes by improving service delivery, operational efficiency, and responsiveness to policy and technological changes. According to Pundziene and Geryba (2023), dynamic capabilities in health facilities include knowledge management capability, strategic collaboration capability, talent management capability, and ICT capability, while Tetik and Zaim (2021) further emphasize innovation capability alongside knowledge and talent management capabilities. These capabilities enable healthcare institutions to effectively respond to evolving patient needs and increasing healthcare demands. By continuously integrating knowledge, strengthening collaboration, leveraging ICT systems, and developing human capital, organizations are able to adapt their structures, processes, and skills. Consequently, healthcare institutions with strong dynamic capabilities are

better positioned to sustain high performance and achieve long-term competitiveness in complex and resource-constrained environments.

Knowledge management capability refers to the ability of an organization to create, store, share, and apply knowledge effectively to improve decision-making and service delivery (Migdadi, 2022). Strategic collaboration capability involves the ability to build and maintain productive partnerships and alliances with internal and external stakeholders to achieve shared goals and improve organizational outcomes (Kasula, 2023). Talent management capability focuses on the organization's ability to attract, develop, retain, and effectively utilize skilled employees to enhance productivity and service quality (Panya & Petchsawang, 2025). ICT capability refers to the effective use of information and communication technologies to support operations, improve efficiency, enhance communication, and enable data-driven decision-making (Liao, Chou & Huang, 2022). Together, these capabilities enable organizations to adapt, innovate, and improve performance in dynamic environments.

1.1.2 Global Perspective of Performance of Referral Hospitals

In the United States, organizations across various sectors have demonstrated strong dynamic capabilities by continually evolving their business models, processes, and strategies to remain competitive and responsive to market changes (Tetik & Zaim, 2021). In health facilities, these capabilities enable timely adjustments to patient care practices, resource allocation, and operational workflows. By continuously refining products and services to meet emerging patient needs, healthcare organizations improve service quality, patient satisfaction, and overall organizational performance. Pundziene and Geryba (2023) highlight collaborative innovation as a key dynamic capability, allowing U.S. health facilities to enhance efficiency, integrate new technologies, and maintain high performance in a rapidly changing healthcare environment.

In France, the healthcare sector relies heavily on knowledge and evidence-based medicine, a dynamic capability that directly affects organizational performance by improving clinical decision-making and care outcomes (Picard, 2024). Health facilities implement evidence-based protocols in daily practice, ensuring consistent and high-

quality care. This approach enhances patient trust, reduces treatment errors, and strengthens institutional reputation. By embedding knowledge management systems and continuous professional development into their operations, French healthcare organizations can respond effectively to complex medical challenges, streamline resource utilization, and improve operational efficiency. Ultimately, dynamic capabilities in knowledge application contribute directly to improved healthcare performance metrics and patient satisfaction.

In the United Kingdom, dynamic capabilities in healthcare are exemplified through ICT integration, including electronic consultations, communication platforms, and digital payment systems (Gaucher et al., 2024). These capabilities improve organizational performance by enhancing patient access to services, streamlining referral processes, and reducing unnecessary specialist visits. The use of digital tools strengthens coordination among healthcare providers, enabling timely and effective interventions that improve patient outcomes. Enhanced ICT capabilities also increase patient satisfaction, as services become more accessible and responsive. By leveraging these dynamic capabilities, UK health facilities demonstrate improved operational efficiency, reduced costs, and better overall performance, showing the direct link between capability development and organizational success.

In Pakistan, dynamic capabilities enable health facilities to respond effectively to evolving patient needs, regulatory requirements, and technological advancements (Pesqueira, Sousa & Pereira, 2023). These capabilities allow organizations to innovate, optimize service delivery, and improve operational efficiency, which collectively enhance overall performance. Health facilities with strong dynamic capabilities can better manage resources, reduce delays in care, and implement modern healthcare technologies. However, maximizing performance requires additional investment in staff training, technological infrastructure, and data analytics. By fostering collaborative partnerships and continuous learning, Pakistani health facilities can translate dynamic capabilities into measurable organizational outcomes, including improved patient satisfaction, reduced errors, and higher institutional efficiency.

In Germany, dynamic capabilities in healthcare refer to the ability of organizations to sense, respond, and adapt to changes in medical technology, patient expectations, and regulatory landscapes (Kokshagina, 2021). German healthcare facilities leverage these capabilities to drive innovation, collaborate with research institutions, and develop new therapies. This results in improved care quality, faster adoption of medical advancements, and enhanced operational performance. By systematically applying these capabilities, organizations achieve higher patient satisfaction, more efficient use of resources, and a stronger competitive position. Dynamic capabilities, therefore, are directly linked to organizational performance, allowing German healthcare institutions to maintain excellence and resilience in a rapidly evolving healthcare environment.

1.1.3 Regional Perspective of Performance of Referral Hospitals

In Nigeria, dynamic capabilities have increasingly been recognized as a key driver of organizational performance across sectors. Akpan, Johnny, and Sylva (2022) observed a strong positive correlation between dynamic capabilities and performance outcomes. Dynamic capabilities include the ability to innovate products, strengthen supplier and customer relationships, and adapt to changing market conditions and consumer demands. Organizations leveraging these capabilities achieve higher efficiency, better market responsiveness, and increased competitiveness. Continuous sensing of opportunities, seizing strategic initiatives, and transforming processes enable Nigerian firms to enhance operational effectiveness and profitability. These capabilities allow organizations to translate strategic agility into measurable improvements in performance.

In Ghana, dynamic capabilities have been linked to innovation capability and competitive advantage, particularly in the telecommunications sector (Quagraine, Li & Nana, 2021). Firms develop the capacity to sense technological trends, seize new market opportunities, and transform organizational processes, which allows them to introduce innovative mobile and internet-enabled services, including personalized data packages and streaming solutions. Effective use of these capabilities improves responsiveness to evolving customer preferences, service quality, and operational efficiency. Organizations that cultivate dynamic capabilities also experience enhanced profitability and stronger market positioning. This demonstrates that dynamic

capabilities directly influence organizational performance and sustain competitive advantage in rapidly evolving industries.

In Tanzania, dynamic capabilities have been shown to influence financial resource development and overall organizational performance in the banking and fintech sectors (Ismail, 2022). Financial institutions apply capabilities such as sensing emerging trends, seizing opportunities, learning from past experiences, and transforming internal processes to introduce innovative products, adapt to regulatory changes, and manage operational risks. Such capabilities improve responsiveness to customer needs, reduce delays, and increase performance metrics like revenue growth and market share. Organizations that actively cultivate dynamic capabilities enhance operational efficiency and customer satisfaction, clearly illustrating the direct connection between strategic capability development and improved organizational outcomes.

In Rwanda, dynamic capabilities are critical for financial service firms, especially those serving low-income or underserved populations (Nshimiyimana, 2021). Capabilities such as innovating new products, adapting services to customer needs, and effectively deploying organizational resources allow firms to respond to market gaps and regulatory shifts. Successful application of these capabilities enhances service accessibility, operational efficiency, and customer satisfaction. Financial institutions that embrace dynamic capabilities strengthen institutional sustainability and maintain relevance in competitive markets. These organizations demonstrate that dynamic capabilities serve as a direct driver of organizational performance, linking adaptability and innovation to tangible business results.

1.1.4 Local Perspective of Performance of Referral Hospitals

In Kenya, dynamic capabilities have been shown to enhance institutional performance across multiple sectors. In the education sector, technical, vocational, and entrepreneurship training institutions in Western Kenya leverage ICT capabilities, innovative teaching methods, and adaptive resource management to respond to changing student needs and improve service delivery (Aduwo & Deya, 2022). These capabilities, particularly sensing trends, learning, and transforming processes, enable

institutions to maintain a competitive advantage, improve student satisfaction, and achieve operational efficiency. This highlights that dynamic capabilities are not abstract but include specific, actionable skills that directly affect organizational outcomes.

In the dairy sector, dynamic capabilities such as risk sensing, operational flexibility, and innovation allow companies to navigate complex supply chains, respond to market fluctuations, and sustain performance (Omeke et al., 2021). By continuously learning and adapting to disruptions in production or consumer demand, firms maintain continuity of supply, optimize resource allocation, and enhance product quality. These capabilities were chosen because they directly influence organizational resilience and efficiency, demonstrating that dynamic capabilities translate into measurable improvements in performance and competitiveness.

In the banking sector, dynamic capabilities, including sensing customer needs, seizing opportunities, coordinating resources, learning, and transforming operations, have been linked to improved performance (Wamalwa, 2023). Banks employ these capabilities to launch digital platforms, streamline services, and foster innovation. Knowledge management, talent management, and strategic alliances further strengthen operational efficiency and customer satisfaction (Gathambo & Muchemi, 2025). These capabilities are particularly relevant as they provide a clear mechanism through which organizations convert strategic resources into performance outcomes, justifying their selection for this study.

In the manufacturing sector, managerial, marketing, adaptive, and alliancing capabilities enable food manufacturing firms to respond to market changes, innovate production processes, and maintain operational efficiency (Bett & Anene, 2023). These specific dynamic capabilities were highlighted because they demonstrate how organizational agility, strategic collaboration, and adaptive decision-making directly enhance productivity, customer satisfaction, and long-term competitiveness. By focusing on these key capabilities, sensing, seizing, learning, transforming, ICT, knowledge management, talent management, innovation, and alliancing, this study ensures that the analysis links dynamic capabilities concretely to organizational performance across sectors in Kenya.

1.1.5 Public Referral Hospitals in Kenya

Public referral hospitals comprise of national referral hospitals (level 6 hospitals) and County referral hospitals (level 5 hospitals). There are 47 County referral hospitals in Kenya, which implies that each County has one referral hospital. County health facilities and pharmacies, ambulance services, promoting primary health care, licensing and controlling facilities that sell food to the public and veterinary services are some of the health-related roles the 47 counties manage (Ministry of Health, 2018). Public national referral hospitals in Kenya are level 6 facilities which act as the referral points for county and are the highest referral category in the public healthcare system. National referral hospitals sit at the top of the healthcare system, offering advanced diagnostic, therapeutic, and rehabilitative services. The public national referral hospitals in Kenya facilitates education and training in nursing and other health and allied professions; and participates in national health planning the hospitals offer quality specialized health care services such as cardiothoracic surgery, neurosurgery, orthopedic surgery, plastic and reconstructive surgery and burns management; radiotherapy, critical care services, new born services, renal services besides other services (Matara, 2020).

In public referral hospitals in Kenya, dynamic capabilities are essential for addressing evolving healthcare needs, improving service delivery, and enhancing overall organizational performance (Akwanalo, Njuguna & Naanyu, 2019). Public referral hospitals in Kenya need robust knowledge management capabilities to effectively capture, share, and utilize medical knowledge and best practices. Knowledge management capability enables hospitals to disseminate information among healthcare professionals, fostering continuous learning and improvement. In addition, collaboration among public referral hospitals, other healthcare institutions, government agencies, and non-governmental organizations (NGOs) is crucial for addressing complex healthcare challenges and optimizing resource utilization. Strategic collaboration capability involves building networks, partnerships, and alliances to leverage collective expertise, share resources, and coordinate efforts towards common healthcare goals.

Talent management capability in public referral hospitals encompasses recruitment, retention, development, and deployment of skilled healthcare professionals. This involves ensuring a sufficient and competent workforce to deliver high-quality healthcare services (Masaba & Moturi, 2020). Hospitals need effective talent management strategies to attract and retain talented medical professionals, including doctors, nurses, specialists, and support staff. Also, Information and Communication Technology (ICT) capability is essential for enhancing healthcare delivery, patient management, and administrative efficiency in public referral hospitals (Kazungu & Barasa, 2021). ICT capability includes the adoption and utilization of electronic health records (EHRs), telemedicine solutions, digital imaging systems, health information systems (HIS), and other technology-enabled tools to streamline clinical workflows, improve communication, and enhance decision-making.

1.1.4 Moderating Effect of Organizational Structure

The way activities such as task distribution, supervision and coordination are oriented toward the accomplishment of organizational goals is referred to as organizational structure. Rules, obligations and roles are all examples of these activities. How information moves across levels within an organization is determined by organizational structure. It regulates who is allowed to take part in which decision-making processes. The structure also binds the members of an organization together (Yi-Horng, 2018). The optimum structure for every organization was determined by its members, the environment, and how far the organization has progressed. Organizational structure is made up of three components: the organization's operating rules, some kind of governance and distribution of work. This study measured the organization structure in terms of chain of command, span of control and work specialization (Kanten *et al.*, 2017).

A chain of command is the line of authority and responsibility that runs across an organization and between different units, from top management, such as business owner or CEO down to front-line workers (Wilden, Gudergan, Nielsen & Lings, 2013). A chain of command clarifies which employee is responsible for what, increases productivity and efficiency, enhances job satisfaction, gives employees clear career goals to work toward and encourages specialization, creates accountability, provides

direction and smooth communications and enhances supervisor morale and respect. Companies make it a point to explain the company's structure to new hires during the on-boarding process to ensure that everyone understands the chain of command (Kelchner, 2019).

The number of subordinates that managers or supervisors within the organization may effectively and efficiently supervise is known to as span of control. The span of control is determined by a number of elements, including the size of the organization, the nature of the organization, the nature of the work, the manager's skills and competences, and the skills and abilities of the employees (Ritu, Parikshit & Manojit, 2019). Typically, because the scope of control is either limited or vast, the organizational structure is either flatter or more hierarchical. The greater the manager's scope of authority is, the more subordinates he or she supervises. The span of control influences the number of interactions and duties between employees and managers, as well as the management style and functions within the company. The importance of span of control and its principles in the workplace are related to productivity (Szu-Yu, Pei-Chun & Chin-Shan, 2017).

Work specialization, often known as division of labor, refers to the extent to which duties required to accomplish organizational goals are distributed among different jobs. Moreover, managers can use work specialization to break down large jobs into smaller, more specific jobs that can be carried out by individual personnel. The employees are instructed on how to accomplish a given duty to the best of their capabilities. Over time, that worker enhances his or her capability to accomplish that duty (Ritu, Parikshit & Manojit, 2019). Moreover, work specialization enables employees to be expert to a certain degree in their specific task, leads to higher productivity levels, lower quality control costs, encourages employees' job security due to specialized skills, improves the employees' morale and task proficiency, increases the speed of production process, saves time and helps employers to be independent (Hamel, 2017).

1.2 Statement of the Problem

The healthcare sector plays a significant role in Kenya's economy, aligning with the Sustainable Development Goals (SDGs) and the Vision 2030 development agenda (Ministry of Health, 2021). A robust healthcare sector promotes a healthier workforce. Healthy workers are more productive, reducing absenteeism and improving overall economic productivity (Mulaki & Muchiri, 2019). The sector also directly contributes to achieving SDG 3 by providing access to quality healthcare services, reducing maternal and child mortality, and combating diseases like HIV/AIDS, malaria, and tuberculosis. Kenya's Vision 2030 recognizes the importance of the healthcare sector within its social pillar (Dinda & Ojera, 2016). The vision aims to provide accessible, affordable, and quality healthcare services to all Kenyans.

According to World Health Organization (2022), the health sector in Kenya is characterized by poor provision of services due to inadequate financing, inadequate medical supplies as well as inadequate and demotivated workforce. Kenya spends around 4.4% of its GDP on healthcare (World Bank, 2020). This falls short of the Abuja Declaration recommendation of allocating at least 15% of GDP for health (World Health Organization, 2022). Kenya faces a shortage of healthcare workers, with a doctor-to-population ratio of only 1 per 10,000 which is lower than the recommended 2.5 doctors per 10,000 people (African Population and Health Research Center, 2021). According to Mulaki and Muchiri (2019), patient satisfaction, turnaround time and efficiency in health care services delivery remain low. The level of patient satisfaction index in County referral hospitals was 67.8%, which is lower than the acceptable customer satisfaction score of between 75% and 85% as indicated by Li, Zolbin and Krimmer (2022). In addition, the waiting time in County health facilities in Kenya (55.3 minutes) was higher than waiting time in health facilities in Rwanda and Uganda, which is 47 minutes and 43 minutes, respectively (World Health Organization, 2022).

While many studies have shown a positive relationship between dynamic capabilities and firm performance, some research suggests this link is not always significant. García-Morales and Martín-Rojas (2023) found that dynamic capabilities did not directly impact the performance of SMEs in Spain, highlighting the importance of factors like resource allocation and market conditions. Similarly, Li and Zhao (2022)

reported a weaker effect of dynamic capabilities on firm performance, contingent on industry and contextual factors. Huang and Wang (2021) found that in highly competitive environments, dynamic capabilities alone were insufficient to enhance performance, while Chen and Zhang (2020) emphasized that adaptability does not always translate into better outcomes in emerging markets due to market and regulatory conditions. Sijabat and Prasetya (2023) also noted an insignificant effect of dynamic capabilities on performance. In the healthcare sector, the impact of dynamic capabilities remains underexplored (Furnival, Boaden, & Walshe, 2019), making it crucial to evaluate their role in Kenyan health facilities.

Research in Kenya on dynamic capabilities and organizational performance has been largely limited to private sector firms, varied in the components of dynamic capabilities studied, and employed diverse methodologies. For instance, Omungu and Kavale (2025) examined the relationship between dynamic capabilities and the performance of telecommunication companies; Wajambia and Kising'u (2022) investigated the effect of dynamic managerial capabilities on firm performance in travel agencies and tour operators; and Mukhwana et al. (2025) explored dynamic capabilities and performance in insurance companies. However, these studies primarily used descriptive research designs, limiting the ability to establish cause-and-effect relationships. In addition, they focused on capabilities such as sensing, innovation, reconfiguration, managerial human capital, and technical skills. Moreover, the studies were conducted in sectors that differ significantly from the public health sector, including referral hospitals, which operate under different regulatory frameworks, objectives, and performance expectations as outlined in Kenya's Health Policy 2014–2030 and the Kenya Health Sector Strategic and Investment Plan (KHSSP 2018–2023). Therefore, this study sought to examine how dynamic capabilities, specifically knowledge management, strategic collaboration, talent management, and ICT, influence the organizational performance of referral hospitals in Kenya.

1.3 Objectives of the Study

1.3.1 General Objective

The study general objective was to examine the influence of dynamic capabilities on organizational performance of referral hospitals in Kenya as moderated by organizational structure

1.3.2 Specific Objectives

1. To determine the influence of knowledge management capability on organizational performance of referral hospitals in Kenya.
2. To assess how strategic collaboration capability influences organizational performance of referral hospitals in Kenya.
3. To examine the influence of talent management capability on organizational performance of referral hospitals in Kenya.
4. To evaluate how ICT capability influences organizational performance of referral hospitals in Kenya.
5. To assess moderating influence of organizational structure on the relationship between dynamic capabilities and organizational performance of referral hospitals in Kenya.

1.4 Research Hypotheses

The following are the null hypotheses that were tested in this study:

H₀₁: Knowledge management capability has no statistically significant influence on organizational performance of referral hospitals in Kenya

H₀₂: Strategic collaboration capability has no statistically significant influence on organizational performance of referral hospitals in Kenya

H₀₃: Talent management capability has no statistically significant influence on organizational performance of referral hospitals in Kenya

H₀₄: ICT capability has no statically significant influence on organizational performance of referral hospitals in Kenya

H05: Organizational structure has no statistically significant moderating influence on the influence of dynamic capabilities on organizational performance of referral hospitals in Kenya

1.5 Significance of the Study

The study findings are beneficial to the management of Kenyan public health facilities, the Kenyan government, policymakers, scholars and academicians, healthcare staff, as well as patients and the general public.

1.5.1 Management of Public Health Facilities

For managers of County and National Referral Hospitals, the study provides actionable guidance on leveraging dynamic capabilities to enhance operational efficiency, service delivery, and patient satisfaction. For example, the findings can inform strategies to improve knowledge sharing among staff, optimize collaboration across departments, enhance talent retention, and integrate ICT systems for faster decision-making and effective patient care. These practical recommendations can directly improve workflow, reduce resource wastage, and strengthen the overall performance and competitiveness of referral hospitals in Kenya.

1.5.2 Policymakers

Policymakers can use the study to formulate or revise policies that promote the development and institutionalization of dynamic capabilities in referral hospitals. By providing empirical evidence on how capabilities such as ICT adoption, strategic collaborations, and talent management affect hospital performance, the study offers guidance on designing interventions that enhance efficiency, equity, and service quality. For instance, policies could focus on promoting ICT infrastructure for health records management, training programs to build staff competencies, and frameworks that encourage inter-hospital collaborations to improve resource utilization and patient outcomes.

1.5.3 Scholars and Academicians

The study contributes to the existing body of knowledge on the relationship between dynamic capabilities and organizational performance in the public health sector. It provides empirical evidence that can inform future research, including comparative studies across different healthcare contexts or investigations into the role of specific capabilities in organizational success. Scholars and academicians can use the findings to identify research gaps, develop new theoretical frameworks, and design interventions aimed at improving healthcare performance in resource-constrained settings. This study also lays a foundation for longitudinal studies that examine the sustained impact of dynamic capabilities on hospital performance over time.

1.5.4 Healthcare Staff

Medical personnel, nurses, and administrative staff will benefit directly from improved resource allocation, clearly defined responsibilities, and more efficient workflows, all of which result when an organization effectively leverages its dynamic capabilities. Aligning skills, knowledge management systems, and technological tools with organizational needs allows staff to perform their roles more effectively and with less frustration. Tailored training programs, enhanced communication channels, and improved decision-making processes reduce inefficiencies and minimize confusion, enabling staff to focus on core tasks. This ultimately enhances staff morale, job satisfaction, and overall performance, contributing to better organizational outcomes.

1.5.5 Patients and the General Public

Patients and the general public are critical beneficiaries of hospitals that effectively utilize dynamic capabilities and maintain a well-structured organization. Improved organizational performance translates into higher quality care, shorter waiting times, and enhanced patient safety. The integration of ICT systems, robust knowledge management practices, and optimized talent management ensures services are timely, evidence-based, and responsive to patient needs. These improvements enhance health outcomes, strengthen public trust in healthcare institutions, encourage patient

engagement, and increase overall satisfaction with the healthcare system, supporting the long-term well-being of the population.

1.6 Scope of the Study

The study focuses on four selected dynamic capabilities in referral hospitals in Kenya: knowledge management capability, strategic collaboration capability, talent management capability and ICT capability. According to research, dynamic capabilities in health sector include: knowledge management capability, strategic collaboration capability, talent management capability and ICT capability. According to Pundziene and Geryba (2023), dynamic capabilities in health facilities include knowledge management capability strategic collaboration capability, talent management capability and ICT capability. In addition, Tetik and Zaim (2021) indicate that dynamic capabilities in health facilities include innovation capability, knowledge management capability and talent management capability. The moderating variable was organizational structure. The variable was selected as it has been used as a moderating variable in other studies focusing on strategic management and performance of health facilities. Lewis (2025) suggests that organizational structure influences the relationship between strategic management and organizational performance. In addition, Kero and Bogale (2023) argue that organizational structure moderates the relationship between business strategy and firm performance. The study was grounded on knowledge-based theory, systems theory, resource-based view theory, technology acceptance theory and dynamic capability theory. The study focused on County referral hospitals and National referrals hospitals distributed across the 47 counties in Kenya. The researcher indicated that Referral hospitals in Kenya were selected for this study due to their significant role in achieving the United Nations Sustainable Development Goal (SDG) 3, which aims to ensure healthy lives and promote well-being for all at all ages. The target population of the study was 47 County referral hospitals and 6 national referral hospitals in Kenya. The unit of observation was 159 individuals that comprised of 47 County referral hospitals' CEOs/Chief administrators, 47 County referral hospitals' Medical/clinical services in charge, 47 County referral hospitals' nursing in charge, 6 national referral CEOs/Chief administrators, 6 national referral Medical/clinical services in charge and 6 national

referral hospitals' Nursing in Charge. The study was conducted between the month of August 2022 and October 2022.

1.7 Limitations of the Study

The study encountered several limitations that could have influenced data collection and interpretation. Firstly, the management of referral hospitals in Kenya was initially hesitant to grant permission for the research, fearing that sensitive performance data might be exposed. To mitigate this concern, the researcher presented an introductory letter from Jomo Kenyatta University of Agriculture and Technology and obtained a research permit from NACOSTI, emphasizing that the study was purely for academic purposes. Additionally, assurances of strict confidentiality and secure handling of all data were provided to the hospital management.

Another limitation arose from respondents' reluctance to provide information due to fears of potential victimization. Some perceived the study as an investigation, which made them hesitant to share accurate or complete responses. To address this, the researcher emphasized the academic purpose of the study, guaranteed anonymity, and ensured that questionnaires did not request respondents' names. The drop-off and pick-up method for questionnaires was employed to accommodate the tight schedules of senior hospital staff, including CEOs, medical/clinical services in charge, and nursing in charge of both County and National referral hospitals.

Furthermore, the study was limited to National and County referral hospitals in Kenya, which represent higher-level health facilities with relatively more advanced structures, resources, and service delivery systems. This contextual focus limits the generalizability of the findings to other healthcare settings, particularly lower-level public health facilities such as health centres and dispensaries, where resource constraints, simpler organizational structures, and different operational dynamics prevail. The influence and manifestation of dynamic capabilities may therefore vary across different levels of care due to contextual differences in funding, staffing, governance, and technological adoption. Accordingly, the findings should be interpreted within the context of referral hospitals, and future studies are recommended

to examine dynamic capabilities across diverse levels of healthcare facilities in Kenya to enhance broader applicability and contextual understanding.

Despite these limitations, several strategies were implemented to ensure the reliability and credibility of the findings. Ethical approvals, confidentiality assurances, respondent trust-building, and flexible data collection methods minimized potential biases. While certain limitations, such as organizational norms in the public sector, may have constrained the full expression of dynamic capabilities, the study's methodological rigor and targeted sampling ensured that the results provide meaningful insights into how dynamic capabilities influence organizational performance in referral hospitals.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section reviews existing literature on association between dynamic capabilities and organizational performance within referral hospitals in Kenya. It begins with a theoretical review of the theories relevant to the study's variables. This is followed by a conceptual framework that depicts the relationships between the variables. Additionally, the section includes an empirical review aligned with the study's objectives, a critique of current literature, identification of research gaps, and a summary of the findings.

2.2 Theoretical Review

Theory refers to a set of concepts and ideas used to explain events and phenomena, often anchored on general principles that are independent of the specific event being explained. The theoretical review introduces the theories employed to justify the research (Özkan, 2023). It outlines the key variables influencing the phenomenon under study and highlights the importance of examining these variables under various conditions. The on-going study was guided by Knowledge-based theory, systems theory, resource-based view theory, Technology Acceptance Theory and Dynamic Capability Theory.

2.2.1 Dynamic Capability Theory

This study used the dynamic capability as the main theory. Dynamic capability theory (DCT) was developed by Teece, Pisano and Shuen (1997). Dynamic capability theory proposes that a firm's ability to adapt, innovate, and continuously reconfigure its resources and capabilities in response to changing environments is essential for achieving and sustaining competitive advantage over time. This theory suggests that firms must possess dynamic capabilities, which include sensing, seizing, and reconfiguring resources, to effectively navigate turbulent markets, technological advancements, and competitive pressures (Ghosh, Hughes & Hughes, 2022). Dynamic capability theory assumes that firms operate in dynamic and uncertain environments,

where resources are heterogeneous and imperfectly mobile, and that competitive advantage arises not only from the possession of valuable resources but also from the ability to dynamically reconfigure these resources in alignment with changing market conditions and strategic objectives (Weiss & Kanbach, 2022).

Critics of dynamic capability theory have raised several concerns. One criticism is that the concept of dynamic capabilities is often vaguely defined, making it difficult to operationalize and measure in practice (Leemann & Kanbach, 2022). In addition, there's a debate about whether dynamic capabilities truly represent a distinct source of competitive advantage or if they are simply a result of other factors such as organizational culture or managerial decisions. Some scholars argue that the theory lacks clear guidance on how firms can develop and deploy dynamic capabilities effectively, leading to ambiguity in its practical application. Furthermore, there's skepticism about the replicability and sustainability of dynamic capabilities across different contexts, with some suggesting that they may be context-specific and difficult to transfer to other organizations or industries (Ghosh, Hughes & Hughes, 2022). As such, while dynamic capability theory offers valuable insights into the importance of adaptability and innovation, it faces criticism for its conceptual ambiguity and limited practical guidance.

Dynamic Capability Theory (DCT) is based on several key assumptions that guide its application. It assumes that firms operate in dynamic, rapidly changing, and uncertain environments, where external conditions, technologies, and customer demands are constantly evolving. The theory presumes that resources within firms are heterogeneous and imperfectly mobile, meaning that they differ across organizations and cannot be easily transferred or imitated by competitors. DCT also assumes that competitive advantage arises not merely from possessing valuable resources, but from the firm's ability to sense opportunities and threats, seize opportunities, and reconfigure resources in alignment with strategic objectives (Bosire, Kising'u & Gichinga, 2025). Additionally, the theory assumes that firms with well-developed managerial, technological, and organizational processes are better positioned to develop and deploy dynamic capabilities effectively, allowing them to adapt, innovate, and maintain superior performance over time.

Dynamic Capability Theory provides a framework to understand how organizational structure moderates the relationship between dynamic capabilities and the performance of referral hospitals in Kenya. A clearly defined chain of command ensures effective decision-making and accountability, enabling hospital leadership to coordinate knowledge management, strategic collaboration, talent management, and ICT capabilities efficiently (Dubat & Noor, 2024). An appropriate span of control allows managers to supervise staff without overextension, ensuring that specialized personnel can focus on their areas of expertise. Work specialization enhances operational efficiency by allocating tasks according to staff skills, thereby facilitating the effective utilization of dynamic capabilities to improve service delivery, patient care, and hospital performance.

Organizational structure shapes how dynamic capabilities are applied and determines the extent to which they influence performance outcomes (Baía & Ferreira, 2024). Referral hospitals with structured hierarchies and well-coordinated departments are better positioned to implement cross-functional teams, enhance knowledge sharing, and deploy ICT systems for consultation, communication, and payment processes (Bosire et al., 2025). Talent management initiatives, such as staff development and retention programs, are more effective when roles and responsibilities are clearly defined. In this way, organizational structure acts as a moderator that amplifies the benefits of dynamic capabilities, ensuring referral hospitals in Kenya achieve improved efficiency, higher patient satisfaction, and sustainable healthcare performance.

2.2.2 Knowledge Based Theory

Knowledge based theory (KBT) was first postulated and advanced by Robert M. Grant in 1996. It posits that the competitive advantage of a firm lies in the unique knowledge possessed by its members, which is difficult for competitors to imitate or substitute (Pereira & Bamel, 2021). According to this theory, firms gain competitive advantage through the creation, transfer, and application of knowledge, rather than through the control of tangible resources alone. KBT assumes that knowledge is a valuable, non-substitutable resource that can be leveraged to achieve superior performance (Singh et al, 2021). It also assumes that knowledge is socially complex and deeply embedded

within an organization's routines, processes, and culture. Furthermore, KBT suggests that knowledge is dynamic and evolving, requiring continuous learning and adaptation for sustained competitive advantage.

One criticism of Knowledge Based Theory (KBT) is its tendency to overlook the practical challenges of managing knowledge within organizations. While KBT emphasizes the importance of knowledge as a source of competitive advantage, it often fails to provide concrete frameworks or strategies for effectively identifying, capturing, and leveraging knowledge assets (Tsvetkova & Partridge, 2021). Critics argue that KBT's focus on the abstract concept of knowledge neglects the messy realities of organizational dynamics, such as communication barriers, resistance to knowledge sharing, and difficulties in codifying tacit knowledge. Furthermore, KBT's assumption that knowledge is always beneficial may not hold true in all contexts, as organizations may face challenges in distinguishing between valuable knowledge and irrelevant or outdated information.

Knowledge-Based Theory (KBT) assumes that knowledge constitutes the most strategically important resource within an organization and is central to achieving a competitive advantage. The theory posits that knowledge is valuable, rare, non-substitutable, and difficult for competitors to replicate, making it a key driver of superior organizational performance (Singh et al, 2021). KBT further assumes that knowledge is socially complex, embedded in routines, processes, and culture, and that its creation, transfer, and application require deliberate effort and coordination among organizational members. Knowledge is also dynamic and evolving, necessitating continuous learning, adaptation, and innovation to sustain competitive advantage (Pereira & Bamel, 2021). While the theory emphasizes the strategic role of knowledge, it also assumes that organizations capable of managing and leveraging knowledge effectively are better positioned to respond to environmental changes and achieve sustained performance improvements.

Knowledge-Based Theory (KBT) was applied in this study to examine the influence of knowledge management capability on the performance of referral hospitals in Kenya. The theory provides a framework for understanding how hospital performance is shaped through the effective acquisition, storage, and sharing of both tacit and

explicit knowledge in clinical, administrative, and operational processes (Kerubo, 2023). Knowledge acquisition allows hospitals to learn from past experiences, research, and staff expertise, while storage ensures that critical information is retained and accessible. Knowledge sharing enhances collaboration, enabling staff to apply insights effectively, reduce errors, and strengthen decision-making. KBT emphasizes knowledge as a strategic resource essential for organizational efficiency and improved patient outcomes.

The study further analyzed how knowledge management capabilities contribute to innovation, informed decision-making, and sustained hospital performance. Acquisition, storage, and dissemination of knowledge transform information into actionable strategies that enhance service delivery and patient care (Wachinga & Deya, 2021). Knowledge management also supports hospitals in addressing resource constraints, regulatory demands, and evolving healthcare challenges. Haider and Kayani (2021) indicate that effective handling of knowledge ensures evidence-based practices, minimizes operational inefficiencies, and reinforces institutional resilience. This theoretical perspective highlights the strategic role of knowledge management as a driver of organizational performance, allowing referral hospitals to achieve measurable improvements in healthcare outcomes, operational efficiency, and overall institutional effectiveness.

2.2.3 Systems Theory

Ludwig von Bertalanffy proposed Systems theory in 1950 s and was later furthered in 1964 by Ross Ashby. Systems theory, a broad interdisciplinary framework, emphasizes understanding complex phenomena by examining the interactions and interdependencies among various components within a system. At its core, systems theory suggests that systems are composed of interconnected parts that work together to achieve certain functions or goals (Patton & McMahon, 2021). These systems can range from biological organisms to social organizations and ecosystems. Systems theory highlights the importance of viewing these entities as holistic entities rather than focusing solely on individual parts in isolation. It suggests that understanding the relationships and feedback loops between different components is essential for comprehending the behavior and dynamics of the entire system. Moreover, systems

theory proposes that systems exhibit emergent properties, where the whole entity possesses characteristics or behaviors that cannot be fully explained by analyzing its individual parts.

Assumptions underlying systems theory include the belief that systems are open, dynamic, and adaptive entities that interact with their environments. Systems theory assumes that systems exchange energy, information, and resources with their surroundings, leading to constant flux and evolution (Markovsky & Dörfler, 2021). Additionally, systems theory acknowledges the existence of feedback loops within systems, where outputs from certain components can influence subsequent inputs, thereby shaping the system's behavior over time (Rapp & Corral-Granados, 2024). Furthermore, systems theory assumes that systems possess boundaries that define their scope and delineate them from their environments, although these boundaries may be permeable to varying degrees. Overall, systems theory provides a holistic framework for understanding the interconnectedness and complexity of phenomena across different disciplines, guiding researchers in analyzing and interpreting systems at various levels of scale and organization.

Criticism of systems theory centers on its broad and abstract nature, which often limits its practical applicability in complex organizational settings (Markovsky & Dörfler, 2021). While the theory emphasizes the interdependence of components within a system and the importance of feedback loops, critics argue that it can oversimplify real-world dynamics, overlooking human behavior, power struggles, and informal networks that significantly influence organizational outcomes (Patton & McMahon, 2021). Additionally, its focus on maintaining equilibrium may encourage rigidity and hinder innovation, as organizations might prioritize stability over adaptability. The theory also struggles to provide clear guidance for decision-making in unpredictable or rapidly changing environments, making it less effective in addressing nuanced organizational challenges.

Systems theory provides a comprehensive lens to understand the influence of strategic collaboration capability on the performance of referral hospitals in Kenya. Under this framework, referral hospitals are viewed as complex systems comprising interconnected components, including medical personnel, administrative staff,

infrastructure, and patient populations (Ariya, Sempele, & Nderitu, 2021). Strategic collaboration capability refers to a hospital's ability to effectively engage with other healthcare providers, government agencies, non-governmental organizations, and community stakeholders to enhance patient care, optimize resource utilization, and improve overall organizational performance. Systems theory posits that such collaborations strengthen the hospital's adaptive capacity by facilitating the flow of knowledge, expertise, and resources across different actors within the healthcare ecosystem. Referral hospitals can access complementary resources, adopt best practices, and coordinate care more efficiently, thereby positively influencing organizational performance.

Strategic collaborations also enable referral hospitals to respond to emerging healthcare challenges more effectively. Partnerships with local clinics, community health workers, or other hospitals provide valuable insights into patient needs, prevalent health conditions, and barriers to accessing care, allowing hospitals to tailor services to meet these demands. Additionally, collaborations enhance the hospitals' ability to mobilize and share resources, implement joint initiatives, and benefit from collective expertise, which ultimately improves service delivery and operational efficiency (Skene, 2021). Overall, systems theory underscores that strategic collaboration capability is a critical factor in strengthening the performance of referral hospitals in Kenya by promoting resource sharing, knowledge exchange, and coordinated healthcare delivery.

2.2.4 Resource Based Theory

Resource based theory was developed in 1991 by Barney. It posits that a firm's sustainable competitive advantage stems from its unique bundle of resources and capabilities rather than from its external environment (Freeman & Dmytriiev, 2021). According to RBV, resources must possess four key attributes to contribute to sustained competitive advantage: they must be valuable, rare, inimitable, and non-substitutable (VRIN). This theory assumes that firms are heterogeneous in terms of their resource endowments and capabilities, and that these differences are a source of competitive advantage (Lubis, 2022). Moreover, RBV assumes imperfect resource mobility, meaning that resources cannot be easily traded or imitated across firms,

further strengthening the competitive advantage of firms with valuable, rare, inimitable, and non-substitutable resources.

Resource-Based theory has faced several criticisms in the field of strategic management. Critics argue that RBV can sometimes rely on tautological reasoning, where the value of resources is circularly defined by their ability to generate competitive advantage (Hossain & Hussain, 2022). Moreover, RBV tends to overlook external factors such as market dynamics and industry structure, which can significantly influence a firm's competitive position. In addition, the difficulty in accurately identifying and measuring resources, coupled with the assumption of resource stability in a dynamic environment, presents challenges in applying the RBV framework effectively (Hossain & Hussain, 2022). Further, RBV provides limited guidance on resource development strategies and often neglects the role of strategic positioning in achieving competitive advantage, leading to concerns about its practical applicability in real-world business contexts.

Resource-Based View assumes that a firm's resources and capabilities are the primary drivers of sustained competitive advantage. The theory posits that resources must be valuable, rare, inimitable, and non-substitutable (VRIN) to provide lasting benefits (Freeman & Dmytriiev, 2021). RBV further assumes that firms are heterogeneous in their resource endowments, meaning that no two organizations possess identical bundles of resources and capabilities, and these differences explain variations in performance (Lubis, 2022). Another key assumption is imperfect resource mobility, suggesting that critical resources cannot be easily transferred, traded, or replicated across firms, making unique resources a source of enduring advantage. Implicitly, the theory assumes that managers can identify, develop, and leverage these resources to achieve superior organizational outcomes, although it acknowledges that not all resources are equally impactful in all contexts.

RBV was applied in this study to examine the influence of talent management capability on the performance of referral hospitals in Kenya. The theory guided the conceptualization of talent management as a strategic resource, emphasizing that skilled and well-managed human capital is valuable, rare, difficult to imitate, and critical for enhancing hospital performance (Komakecha et al, 2025). By framing

talent management capability as a core resource, the study analyzed how recruitment, training, retention, and development of medical and administrative personnel contribute to operational efficiency, quality of patient care, and overall organizational effectiveness. RBV enabled the study to link the unique capabilities of hospital staff to performance outcomes, highlighting the role of strategically managed human resources in sustaining competitive advantage and improving service delivery in Kenya's referral hospitals.

Resource Based View was applied in this study to examine the influence of talent management capability on the performance of referral hospitals in Kenya. The theory positions human capital as a strategic resource that is valuable, rare, inimitable, and non-substitutable, making it central to achieving competitive advantage (Komakecha et al., 2025). Within this framework, talent management capability is conceptualized as the ability to attract, develop, and retain skilled medical and administrative personnel. The study focused on how these practices enable hospitals to enhance operational efficiency, improve patient care quality, and optimize internal processes, emphasizing that strategically managed human resources are a critical driver of organizational performance in healthcare.

RBV further guided the analysis of how hospitals leverage talent management capability to sustain long-term performance outcomes. Recruitment processes ensure that staff possess the necessary expertise, while targeted training and development programs enhance competencies to meet evolving healthcare needs (Shabeer & Mahmood, 2025). Retention strategies, including recognition and career progression, reduce turnover and preserve institutional knowledge. By linking these human resource practices to measurable performance indicators, the study highlighted the role of talent management in fostering innovation, improving service delivery, and maintaining a competitive edge in Kenya's referral hospitals. This approach demonstrates that effective human resource management is integral to achieving sustained organizational success.

2.2.5 Technology Acceptance Theory

Theory of Technology Acceptance was developed in 1989 by Davis. It posits that the adoption and use of new technologies by individuals or organizations are determined by their perceived usefulness and perceived ease of use. According to TAM, if individuals believe that a technology will help them perform tasks more effectively or efficiently (perceived usefulness) and that using the technology will be free from effort or complications (perceived ease of use), they are more likely to accept and use the technology (Noori & Zabihi, 2023). TAM assumes that users are rational decision-makers who assess the potential benefits and ease of use of a technology before deciding whether to adopt it. Also, TAM assumes that external factors such as training, support, and social influence can also impact individuals' perceptions and, consequently, their acceptance of technology (Attié & Meyer-Waarden, 2022).

A key criticism of Technology Acceptance Theory (TAM) is its oversimplification of human behavior and decision-making processes regarding technology adoption (Toraman, 2022). Critics argue that TAM primarily focuses on individual perceptions of usefulness and ease of use while neglecting other important factors that influence technology adoption, such as social, cultural, and organizational contexts. Additionally, TAM often assumes that individuals are rational decision-makers, overlooking the influence of emotions, habits, and biases in shaping technology acceptance (Rejali, Aghabayk & Shiwakoti, 2023). Furthermore, TAM's reliance on self-reported perceptions may not always accurately reflect actual behavior, leading to discrepancies between intention to use and actual use of technology. Therefore, while TAM provides valuable insights into technology adoption, its narrow focus and simplistic assumptions limit its explanatory power in complex real-world settings.

TAM is built on several key assumptions that guide its application. The theory assumes that users are rational decision-makers who systematically evaluate a technology's potential benefits and ease of use before deciding to adopt it. Second, it presumes that individuals' perceptions, specifically perceived usefulness and perceived ease of use, are the primary determinants of technology acceptance (Attié & Meyer-Waarden, 2022). Third, TAM assumes that external factors, such as training, organizational support, social influence, or peer behavior, indirectly shape adoption by affecting

users' perceptions. Further, the theory assumes a linear relationship between behavioral intention and actual usage, suggesting that higher intention to use a technology will reliably lead to increased adoption (Noori & Zabihi, 2023). These assumptions simplify the adoption process to key perceptual and cognitive factors, providing a structured framework for predicting technology acceptance.

Technology Acceptance Model (TAM) provides a framework to understand how ICT capability influences organizational performance in referral hospitals in Kenya. The theory posits that perceived usefulness drives technology adoption, meaning that ICT tools such as electronic health records, telemedicine platforms, and digital payment systems are more likely to be utilized if staff believe they enhance efficiency and patient care outcomes (Omieno, 2022). Effective communication capabilities through ICT facilitate timely information sharing among healthcare professionals, enabling better coordination, decision-making, and administrative efficiency. Consultation platforms allow remote interaction with specialists, improving patient management, while digital payment systems streamline billing and reduce financial errors, collectively enhancing hospital performance.

TAM also emphasizes perceived ease of use, suggesting that adoption is higher when ICT systems are user-friendly and staff receive adequate training and support. Referral hospitals that prioritize intuitive interfaces and continuous capacity building for medical and administrative personnel are more likely to realize the full benefits of ICT capabilities, including improved communication, consultation, and payment processes (Rejali et al., 2023). External factors, such as government ICT policies, infrastructure development, and regulatory requirements, further shape the adoption and effectiveness of technology. Overall, TAM highlights that strategically implementing and supporting ICT systems can strengthen organizational efficiency, patient satisfaction, and overall performance in Kenya's referral hospitals.

2.3 Conceptual Framework

Conceptual framework refers to a model that illustrates the link between variables used in a study. It offers relevant and crucial insights into the research questions and problems. In this study, the conceptual framework aims to explore the relationship

between dynamic capabilities and organizational performance in referral hospitals in Kenya. The study independent variables were knowledge management capability, strategic collaboration capability, talent management capability and ICT capability. The dependent variable was organizational performance of referral hospitals in Kenya and the moderating variable was organizational structure.

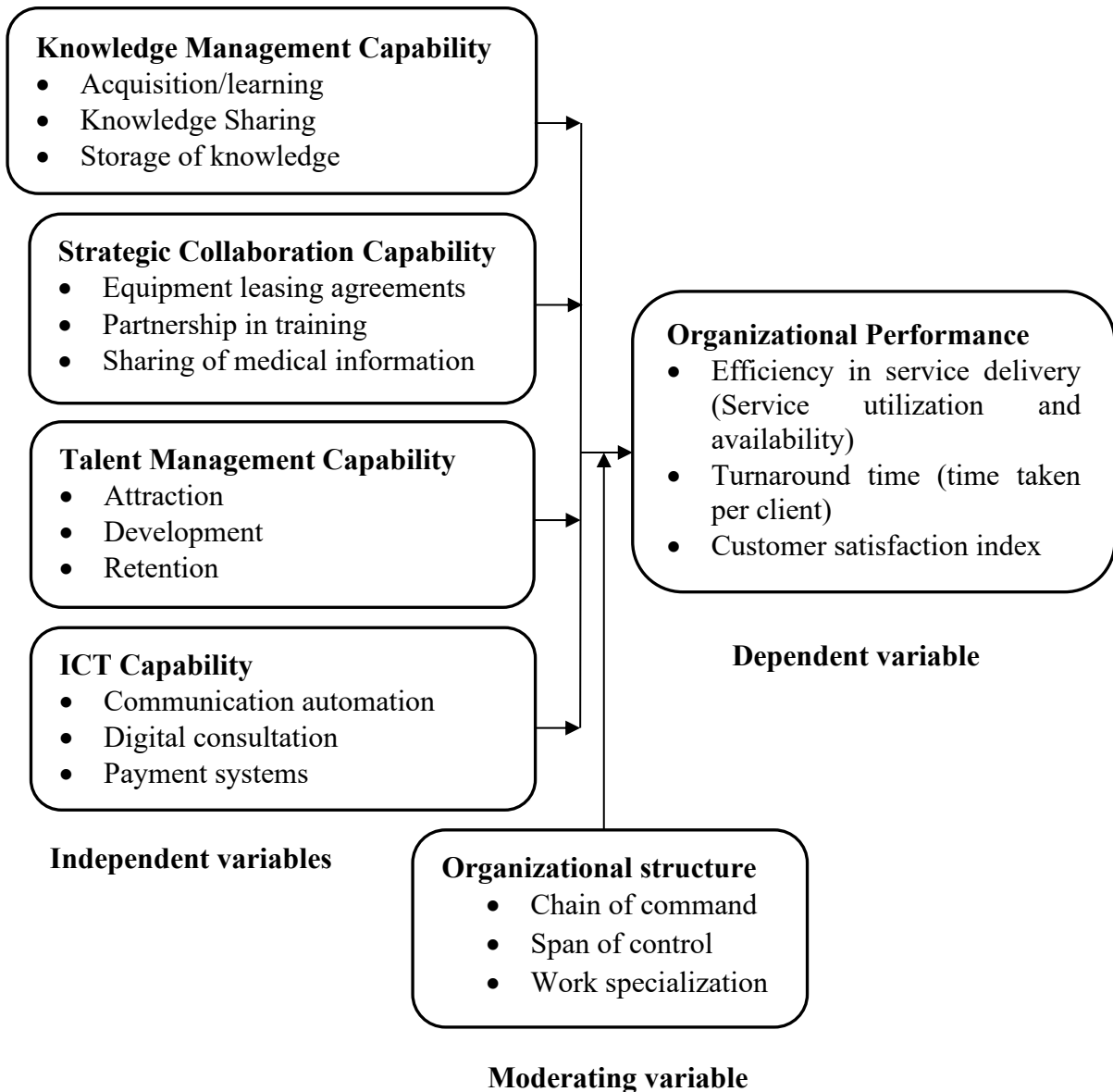


Figure 2. 1: Conceptual Framework

2.3.1 Knowledge Management Capability

Knowledge management capability refers to an organizational system designed to intentionally create, organize, and leverage knowledge to improve overall organizational effectiveness (Migdadi, 2022). In the context of referral hospitals, this capability enables institutions to integrate clinical expertise, research insights, and operational knowledge to enhance patient care, optimize workflows, and strengthen strategic decision-making (Aldhaheri & Ahmad, 2024). It encompasses the deliberate processes, structures, and cultural practices that facilitate continuous learning, information sharing, and knowledge application across all levels of the organization. Knowledge management capability has been conceptualized in this study in terms of knowledge acquisition, knowledge sharing, and knowledge storage, which together allow hospitals to systematically capture, distribute, and utilize knowledge.

Knowledge acquisition, also referred to as organizational learning, involves the deliberate generation, collection, and assimilation of knowledge from both internal and external sources, including clinical research, professional experience, operational processes, and technological innovations (Gui, Lei & Le, 2024). In referral hospitals, acquisition occurs through interactions among healthcare staff, technologies, tasks, and resources, enabling the organization to create new insights and integrate them into everyday practices. Effective knowledge acquisition enhances innovation, clinical decision-making, and operational efficiency. By continually acquiring relevant knowledge, hospitals are better able to anticipate changes in patient needs, adopt improved healthcare practices, and respond proactively to emerging challenges (Lam et al, 2021). Knowledge acquisition thereby forms the foundation for informed decision-making and sustainable competitive advantage in hospital performance.

Knowledge sharing refers to the processes and mechanisms through which an organization disseminates knowledge to ensure that it is accessible and usable by staff across departments and levels (Ge, 2022). In referral hospitals, this includes transforming tacit knowledge—such as clinical experience or specialized skills—into explicit knowledge that can be codified, documented, and applied in practice. Knowledge sharing can occur through technological systems, including databases, intranet portals, and electronic health record platforms, as well as through non-

technological channels, such as workshops, collaborative sessions, team meetings, and professional forums (Abou-Moghli, 2025). Effective knowledge sharing promotes collaboration, innovation, problem-solving, and collective learning. By ensuring that critical knowledge is accessible to all relevant stakeholders, referral hospitals can improve care quality, operational efficiency, and overall organizational performance.

Knowledge storage involves systematically recording, organizing, and preserving knowledge to ensure that it can be retrieved, reused, and applied when needed (Migdadi, 2022). In referral hospitals, this includes both digital storage solutions, such as electronic health records, clinical protocols, and knowledge management systems, and physical storage, such as manuals, documentation, and research archives. Proper knowledge storage ensures continuity of operations, minimizes the loss of valuable expertise due to staff turnover, and facilitates efficient decision-making across clinical and administrative processes. By maintaining structured and accessible repositories of both tacit and explicit knowledge, referral hospitals enhance operational efficiency, promote innovation, reduce errors, and improve patient outcomes (Aldhaheri & Ahmad, 2024). Knowledge storage is therefore a critical component of knowledge management capability that sustains hospital performance and strategic advantage.

2.3.2 Strategic Collaboration Capability

Strategic collaboration capability refers to a hospital's ability to establish, maintain, and leverage partnerships with multiple stakeholders to achieve shared goals, optimize resources, and improve overall organizational performance (Kasula, 2023). In the context of referral hospitals, this capability enables institutions to coordinate effectively with government agencies, non-governmental organizations, local clinics, and community-based organizations to enhance patient care, service delivery, and operational efficiency (Basabih, Prasajo & Rahayu, 2022). Through strategic collaborations, hospitals can access complementary expertise, resources, and innovative practices that would be difficult to achieve independently. Strategic collaboration capability has been conceptualized in terms of equipment leasing agreements, partnership training, and the sharing of medical information, which collectively strengthen hospitals' capacity to deliver quality healthcare and improve organizational outcomes.

Equipment leasing agreements involve formal arrangements where healthcare facilities obtain medical equipment from other institutions, suppliers, or partners for a specified period in exchange for agreed payments or terms, rather than purchasing the equipment outright (Weiss & Kanbach, 2022). In referral hospitals, equipment leasing agreements enable access to advanced and specialized medical technologies that may otherwise be unaffordable due to high capital costs. These arrangements support continuity of care by ensuring that essential diagnostic and treatment equipment is available when needed, thereby reducing service disruptions and improving efficiency. Through such agreements, hospitals can optimize resource utilization, manage financial constraints, and maintain up-to-date medical technology without heavy upfront investments (Kanti, Kim & Mikidadi, 2022). Effective implementation of equipment leasing agreements therefore contributes to improved service delivery, operational efficiency, and overall hospital performance.

Partnerships in training enable referral hospitals to collaborate with universities, professional bodies, and healthcare institutions to enhance the skills, knowledge, and competencies of their staff (Fabre & Straub, 2023). Through joint training programs, workshops, internships, and continuing medical education, hospitals ensure that staff remain updated on emerging healthcare practices, technologies, and clinical guidelines. These partnerships not only improve workforce competence but also promote knowledge transfer between institutions, leading to innovation in clinical and administrative practices. By investing in collaborative training initiatives, referral hospitals enhance employee performance, reduce skill gaps, and improve patient outcomes (Shin & Park, 2021). Strategic training partnerships therefore represent a crucial dimension of strategic collaboration capability that strengthens human capital and organizational effectiveness.

Sharing of medical information entails the exchange of patient data, research findings, and best practices between referral hospitals, primary care facilities, and other healthcare stakeholders to facilitate evidence-based decision-making and coordinated care (Zaridis, Vlachos & Bourlakis, 2021). Through secure and systematic information sharing, hospitals can identify trends in disease prevalence, track patient referrals, and implement preventive and treatment interventions more efficiently. Sharing medical information also enhances communication across departments and partner

organizations, reduces duplication of services, and improves the quality and continuity of care. This collaborative approach ensures that critical knowledge is accessible to all relevant stakeholders, thereby strengthening the hospital's capacity to deliver high-quality healthcare (Ge, 2022). Information sharing is therefore an essential component of strategic collaboration capability that directly supports organizational performance and patient outcomes.

2.3.3 Talent Management Capability

Talent management capability refers to an organization's ability to attract, develop, and retain a skilled and motivated workforce that can effectively contribute to achieving organizational goals (Panya & Petchsawang, 2025). In referral hospitals, this capability ensures that critical healthcare roles are filled with competent professionals, enhancing service delivery, patient care, and operational efficiency. Talent management involves a strategic approach to managing human resources, aligning workforce planning with organizational objectives, and continuously responding to changing healthcare demands (Kwon & Jang, 2022). Talent management capability has been conceptualized as a multidimensional construct comprising talent attraction, talent development, and talent retention, which collectively enable referral hospitals to build a high-performing, sustainable workforce and improve organizational performance.

Talent attraction focuses on identifying, recruiting, and hiring skilled healthcare professionals who meet the hospitals' current and future needs (Afshari & Hadian Nasab, 2021). In referral hospitals, effective talent attraction ensures that critical positions such as specialized clinicians, nurses, and administrative staff are filled with individuals who possess the required expertise and experience. Hospitals use a combination of recruitment strategies, including competitive compensation, employer branding, professional networks, and partnerships with training institutions, to attract top talent. By securing high-quality personnel, referral hospitals enhance service delivery, clinical outcomes, and patient satisfaction (Yildiz & Esmer, 2023). Talent attraction is therefore a key dimension of talent management capability that establishes the foundation for a capable and high-performing workforce.

Talent development involves equipping healthcare staff with the skills, knowledge, and competencies necessary to perform their roles effectively and adapt to evolving healthcare challenges (Gurusinghe, Arachchige & Dayarathna, 2021). Referral hospitals invest in training programs, mentorship, continuing professional education, and skill-building workshops to enhance the capabilities of their workforce. Talent development not only improves individual performance but also strengthens team collaboration, clinical decision-making, and service innovation. Through structured development initiatives, hospitals can align employee skills with organizational objectives, foster a culture of continuous learning, and ensure compliance with medical standards (Jooss, Burbach & Ruël, 2021). Consequently, talent development represents a critical dimension of talent management capability that drives organizational performance in referral hospitals.

Talent retention refers to strategies and practices that hospitals use to retain skilled and experienced staff, minimizing turnover and maintaining workforce stability (Afshari & Hadian Nasab, 2021). Retention strategies in referral hospitals may include competitive remuneration, career advancement opportunities, recognition programs, supportive work environments, and work-life balance initiatives. High retention rates ensure continuity of care, institutional knowledge preservation, and operational efficiency. Additionally, retaining experienced healthcare professionals reduces recruitment and training costs while sustaining high-quality patient care (Yildiz & Esmer, 2023). Talent retention is therefore a vital component of talent management capability that supports long-term organizational performance, ensuring that referral hospitals maintain a motivated and competent workforce capable of delivering effective healthcare services.

2.3.4 ICT Capability

ICT capability refers to an organization's ability to effectively deploy, integrate, and leverage information and communication technologies to support its operations, improve service delivery, and enhance overall performance (Amoako et al., 2022). In referral hospitals, ICT capability enables efficient management of patient records, communication among healthcare providers, and the coordination of administrative and clinical processes. A strong ICT capability ensures timely access to accurate

information, reduces operational errors, and improves decision-making processes (Liao, Chou & Huang, 2022). In this study, ICT capability was conceptualized as a multidimensional construct encompassing communication automation, digital consultation, and payment systems, which collectively enhance the operational efficiency, service quality, and performance of referral hospitals in Kenya.

Communication automation refers to the hospital's capacity to use digital technologies to facilitate timely, accurate, and automated information flow among healthcare providers, patients, and stakeholders (Amoako et al., 2022). This includes the use of emails, hospital intranets, instant messaging platforms, and teleconferencing systems that enable seamless coordination of clinical and administrative functions. Effective communication automation enhances collaboration, minimizes miscommunication, and ensures that critical patient and organizational information is shared efficiently. In referral hospitals, robust automated communication systems support staff in responding promptly to patient needs, coordinating multidisciplinary teams, and aligning operations with institutional goals (Liao, Chou & Huang, 2022). As such, communication automation represents a key dimension of ICT capability that strengthens organizational performance and service delivery.

Digital consultation refers to the ability of referral hospitals to provide remote medical consultations through telemedicine platforms, video conferencing, and other virtual communication technologies (Rutainurwa, Wenda & Israel, 2024). This capability enables healthcare providers to diagnose, monitor, and manage patients without requiring physical visits, thereby improving access to healthcare services, particularly in remote and underserved areas. Digital consultation enhances patient engagement, reduces waiting times, and improves continuity of care through real-time specialist input and follow-ups (Hudu et al., 2023). By integrating digital consultation systems into hospital operations, referral hospitals can expand service reach, optimize resource utilization, and improve patient outcomes. Therefore, digital consultation is a critical component of ICT capability that positively influences hospital performance.

Payment systems refer to the hospital's ability to process financial transactions electronically, including patient billing, insurance claims, and supplier payments through secure digital platforms (Wang et al., 2022). The use of electronic payment

systems reduces administrative inefficiencies, minimizes errors associated with manual processes, and enhances financial transparency and accountability. In referral hospitals, efficient payment systems ensure timely revenue collection, improve financial management, and increase patient satisfaction by offering convenient and secure payment options. Furthermore, integration of payment systems with other hospital information systems streamlines operations and supports effective resource allocation (Wang & Zhao, 2021). Consequently, payment systems constitute an essential dimension of ICT capability that supports operational efficiency and overall performance of referral hospitals in Kenya.

2.3.5 Performance of Referral Hospitals

Organizational performance refers to the degree to which an organization achieves its strategic objectives and delivers value to its stakeholders. In referral hospitals, organizational performance encompasses multiple dimensions, including service efficiency, patient satisfaction, and operational effectiveness (Gatimu & Minja, 2024). Efficient performance ensures that resources, human, financial, and technological, are optimally utilized to provide high-quality healthcare services. It also reflects the hospital's ability to meet demand, maintain quality standards, and achieve institutional goals. In this study, organizational performance was conceptualized as a multidimensional construct comprising efficiency in service delivery, turnaround time, and customer satisfaction (Muthengi & Ragui, 2023). These dimensions collectively measure the hospital's effectiveness in delivering timely, high-quality, and patient-centered healthcare services, which are critical for improving health outcomes and achieving institutional sustainability in Kenya.

Efficiency in service delivery refers to the hospital's capacity to treat and manage a high volume of patients within a given timeframe while maintaining quality care. In referral hospitals, efficiency is measured by the number of patients serviced per day, reflecting the hospital's ability to allocate resources effectively, reduce bottlenecks, and optimize clinical workflows (Adan & Mweta, 2025). High service efficiency ensures that medical staff can attend to more patients without compromising care standards, which is critical in high-demand environments. Efficient hospitals can maximize resource utilization, improve patient throughput, and reduce waiting times,

ultimately enhancing both operational performance and patient outcomes (Omondi, 2024). Therefore, efficiency in service delivery is a key indicator of organizational performance in referral hospitals.

Turnaround time refers to the duration taken to deliver services to a patient from the point of entry until discharge or completion of the required service (Mire, Sabwami & Ayora, 2024). In referral hospitals, minimizing turnaround time is crucial for improving patient experiences, reducing congestion, and ensuring timely clinical interventions. Shorter turnaround times indicate that hospital processes are streamlined, resources are effectively managed, and staff are coordinated to provide rapid and efficient care. Conversely, prolonged turnaround times can lead to patient dissatisfaction, delayed treatments, and reduced operational efficiency (Owich, Kiongera & Odero, 2022). Hospitals can enhance workflow efficiency, reduce service delays, and support overall organizational performance, by monitoring and optimizing turnaround time. Turnaround time is therefore a critical dimension of performance in healthcare institutions.

Customer satisfaction reflects patients' perceptions of the quality, responsiveness, and reliability of healthcare services provided by the hospital (Gatimu & Minja, 2024). High levels of patient satisfaction indicate that the hospital meets or exceeds expectations in clinical care, communication, and service delivery. Satisfaction is influenced by factors such as staff professionalism, responsiveness to patient needs, waiting times, and the hospital environment. In referral hospitals, measuring customer satisfaction provides insights into service quality, helps identify areas for improvement, and guides policy and operational decisions. It also fosters trust and loyalty among patients, contributing to better health outcomes and organizational reputation (Muthengi & Ragui, 2023). Customer satisfaction is therefore a key dimension through which organizational performance is assessed in referral hospitals in Kenya.

Following the Service, Health, and Administration (SHA) framework, the dimensions of organizational performance—efficiency, turnaround time, and customer satisfaction—remain critical in evaluating referral hospitals. SHA emphasizes the integration of health services, administrative efficiency, and patient-centered care,

which aligns closely with the conceptualization of performance in this study. Efficiency in service delivery ensures optimal utilization of resources while maintaining quality standards, turnaround time reflects streamlined processes and timely interventions, and customer satisfaction captures patient perceptions of care quality and responsiveness. Therefore, after applying SHA principles, these performance dimensions continue to provide a comprehensive measure of hospital effectiveness, highlighting both operational efficiency and patient-centered outcomes in referral hospitals.

2.3.6 Organizational Structure

Organizational structure refers to the formal arrangement of roles, responsibilities, authority, and communication within an organization, guiding how tasks are coordinated and resources are allocated to achieve strategic objectives (Lewis, 2025). In referral hospitals, a clear organizational structure ensures that staff understand their roles, reporting lines, and decision-making authority, which enhances operational efficiency, accountability, and coordination. It helps reduce role ambiguity, prevent overlaps, and facilitates smooth workflow across clinical and administrative functions (Rakova et al, 2021). A well-defined organizational structure also provides a framework for implementing hospital policies, monitoring performance, and achieving organizational goals. According to Douglas (2023), the key elements of organizational structure include chain of command, span of control, and work specialization. In this study, organizational structure was conceptualized as a multidimensional construct comprising chain of command, span of control, and work specialization, which together influence decision-making, operational efficiency, and the overall performance of referral hospitals in Kenya.

Chain of command refers to the formal line of authority within a hospital, which defines reporting relationships and the hierarchy for decision-making. A clear chain of command ensures that instructions and information flow effectively from top management to operational staff, minimizing delays and misunderstandings in task execution (Iranmanesh et al, 2021). In referral hospitals, a structured chain of command promotes accountability, clarity in responsibilities, and timely decision-making across departments. It also supports supervisory control, enabling managers to

monitor performance and intervene when needed (Ghosh et al, 2022). Hospitals can coordinate clinical and administrative activities efficiently, reduce conflicts, and improve service delivery. Therefore, chain of command represents a critical dimension of organizational structure that directly affects coordination, staff accountability, and hospital performance outcomes.

Span of control refers to the number of subordinates a manager can effectively oversee and supervise within an organization (Khoury et al, 2022). In referral hospitals, an optimal span of control allows managers to provide sufficient guidance, monitor staff performance, and ensure operational efficiency, particularly in high-pressure clinical settings. A manageable span of control promotes effective communication, strengthens supervision, and enables timely decision-making, enhancing staff productivity and patient care. Conversely, excessively wide spans of control can overwhelm managers, reduce oversight quality, and hinder responsiveness, negatively affecting organizational performance (Akpa, Asikhia & Nneji, 2021). Therefore, span of control is a key component of organizational structure that influences workflow efficiency, staff motivation, and coordination across units. Properly designed spans of control enhance hospital operations, improve service quality, and support the overall performance of referral hospitals.

Work specialization refers to the degree to which tasks in an organization are divided into specific roles, allowing employees to focus on particular functions and develop expertise (Kulkov et al, 2024). In referral hospitals, high work specialization ensures that staff concentrate on their areas of competence, improving technical proficiency, service quality, and operational efficiency. It reduces redundancy, enhances workflow, and allows staff to perform tasks with speed and accuracy, which is critical in healthcare delivery. However, excessive specialization can create rigidity, limit flexibility, and hinder interdepartmental collaboration (Rakova et al, 2021). Therefore, hospitals must balance specialization with cross-functional capabilities to maintain adaptability. Work specialization is a fundamental dimension of organizational structure, influencing efficiency, staff performance, and the overall effectiveness of referral hospitals in Kenya by optimizing resource allocation and fostering expertise.

Organizational structure moderates the relationship between dynamic capabilities and organizational performance by shaping how knowledge, talent, ICT systems, and strategic collaborations are applied within referral hospitals. A well-defined structure, through clear chains of command, optimal spans of control, and balanced work specialization, facilitates the effective coordination, allocation, and utilization of dynamic capabilities (Dubat & Noor, 2024). It ensures that staff understand their roles, decision-making authority, and communication channels, allowing capabilities such as knowledge management, talent development, and ICT deployment to translate into tangible improvements in efficiency, service quality, and patient satisfaction. Conversely, rigid hierarchies or poorly designed structures can impede the mobilization of these capabilities, weakening their impact on hospital performance.

2.4 Empirical Review

This part reviews the related literature on relationship between dynamic capabilities (knowledge management capability, strategic collaboration capability, talent management capability and ICT capability) and organizational performance of referral hospitals.

2.4.1 Knowledge Management Capability and Organizational Performance

Nor, Mohamad and Fikry (2021) examined the impact of knowledge management capabilities (KMC) on performance among firms in Malaysia. The study adopted a quantitative research design focusing on top management staff among firms in Malaysia. Data were collected through a structured questionnaire. The findings revealed that knowledge management capabilities have a significant relationship with market orientation in the hotel industry. The results further indicated that market orientation strengthens the relationship between knowledge infrastructure and hotel performance. This suggests that hotels with strong knowledge management capabilities are better able to align their operations with market trends, thereby improving their performance and sustaining competitiveness in the tourism sector.

Haider and Kayani (2021) examined the relationship between customer knowledge management capability (CKMC) and project performance in Pakistan. The study adopted a cross-sectional research design. The target population consisted of 307

employees working in 30 public and private project-based software firms operating in the twin cities of Rawalpindi and Islamabad in Pakistan. Data were collected using a non-probability sampling technique. The findings revealed that the CKMC components of creating, transferring, integrating, and influencing customer knowledge play a significant role in improving organizations' ability to understand customer needs and expectations. This capability helps reduce project delays and budget overruns, thereby enhancing overall project performance. The results further showed a significant positive relationship between CKMC and project performance.

Chen and Yu (2024) investigated the effect of knowledge management (KM) capability on firm performance in the knowledge economy in China. The study adopted a quantitative research design using a cross-sectional survey approach. The target population consisted of innovative enterprises in China. Data were collected using a survey questionnaire. The results indicated that internal KM capability does not have a significant direct effect on firm performance; instead, its influence is fully mediated by efficiency-centered and novelty-centered business model innovations. Conversely, external KM capability has a direct and positive effect on firm performance, and this relationship is partially mediated by business model innovations.

In Nigeria, Alo, Hoque and Arslan (2025) examined the role of knowledge management capability (KMC) in enhancing process innovation in organizations during and after the COVID-19 pandemic in Africa. The study adopted a qualitative research design using an interpretivist approach. The target population comprised organizational managers and professionals involved in knowledge management and innovation activities in African organizations. Data were collected through in-depth semi-structured interviews. The findings revealed that knowledge management capability plays a critical role in supporting process innovation and organizational resilience during turbulent times. Organizations with strong KMC were better able to capture, share, and utilize knowledge to respond effectively to emerging challenges. The study further found that effective knowledge sharing mechanisms and coordination of knowledge resources enhance innovation outcomes.

Mwadime and Kising'u (2025) examined the influence of knowledge management capability (KMC) on the performance of organizations in Mombasa County, Kenya. The study used a cross-sectional survey design targeting 302 registered organizations. Data were collected through structured questionnaires. The findings revealed that knowledge management capability significantly impacts organizational performance, with organizations that effectively create, share, and apply knowledge achieving better outcomes. The study emphasized that organizational leaders should exercise strategic thinking and effective decision-making to strengthen knowledge management practices, thereby enhancing overall organizational performance and ensuring that resources, expertise, and information are optimally leveraged for improved efficiency and effectiveness.

In Kenya, Wachinga and Deya (2021) examined the influence of knowledge management capabilities (KMC) on the performance of organizations. The study adopted a descriptive survey research design, targeting 63 departmental heads across 21 organizations. Data were collected using structured questionnaires. The findings revealed that knowledge acquisition, application, transfer, and protection each had a positive and significant effect on organizational performance. Organizations that effectively manage knowledge experience improved efficiency, innovation, decision-making, and competitiveness. The study concluded that leveraging knowledge management capabilities is critical for enhancing overall organizational performance, ensuring better operational outcomes, and sustaining a strategic advantage in dynamic and competitive environments.

Kenyatta and Kiugu (2023) examined the effect of knowledge management capabilities (KMC) on the performance of commercial state corporations in Kenya. The study adopted a descriptive research design. The target population consisted of 55 commercial state corporations in Kenya. Semi structured questionnaires gathered both primary and secondary data. The study found that knowledge management capabilities significantly influence the performance of commercial state corporations in Kenya. Specifically, infrastructure capabilities, process capabilities, innovation capability, and learning capability were identified as key drivers of improved organizational performance. The findings indicated that organizations that effectively develop and

leverage knowledge management systems, encourage learning, and promote innovation are more likely to achieve higher levels of efficiency, sustainability, and competitiveness.

2.4.2 Strategic Collaboration Capability and Organizational Performance

Tahili et al. (2025) explored the role of strategic collaboration approaches in enhancing capacity development in the health sector in Indonesia. The study adopted a sequential mixed-methods research design, targeting key stakeholders involved in healthcare delivery within Central Sulawesi Province. Data were collected using structured questionnaires. The findings revealed that all four dimensions of strategic collaboration significantly influence capacity development in health institutions. Specifically, strategic collaboration planning, collaborative leadership development, stakeholder collaboration capacity, and interorganizational collaboration were found to positively contribute to strengthening institutional capacity, improving service delivery, and enhancing overall performance within the healthcare sector.

Idolor, Adebisi, and Ifere (2025) examined the role of strategic capabilities in enhancing the performance of organizations in Nigeria. The study adopted a cross-sectional research design. The target population consisted of 618 organizations in Lagos State, Nigeria. The findings revealed that strategic capabilities significantly enhance organizational performance. Organizations that developed essential strategic capabilities and demonstrated entrepreneurial behaviors were better able to respond to market competition, technological disruptions, and operational challenges. The study also highlighted the importance of managers adopting a resilience-oriented approach to leverage internal capabilities and entrepreneurial traits effectively.

In the Indonesian financial sector, Moeliadi et al. (2025) examined the effect of collaboration capability on the sustainability of organizational performance. The study employed a quantitative research design, targeting private commercial institutions operating in Indonesia. Primary data were collected using structured questionnaires. The findings indicated that collaboration capability is a critical determinant of sustainable organizational performance, particularly in the context of growing competition from fintech firms. Organizations that effectively develop and leverage collaborative processes are better positioned to achieve long-term operational and

strategic success. Furthermore, digital capability was identified as a key enabler, directly enhancing both collaboration capability and performance sustainability. This suggests that digital tools and platforms not only facilitate more efficient and coordinated collaboration but also strengthen organizations' ability to maintain competitive performance over time.

Mtange and Deya (2024) examined the effect of strategic collaboration on the performance of firms in Kenya. The study adopted a descriptive research design, targeting firms operating in Kenya. Primary data were collected using structured questionnaires. The findings revealed that strategic collaboration significantly improves the performance of firms. The results showed that partnerships such as shared storage facilities, cooperative distribution networks, and specialized service sharing enhance operational efficiency and competitiveness. Furthermore, the analysis indicated that firms engaging in strategic collaboration were better able to adapt to market fluctuations, reduce operational risks, and achieve higher customer satisfaction, highlighting the comprehensive benefits of collaborative strategies on overall organizational performance.

In Kenya, Barasa and Simiyu (2024) examined the relationship between strategic collaboration and the performance of county governments in Kenya, using Busia County. The study adopted a descriptive case study research design. The target population comprised 2,880 employees of the Busia County Government. Primary data were collected using structured questionnaires. The findings revealed that both strategic inter-county collaboration and strategic public-private partnerships had a positive and significant relationship with county government performance. Collaborative initiatives such as joint planning, shared decision-making, and coordinated service delivery enhanced operational efficiency and service outcomes. Furthermore, the study indicated that open communication, continuous consultation, and consolidation of responsibilities across departments strengthened strategic collaboration, enabling the county government to achieve its performance objectives.

2.4.3 Talent Management Capability and Organizational Performance

In Pakistan, Shabeer and Mahmood (2025) examined the impact of talent management practices on the performance of firms in the Pakistani banking industry. The study

adopted a quantitative research design, and data were collected through a self-administered questionnaire. The findings revealed a weak but positive correlation between talent management practices and the performance of firms. The results suggest that other organizational and external factors also significantly influence performance outcomes. This implies that while talent management contributes to the performance of firms, its effectiveness depends on the broader organizational context. The study recommends the implementation of strategic HR policies, leadership development programs, and evidence-based decision-making to enhance the impact of talent management practices on the performance of firms.

Igwe, Obidigbo, and Dulora (2025) explored the relationship between talent management and the performance of firms in selected manufacturing firms in Anambra State, Nigeria. The study adopted a cross-sectional research design, focusing on workers from different departments within the firms. Data were collected through a structured questionnaire from a random sample of 123 workers drawn from a population of 320 employees. The findings revealed that the dimensions of talent management, talent attraction, talent development, and talent retention, have a positive and significant relationship with key performance outcomes, including job satisfaction, employee loyalty, and employee commitment. The results further indicated that manufacturing firms with the capacity and resources to attract talent are more likely to achieve higher employee job satisfaction than firms lacking these resources. This suggests that effective talent management practices, such as objective recruitment, appropriate rewards, job security, and investment in staff welfare, enhance the performance of firms by fostering employee satisfaction, loyalty, and commitment.

Mgbemena et al. (2022) investigated the effect of talent management on employee performance in pharmaceutical companies in Anambra State, Nigeria. The study adopted a survey research design focusing on staff from selected pharmaceutical firms in the South-South region of Nigeria. Data were collected through structured questionnaires from a sample of 353 respondents selected from a population of 1,800 employees. The findings revealed that talent retention, training and development, and talent attraction each have a significant influence on employee productivity. The

results further indicated that performance management systems significantly affect employee performance. This suggests that pharmaceutical companies that implement effective talent management practices—including retention strategies, participatory performance appraisals, comprehensive training programs, and competitive rewards—are better able to enhance employee productivity and overall organizational performance.

Nduhura et al. (2022) investigated the effect of talent management on the performance of firms at NWSC, Masaka, Uganda. The study adopted a descriptive survey research design, with data collected through structured questionnaires and interviews. The findings revealed a positive relationship between talent management and the performance of firms. Specifically, talent attraction was found to significantly enhance employee commitment and motivation, leading to higher productivity. Employee development initiatives, including training, mentorship, and coaching, were shown to improve skills and knowledge, positively influencing the performance of firms. Additionally, the study highlighted that fostering a supportive organizational culture that encourages innovation and participation strengthens the impact of talent management practices on the performance of firms.

Tomeyan and Mose (2025) explored on the influence of talent management on employee performance in private universities in Kenya. The study adopted a descriptive research design focusing on Vice Chancellors, registrars, and Deans of Schools from 30 private universities. Data were collected through structured questionnaires from a sample of 194 respondents selected using a stratified random sampling technique. The findings revealed that talent compensation has a positive and significant effect on employee performance in private universities in Kenya. The results further indicated that talent retention also has a positive and significant effect on employee performance. This suggests that private universities that implement effective compensation strategies and retention practices are better able to enhance employee motivation, commitment, and overall performance. The study recommends that management should implement continuous professional development programs, including advanced training, workshops, and certifications, to support career growth and ensure employees remain up-to-date with emerging trends in academia.

2.4.4 ICT Capability and Organizational Performance

In Italy, Bettiol et al. (2022) investigated the influence of information and communication technologies (ICT) on knowledge-related performance in manufacturing firms. The study adopted a quantitative research design using a survey method. The target population consisted of entrepreneurs, chief operations officers, and managers responsible for operational and technological processes in Italian manufacturing firms. Data were collected through structured questionnaires, with 206 participants indicating that their firms had adopted various ICT technologies. The findings revealed that ICT adoption has a significant positive relationship with knowledge-related performance, particularly in enhancing product and process development, job learning, product-related services, and customer involvement. This suggests that effective utilization of ICT enables manufacturing firms to improve knowledge creation, strengthen operational processes, and enhance the overall performance of organizations.

Jin, Chen and Li (2022) examined the influence of information and communication technology (ICT) capability on the performance of organizations in China. The study adopted a quantitative research design. The findings revealed that ICT capability positively affects the performance of organizations, with this relationship moderated by heterogeneous factors such as the firm's main market and industry characteristics. The results further indicated that ambidextrous innovation mediates the relationship between ICT capability and the performance of organizations, suggesting that firms leveraging ICT to support both exploratory and exploitative innovations are better able to enhance outcomes. This implies that effective ICT capability, combined with innovation practices, enables firms to improve the performance of organizations while adapting to industry and market conditions.

Mumin, Adam and Alhassan (2024) explored the influence of information and communication technology (ICT) capabilities on supply chain fraud and the performance of organizations in Ghana. The study adopted a quantitative research design. The findings revealed that ICT capabilities significantly reduce supply chain fraud and positively affect the performance of organizations. The results further indicated that supply chain fraud mediates the relationship between ICT capabilities

and the performance of organizations, suggesting that improved ICT capabilities help organizations minimize fraudulent practices while enhancing organizational performance. This implies that strengthening ICT capabilities enables organizations to improve supply chain transparency, reduce fraud-related risks, and promote practices that enhance the performance of organizations.

In Kenya, Gitau, Nzuki, and Musau (2022) investigated the effects of IT capability on the performance of organizations in Nairobi City County, Kenya. The study adopted a positivism philosophical approach with descriptive and explanatory research designs, focusing on managers and staff. Data were collected through a semi-structured questionnaire from a sample of 222 organizations selected using stratified and random sampling techniques. The findings revealed that IT infrastructure capability, IT personnel capability, IT management capability, and IT reconfiguration capability each have a positive and significant effect on the performance of organizations. This suggests that organizations that develop robust IT capabilities are better able to enhance operational efficiency, innovation adoption, and competitive advantage. The study recommends that managers implement targeted interventions to strengthen IT capabilities, thereby sustaining superior performance of organizations.

2.4.5 Organizational Performance

Saputra et al (2024) examined organizational performance capacity enhancement through a systematic review of existing literature in Pakistan. The study adopted a systematic review research design. The target population consisted of previously published scholarly studies focusing on organizational performance, innovation, knowledge management, technology adoption, and sustainability within organizations, particularly in the public sector. Data were collected through a systematic identification, screening, and analysis of relevant academic literature and research publications. The findings revealed that factors such as innovation, human resource management, knowledge management, sustainability, and technology adoption significantly contribute to enhancing organizational performance capacity. The results further indicated that strategic components including individual expertise, transformational leadership, and a collective organizational vision play a critical role in promoting innovation and knowledge acquisition. The study also established that

integrating absorptive capacity with strategic elements creates a conceptual framework that strengthens organizational performance, particularly in the public sector.

In Indonesia, Gutterman (2023) examined the conceptualization and measurement of organizational performance and the frameworks used to evaluate it within organizations. The study adopted a conceptual research design. The target population consisted of previously published scholarly works, theoretical frameworks, and organizational performance measurement models in management and organizational studies. Data were collected through secondary sources including academic publications, books, and organizational performance reports. The findings revealed that organizational performance has traditionally been measured using financial indicators such as profitability, return on assets, return on equity, market share, and sales growth. However, the results further indicated that modern performance evaluation increasingly incorporates non-financial indicators that address stakeholder expectations and sustainability considerations.

Sarwar and Khattak (2024) examined the various aspects and dimensions of organizational performance in Pakistan. The study adopted a qualitative exploratory literature review research design. The target population consisted of previously published academic studies, management literature, and organizational performance frameworks in business and management research. Data were collected through secondary sources by reviewing a wide range of scholarly articles, books, and research publications related to organizational performance. The findings revealed that organizational performance is a multidimensional concept with several key dimensions. The results identified knowledge creation performance, environmental performance, financial performance, marketing and sales performance, product quality performance, corporate social responsibility performance, and production performance as the primary aspects of organizational performance.

In Nigerai, Odiri and Ideh (2021) examined tacit knowledge, motivational incentives, participative leadership, and workers' competence as determinants of organizational performance. The study adopted a quantitative research design. The target population consisted of employees working in selected service firms in Nigeria. Data were collected using structured questionnaires administered to the employees. The findings

revealed that tacit knowledge and participative leadership had the highest factor loadings, making them the strongest predictors of organizational performance. Correlation analysis further indicated that tacit knowledge and participative leadership contribute positively to organizational performance, while workers' competence and motivational incentives were found to have a negative effect. This implies that managing tacit knowledge effectively, while promoting participative leadership, can enhance organizational performance, though attention must also be paid to integrating workers' competence and motivational incentives to support overall performance outcomes.

In Kenya, Mutungi (2022) explored on the organizational performance of local contractors in the Kenya construction industry. The study adopted a quantitative research strategy with a survey research design. The target population comprised local contractors registered under NCA1, NCA2, and NCA3 categories, as well as consultants who had worked with these contractors on current or previous projects. Data were collected using structured questionnaires. The findings revealed that the overall organizational performance of local contractors in Kenya was suboptimal. The determinants of performance, representing the internal and external environment. The results further indicated significantly strong positive relationships between these determinants and the dimensions of organizational performance. This implies that enhancing both the internal capabilities and the external operating environment of local contractors can improve their organizational performance.

Simon, Njuguna and Kivaa (2021) explored on the organizational performance of local contractors in the Kenya construction industry. The study adopted a survey research design. The target population included all NCA1, NCA2, and NCA3 registered contractors, with consultants included to provide an external perspective and reduce evaluation bias. Data were collected using structured questionnaires. The findings revealed that the highest performing indicator was project durability while the lowest was net profit margin. Overall, the organizational performance of local contractors was calculated at 63.74%, indicating a moderately high performance level but with significant room for improvement. This implies that while local contractors demonstrate strength in quality and client satisfaction, greater attention is needed on

financial outcomes and employee satisfaction to enhance overall organizational performance.

2.4.6 Moderating Effect of Organizational Structure on Dynamic Capabilities and Organizational Performance

In China, Wang et al. (2025) examined the influence of dynamic capabilities on business model innovation in project-driven enterprises, with organizational structure introduced as the moderating variable. The study adopted a quantitative research design targeting employees from four project-driven companies operating across 26 cities, including Beijing, Tianjin, Guangzhou, and Shenzhen. Data were collected using structured questionnaires. The findings revealed that dynamic capabilities positively influence business model innovation, while organizational structure significantly moderated this relationship. Specifically, flexible and efficient organizational structures strengthened the ability of enterprises to leverage dynamic capabilities in enhancing business model innovation. The study further demonstrated that organizations with adaptive structural arrangements are better positioned to respond to changing operational environments and support innovation-oriented initiatives.

In Brazil, Castelo and Gomes (2023) assessed the relationship between the implementation of administrative reforms and organizational performance in public organizations, with a focus on the mediating role of dynamic capabilities and the moderating role of organizational structure. The study adopted a quantitative survey research design targeting public officials and managers working in public organizations in the State of Ceará, and data were collected using structured questionnaires. The findings revealed that dynamic capabilities play a decisive role in the successful implementation of administrative reforms and in aligning organizational outcomes with stakeholder needs. In addition, organizational structure significantly moderated this relationship, indicating that flexible, efficient, and well-coordinated organizational structures strengthen the effectiveness of dynamic capabilities in translating administrative reforms into improved organizational performance. The study further identified two levels of dynamic capabilities and proposed a roadmap for their effective implementation, implying that strengthening dynamic capabilities

within supportive organizational structures enhances the impact of administrative reforms on organizational performance.

In Nigeria, Okoisama and Oshi (2025) undertook a study to examine the relationship between dynamic capabilities, sensing, seizing, and reconfiguring capabilities, and the economic sustainability of petroleum tank farms, with organizational culture introduced as a moderating variable. A cross-sectional survey research design was employed, targeting a population of 820 middle- and top-level managers drawn from 29 petroleum tank farms in the South-South region of Nigeria, with data collected using structured questionnaires. The findings revealed a strong positive and significant relationship between sensing capabilities and economic sustainability, indicating that the ability to gather and interpret market information is critical for sustainability outcomes. Seizing capabilities showed a weak but statistically significant positive relationship with economic sustainability, while reconfiguring capabilities exhibited a weak positive but statistically insignificant relationship. Further, organizational culture was found to significantly moderate these relationships, suggesting that supportive, adaptive, and innovation-oriented cultures enhance the effectiveness of dynamic capabilities in driving economic sustainability outcomes.

In Kenya, Korwa (2025) investigated the relationship between dynamic capabilities and the performance of quality management systems (QMS) in manufacturing companies, with organizational learning orientation introduced as a moderating variable. The study adopted a mixed-methods research design targeting 187 manufacturing companies across various industrial sectors in Kenya. Data were collected using structured questionnaires and semi-structured interviews. The findings revealed that all three dimensions of dynamic capabilities—reconfiguring, sensing, and seizing—positively influence QMS performance, with reconfiguring capabilities having the strongest effect, followed by sensing and seizing capabilities. Qualitative findings further indicated that firms with strong dynamic capabilities were better able to adapt their QMS to changing market conditions, integrate innovative quality practices, and transform quality management from a compliance-focused activity into a strategic organizational capability. In addition, organizational learning orientation was found to significantly moderate the relationship between dynamic capabilities and

QMS performance, strengthening the ability of firms to translate dynamic capabilities into improved quality management outcomes.

2.5 Critique of Reviewed Literature

Various research studies have explored the relationship between dynamic capabilities and organizational performance across different regions. For instance, Castelo and Gomes (2023) investigated the role of dynamic capabilities on the effectiveness of organizational changes in the public sector in Brazil. The study found that dynamic capabilities play a decisive role in implementing government policy proposals and help public organizations align their outcomes with stakeholders' needs. However, this study focused on public organizations in Brazil, and its findings may not be directly applicable to other sectors or countries.

A convergent theme emerges in Niamat and Qureshi (2025), who examined the relationship between dynamic capabilities, sensing, seizing, and reconfiguring, and environmental performance in high-tech SMEs in Pakistan. Their findings align with Castelo and Gomes (2023) in confirming that dynamic capabilities significantly enhance organizational performance outcomes, particularly through improved responsiveness and alignment with environmental demands. However, divergence is observed in the sectoral focus, as Niamat and Qureshi's study is limited to high-tech SMEs, indicating that contextual factors may influence how strongly different capability dimensions affect performance outcomes across sectors.

Similarly, Okoisama and Oshi (2025) in Nigeria found that sensing and seizing capabilities positively influence economic sustainability in petroleum tank farms, while reconfiguring capabilities had no significant direct effect. These findings partially converge with both Castelo and Gomes (2023) and Niamat and Qureshi (2025), particularly on the importance of sensing capabilities in enhancing organizational responsiveness and sustainability outcomes. However, divergence is evident in the weak or insignificant role of reconfiguring capabilities, suggesting that the effectiveness of specific dynamic capability dimensions may vary depending on industry characteristics and operational environments.

In South Africa, Fatoki (2021) established that sensing, learning, and coordinating capabilities significantly enhance performance in hospitality firms. These findings converge with those of Castelo and Gomes (2023), as well as Niamat and Qureshi (2025), in confirming that dynamic capabilities positively influence organizational performance through improved efficiency, coordination, and adaptability. Similarly, they align with Okoisama and Oshi (2025), who emphasized the importance of sensing capabilities in driving organizational sustainability outcomes. However, divergence arises in the specific configuration of capabilities, as learning and coordinating capabilities are more strongly emphasized in hospitality settings compared to the public sector, SMEs, and petroleum tank farms, highlighting sector-specific differences in capability relevance and application.

In Kenya, Korwa (2025) found that sensing, seizing, and reconfiguring capabilities positively influence quality management system performance in manufacturing firms, with reconfiguring having the strongest effect. These findings strongly converge with those of Castelo and Gomes (2023), Niamat and Qureshi (2025), and Fatoki (2021), which collectively confirm that dynamic capabilities enhance organizational performance across different contexts. They also partially align with Okoisama and Oshi (2025), particularly on the importance of sensing capabilities, although differences exist in the role of reconfiguring capabilities. However, divergence is noted in the magnitude of effects across capability dimensions and in the manufacturing context, which differs significantly from public sector, SME, and service-oriented healthcare institutions.

Further, Gathambo and Muchemi (2025) found that innovative capability, technical knowledge ability, learning culture ability, and service quality ability significantly enhance performance in commercial banks in Nairobi City County. These findings converge with earlier studies, particularly Fatoki (2021) and Korwa (2025), in reinforcing the positive relationship between dynamic capabilities and organizational performance, especially through learning, innovation, and coordination-related capabilities. They also align with the broader evidence from Castelo and Gomes (2023) and Niamat and Qureshi (2025), which highlight the role of capability development in improving organizational outcomes. However, divergence exists in the financial sector

focus, which operates under different regulatory, technological, and performance measurement frameworks compared to public health institutions, reinforcing the contextual gap this study seeks to address.

2.6. Research Gaps

While numerous studies have explored the relationship between dynamic capabilities and organizational performance, most have been limited to specific countries, sectors, and organizational contexts. For example, Castelo and Gomes (2023) focused on public organizations in Brazil, examining how dynamic capabilities influence the implementation of government policies. Similarly, Niamat and Qureshi (2025) investigated high-tech SMEs in Pakistan and found that sensing, seizing, and reconfiguring capabilities enhance environmental performance, with sensing capabilities having the strongest effect. In Nigeria, Okoisama and Oshi (2025) studied petroleum tank farms and reported that sensing capabilities significantly enhance economic sustainability, while reconfiguring capabilities had no direct effect. Fatoki (2021) examined hospitality firms in South Africa and highlighted the importance of sensing, learning, and coordinating capabilities in improving operational efficiency and service quality. These studies demonstrate that while dynamic capabilities play a critical role in enhancing organizational performance, their findings are highly context-specific. Differences in economic development, regulatory frameworks, organizational objectives, and operational environments limit the generalizability of these results to other sectors or countries.

In Kenya, research on dynamic capabilities has primarily focused on manufacturing firms and commercial banks. Korwa (2025) found that reconfiguring, sensing, and seizing capabilities significantly influenced quality management system performance in manufacturing companies. Gathambo and Muchemi (2025) reported that innovative capability, technical knowledge, learning culture, and service quality positively affected the performance of commercial banks. However, the healthcare sector, particularly referral hospitals, has unique objectives, performance measures, and organizational structures that differ markedly from these industries. Consequently, the findings from manufacturing and banking studies cannot be directly applied to hospitals. This study, therefore, addresses this gap by examining the influence of

selected dynamic capabilities, knowledge management capability, strategic collaboration capability, talent management capability, and ICT capability, on the performance of referral hospitals in Kenya, while considering the moderating role of organizational structure.

2.7. Summary of the Literature Reviewed

The present research was guided by knowledge-based theory, systems theory, RBV theory, technology acceptance theory and Dynamic capability theory. The Knowledge-Based View (KBV) theory was used to assess the relationship between knowledge management capabilities and organizational performance in referral hospitals in Kenya. Systems theory was deployed to assess correlation between strategic collaboration capability and organizational performance of referral hospitals in Kenya. In addition, resource-based view was employed to examine association between talent management capability and organizational performance of referral hospitals in Kenya. Technology Acceptance Theory was utilized to evaluate the relationship between ICT capabilities and organizational performance in referral hospitals in Kenya. Dynamic capability theory was used as the main theory to show the relationship between dynamic capabilities and organizational performance of referral hospitals in Kenya. Dynamic capabilities include knowledge management capability, strategic collaboration capability, talent management capability and ICT capability.

The empirical literature showed that dynamic capabilities (knowledge management capability, strategic collaboration capability, talent management capability and ICT capability) influence organizational performance. The literature revealed that knowledge management capability (acquisition of knowledge, sharing the knowledge and storing the knowledge) influence organization performance. In addition, strategic collaboration capability (building coalition, partnership in training and sharing of medical information) influences organization performance. Further the literature revealed that talent management capability (talent attraction, talent development and talent retention) influences organization performance. The literature also revealed that ICT capability (electronic communication, electronic consultation and electronic payments) influence organization performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines methods and techniques employed in the research. It covers the research design, study population, sampling frame, sample size, and sampling procedure. Additionally, it discusses the research instruments, pilot testing, and the validity and reliability of these instruments. The chapter also details data collection procedures, data analysis methods, and the statistical measurement models to be used in the analysis and presentation of the data.

3.2 Research Philosophy

Research philosophy entails the beliefs and principles guiding a researcher's approach to conducting and interpreting research. It influences the choice of methods, data collection, and analysis techniques. According to Bell, Harley and Bryman (2022), research philosophies include positivism, interpretivism, pragmatism, and critical realism. This study adopted a positivism research philosophy, which views reality as stable and objectively observable without interference. Positivism research philosophy is a scientific approach that emphasizes observation and measurement of objective reality (Babbie, 2021). It assumes that social and natural phenomena follow consistent laws that can be quantified and analyzed. Researchers adopting positivism typically use quantitative methods, such as surveys and experiments, to collect numerical data and test hypotheses, aiming for objective and generalizable findings.

The use of the positivism research philosophy is appropriate for a study examining the influence of selected dynamic capabilities on the performance of referral hospitals in Kenya, as moderated by organizational structure. Positivism emphasizes the collection of objective, measurable data, which aligns with the study's focus on quantifying the relationship between dynamic capabilities and organizational performance. By employing instruments such as questionnaires, the study can generate numerical data that allow for statistical analysis of these relationships, ensuring objectivity, reliability, and generalizability of the findings across referral hospitals. Furthermore, positivism enables the identification of patterns and causal links, which is essential for

understanding how organizational structure may moderate the effect of dynamic capabilities on organizational performance.

3.3 Research Design

Research design refers to the overall plan or strategy that guides the researcher in conducting a study and addressing research questions or objectives. It encompasses decisions about the research approach, data collection methods, sampling techniques, and data analysis procedures (Bell, 2022). The research design is crucial as it ensures that the study is structured in a systematic and methodical manner, allowing researchers to collect relevant and reliable data to answer their research questions effectively (Bryman, 2022). The study adopted both descriptive research design and explanatory research design. Descriptive research design is a method that systematically describes the characteristics of a population, phenomenon, or situation, often using surveys, observations, or existing data (Bell, Harley & Bryman, 2022). It focuses on “what exists” rather than exploring cause-and-effect relationships and is justified when the objective is to obtain an accurate snapshot of current conditions or trends to inform decision-making (Saunders, Lewis & Thornhill, 2023). This design has been applied in related studies, such as Haji, Ooko and Katiti (2024), who examined the effect of dynamic capabilities on the performance of SACCOs in Mandera County, Kenya, and Masinde, Otinga and Miroga (2023), who investigated dynamic capabilities and the performance of pharmaceutical firms in Nairobi County, Kenya.

Explanatory research design was employed in this study to provide a deeper understanding of relationships among variables. It focuses on establishing cause-and-effect linkages between variables (Neuman, 2022). The design explains how and why particular phenomena occur. The design is appropriate as the study seeks to determine the influence of dynamic capabilities on performance. It also enables the examination of the moderating effect of organizational structure on this relationship (Kothari, 2023). It has been applied in related studies, such as Rono et al. (2021), who examined the effect of dynamic capabilities on competitive advantage of manufacturing firms in Nairobi, Kenya, and Muthoka and K’Obonyo (2021), who also investigated how

dynamic capabilities influence competitive advantage among manufacturing firms in Nairobi City County.

3.4 Target Population

Target population is defined as a set of events, services or people, group of households or things that a researcher seeks to examine (Greene & Dreyer, 2021). Target population of the study comprised of 47 County referral hospitals and 6 national referral hospitals in Kenya. The unit of observation was 159 individuals that comprised of 47 County referral hospitals' CEOs/Chief administrators, 47 County referral hospitals' Medical/clinical services in charge, 47 County referral hospitals' nursing in charge, 6 national referral CEOs/Chief administrators, 6 national referral Medical/clinical services in charge and 6 national referral hospitals' Nursing in Charge. This unit of observation was appropriate as it included key decision-makers and departmental heads with in-depth knowledge of hospital operations and performance. Their roles in strategic management and service delivery enabled them to provide reliable and relevant information required for the study.

Table 3. 1: Target Population

Unit of analysis		Unit of observation	Target Population
County referrals	47	CEOs/Chief administrators	47
		Medical/clinical services in charge	47
		Nursing in Charge	47
National referrals	6	CEOs/Chief administrators in	6
		Medical/clinical services in charge	6
		Nursing in Charge	6
Total	53		159

3.5 Sampling Frame

A sampling frame refers to a register or list of records where a sample is drawn. Field (2024) defines sampling frame as a comprehensive register of all individuals within a population who are eligible for inclusion in a sample, potentially including individuals, institutions or households. Sampling frame is essential for accurately identifying every member of the population and ensuring that each individual has an equal chance of being chosen for the sample. The sampling frame of this study was all the 159 individuals that comprised of 47 County referral hospitals' CEOs/Chief

administrators, 47 County referral hospitals' Medical/clinical services in charge, 47 County referral hospitals' nursing in charge, 6 national referral CEOs/Chief administrators, 6 national referral Medical/clinical services in charge and 6 national referral hospitals' Nursing in Charge. Senior managers were the most appropriate respondents in this study because they hold key leadership positions within the organization and are responsible for shaping strategic decisions and guiding the implementation of organizational initiatives. As such, they possess valuable insights into the dynamic capabilities of the hospital, including knowledge management capabilities, strategic collaboration capabilities, talent management capability and ICT capability. In addition, senior managers play a crucial role in shaping the organizational structure and decision-making processes within the hospital. As stewards of organizational governance, they have a deep understanding of the hospital's structural arrangements, such as hierarchical levels, reporting relationships, and decision-making authority.

3.6 Sampling Technique

Since the target population for this study is small, a census was conducted, meaning that the entire population was included in the study. A census is particularly suitable for small populations. According to Saunders, Lewis and Thornhill (2023), census sampling eliminates sampling error and is advantageous for small populations, providing data on every individual within the population. As described by Bryman (2022), a census is a quantitative research method where every member of the population is enumerated. It involves a complete count of the population, including every unit in the data collection. The primary advantage of a census is that it yields accurate and reliable results, reducing the potential for errors compared to results derived from sampling.

3.7 Data Collection Instruments

Both primary and secondary data were used in the study. Data gathered by someone apart from the user is referred to as secondary data (Latwal, 2020), commonly sourced from government departments and organizational records. In this study, secondary data was obtained from annual reports of health facilities and County Governments. A

data extraction checklist was used to collect data on health facility turnaround time and patient satisfaction index (Appendix II). As Bryman (2022) notes, a data extraction checklist is a structured tool that enables researchers to systematically collect and record specific information from existing sources, ensuring consistency, accuracy, and completeness. Secondary data complemented the primary data by providing historical context and trends, filling gaps that might not be captured through questionnaires, and allowing for a more comprehensive understanding of health facility performance over time.

Babbie (2021) defines primary data as information gathered directly from original sources that have not been processed or altered. This study utilized semi-structured questionnaires to collect data from respondents, incorporating both open-ended and closed-ended questions. The open-ended questions allowed participants to provide in-depth and personal insights without restrictions, while the structured questions enabled straightforward responses that were easier to analyze. A 5-point Likert scale was employed for variables to capture the degree of agreement or perception, providing nuanced responses that reflect subtle variations in participants' attitudes and experiences. Nominal scales were used for demographic information. The questionnaires also facilitated anonymity, which was important given the sensitivity of some information, and ensured cost-efficient data collection from a larger sample (Bell, 2022). The unstructured questions on the other hand were deployed as they motivate participants to provide felt and in-depth answers without feeling hindered in disclosing any information. Bell (2022) reveals that questionnaire facilitates anonymity and is cost efficient in gathering information specifically from a wider group of participants. In present study, questionnaires were utilized as anonymity component since some of the required information is sensitive.

The questionnaire employed was grouped into 7 parts. Part one focused on respondents' socio-demographic information. Second to fifth parts mainly focused on independent variables (knowledge management, strategic collaboration, talent management capability, ICT capability). In addition, sixth section only focused on moderating variable (organizational structure) while last section merely focused on dependent variable (organizational performance).

3.8 Pilot Testing

To assess the reliability and validity of the data collection tools, a pilot test was undertaken. Pilot testing helps identify and resolve potential issues in the research instruments, estimate the time required for participants to complete the survey, and ensure that questions are clear and understandable. In this study, the pilot test included 16 staff members, representing 10% of the intended sample size, in line with Neuman's (2022) recommendation for pilot studies. The pilot was conducted at Thika Level 5 Hospital, a facility not included in the target population, and the respondents from the pilot group were excluded from the main study. The insights gained from the pilot test were used to refine the questionnaire. Specifically, some questions were reworded for clarity, ambiguous items were removed, and the sequence of sections was adjusted to improve the logical flow of the survey. Additionally, the Likert scale was standardized to range from 1 (strongly disagree) to 5 (strongly agree) to ensure consistency and improve interpretability of responses. The pilot data collection took place from 19th to 23rd April 2022 and was instrumental in enhancing the reliability and validity of the final research instruments. Data gathered during the pilot was not included in the main analysis.

3.8.1 Validity of Research Instruments

As stated by Creswell (2020), validity refers to the extent to which the results of data analysis accurately reflect the phenomenon being studied. In this study, validity was enhanced through expert review of the questionnaire to ensure content relevance and clarity, as well as through pretesting during the pilot study. Potential threats to validity included ambiguous questions, respondent misunderstanding, measurement bias, and response bias, where participants might provide socially desirable answers. These threats were mitigated by refining unclear items, providing clear and standardized instructions, ensuring anonymity of responses, and using consistent and well-structured response scales such as the standardized 5-point Likert scale. These measures helped ensure that the instruments accurately captured the intended information while minimizing distortions.

The study adopted three types validity: content validity, face validity, and construct validity. Face validity concerns the likelihood that a question may be misunderstood or misinterpreted. Face validity was enhanced by conducting a pilot test and revising any ambiguous or unclear questions. Adams (2014) suggests that pre-testing is an effective method to enhance face validity. Content validity, also known as logical validity, assesses how thoroughly a measure covers all aspects of the social construct being studied. To improve content validity in the current study, expert opinions, including those of supervisors, were sought.

Construct validity entails assessing how well an item is developed and is operationalized to measure a particular construct (Field, 2024). Construct validity evaluation need to examine the association of the measure being assessed with variables said to be correlated or theoretically correlated to the construct gauged by instrument. According to Creswell and Creswell (2022), for the items to have construct validity, they need to explain a variance of 0.5 or above towards the construct. The AVE for the construct also should be above 0.4 (Neuman, 2022). SPSS Analysis of Moment Structures (AMOS) version 24 was used to provide statistics for the testing of construct validity.

3.8.2 Reliability of Research Instruments

Reliability assesses whether the evaluation tool produces consistent outcomes when used repeatedly with similar subjects in similar settings. In this study, internal consistency was used to measure reliability (Bell et al., 2022), which examines the correlation between items intended to measure the same construct. Cronbach's alpha, the most commonly used method for assessing internal consistency, was employed, with a value of 0.7 or higher considered acceptable (Greene & Dreyer, 2021). The Cronbach's alpha values obtained for the study constructs were all above 0.7, indicating high internal consistency. This implies that the research instruments provided reliable measurement of the constructs, ensuring that the data collected would yield consistent and dependable results across respondents.

3.9 Data Collection Procedure

Prior to fieldwork, a letter of introduction was obtained from the School of Business at Jomo Kenyatta University of Agriculture and Technology (JKUAT), followed by a transmittal letter from the National Commission for Science, Technology, and Innovation (NACOSTI). Permission was then requested from the management of all referral hospitals in Kenya, both national and county. The researcher employed four trained research assistants who were briefed on the study objectives and data collection procedures. The drop-off and pick-up method was used, allowing respondents two weeks to complete the questionnaires before collection. This method was chosen due to the limited availability of healthcare professionals. Respondents were encouraged to answer the questions honestly and thoroughly, and strict confidentiality was maintained to protect their identities.

To address potential non-responses and incomplete questionnaires, the researcher implemented several strategies to ensure maximum participation. Follow-ups were conducted through phone calls, emails, and, where possible, in-person reminders to encourage timely and complete submission of the questionnaires. Respondents who had not returned their forms within the two-week period were gently reminded and given additional time to respond if needed. Ethical safeguards were strictly observed throughout the data collection process. Informed consent was obtained from all participants, clearly explaining the purpose of the study, their voluntary participation, and their right to withdraw at any time. Respondent anonymity was ensured by assigning codes to questionnaires instead of using personal identifiers, and all data was stored securely to prevent unauthorized access. Additionally, participants were assured that the information they provided would be used solely for research purposes and would not affect their employment or professional standing.

3.10 Data Analysis and Presentations

The research instrument, semi-structured questionnaire, generated both quantitative data and qualitative data were. Thematic analysis was employed in qualitative data analysis from the open ended questions (Kothari, 2023). The most common types of qualitative research analysis were thematic analysis. The aim of thematic analysis is

to establish patterns and themes in the data that are interesting or important, and utilize these themes in order to say something concerning an issue or address the research (Creswell & Creswell, 2022). This is more than just making a summary of the data; the most effective thematic analysis interprets and makes sense of data by focusing on identifying, examining, and recording "themes" or patterns within it. Themes are crucial patterns within data sets that help describe phenomena and are related to specific research questions. These themes serve as categories for analysis. The results from the qualitative data analysis were presented in narrative form supported by use of direct quotations.

Descriptive and inferential statistics were utilized to analyze the quantitative data, with the support of SPSS version 24. To explain the outcomes, in relation to dependent indicators, moderating, independent factor and general information from respondents' descriptive statistics were employed for data analysis. These descriptive statistics included percentages, mean, frequency distribution and standard deviation. Inferential statistics consisted of univariate regression analysis, Pearson correlation as well as multivariate regression analysis. Testing of hypothesis was conducted using p-value since it gives more insight into the significance of a decision and helps in decision concerning null hypothesis. Moreover, significance level (0.05) was employed as it is the most used level in strategic management. This implies that the findings are at a confidence level of 95% and this was deployed in present study. Interpretation of p-value acquired was done based on significance level or alpha level.

Secondary data on health facility turnaround time and patient satisfaction index were analyzed using percentages and trend analysis. Percentages were used to summarize and present the proportion of facilities meeting specific performance benchmarks, providing a clear snapshot of operational efficiency and patient satisfaction levels. Trend analysis was applied to examine changes over time, highlighting patterns and shifts in service delivery and patient experiences across the health facilities. Trend analysis is a statistical technique used to examine data over a period of time in order to identify patterns, directions, or movements (Schindler, 2021). This approach allowed the study to identify both current performance levels and historical trends,

offering a comprehensive understanding of facility efficiency and customer satisfaction.

To ensure the credibility and robustness of the findings, triangulation was employed by combining multiple data sources and analysis methods. Quantitative data from the semi-structured questionnaires were analyzed using descriptive and inferential statistics, while qualitative data from open-ended questions were subjected to thematic analysis to identify patterns, themes, and insights (Neuman, 2022). Secondary data on health facility turnaround time and patient satisfaction index were analyzed using percentages and trend analysis to provide historical context and operational benchmarks. By comparing and integrating findings from these different sources and methods, the study was able to cross-validate results, reduce potential biases, and provide a more comprehensive understanding of how dynamic capabilities, organizational factors, and service delivery influence performance and patient satisfaction.

3.11 Model Specification

Multiple linear regression analysis was employed to determine the relationship between the independent and dependent variable alongside with the moderating effect of organizational structure. The multiple linear regression analytical equation model was;

$$(i) \quad y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where;

Y = Organizational performance in referral hospitals in Kenya;

β_0 =Constant;

β_1 - β_4 = Beta Coefficients of determination;

X_1 = Knowledge management capability;

X_2 = Strategic collaboration capability;

X_3 = Talent management capability;

X_4 = ICT capability;

ε = Error term (errors in the estimation of X_{1-4} and Y)

Moderating effect was computed to test hypothesis five of the study; that is; **H₀₅**: Organizational structure has no statistically significant moderating effect on the influence of dynamic capabilities on organizational performance of referral hospitals in Kenya.

Moderator variable refers to a variable that can affect strength as well as direction of the relationship between an independent variable and a dependent variable (Field, 2024). It can either enhance or diminish the strength of this association, and it can also change the direction of the relationship from positive to negative or vice versa (Greene & Dreyer, 2021).

Moderation analysis was computed by use of hierarchical regression, whereby compounded standardized scores of dynamic capabilities; denoted as X_5 in the moderation model and organizational performance of referral hospitals relationship was computed first, followed by (organizational structure-Moderator-M), then lastly, interaction term, subsequently. The product term, sometimes referred to as the interaction term, was created by multiplying the compounded standardized scores of dynamic capabilities construct and transformed standardized scores of organizational structure-Moderator (M).

The moderation analytical equation model based on hierarchical regression analysis is;

$$(ii) \quad y = \beta_0 + \beta_5 X_5 + \beta_6 M + \beta_7 (X_5 * M) + \epsilon$$

Where:

y = Organizational performance of referral hospitals in Kenya;

β_0 is constant;

β_5 is the beta coefficient of X_5 (compounded scores of dynamic capabilities)

β_6 is the beta coefficient of the moderator (organizational structure)

M is the hypothesized moderator (organizational structure);

B₇ is the beta coefficient of ($X_5 * M$); the interaction term between compounded scores of dynamic capabilities- X_5 and the moderator (organizational structure).

ε is an error term; (errors in the estimation of X_5 , M and y)

NB: The statistical correctness of this moderation model is based on the assumptions that;

(i) X_5 should have statistically significantly predicted M in linear regression analysis

(ii) M should have statistically significantly predicted y in linear regression analysis

3.11.1 Diagnostic Tests (Multiple regression model assumptions)

Diagnostic tests are procedures used to assess whether a statistical model or dataset meets the underlying assumptions required for valid analysis (Bell, 2022). In research and statistics, diagnostic tests are also used to assess the assumptions, quality, and validity of data or models, such as checking for normality, multicollinearity, heteroscedasticity, or model fit before conducting further analysis. In this study, diagnostic tests were conducted to evaluate four key assumptions: linearity, multicollinearity, multivariate normality and homoscedasticity.

3.11.1.1 Multicollinearity Test

Multicollinearity in regression occurs when two or more independent variables in a model are highly correlated, implying that one variable can be predicted from the others with a certain level of accuracy (Neuman, 2022). Detecting multicollinearity is important because high correlations among predictors can distort the estimation of regression coefficients, inflate standard errors, and reduce the reliability of hypothesis testing. In this study, the null hypothesis for the multicollinearity test was that there is no multicollinearity among the independent variables, while the alternative hypothesis stated that multicollinearity exists among the independent variables.

Multicollinearity was assessed using the Variance Inflation Factor (VIF) and tolerance metrics. Tolerance measures the proportion of variance in an independent variable not explained by other independent variables, while a VIF value greater than 10 indicates potential multicollinearity (Saunders et al., 2023). If violations of the assumption were detected, corrective measures such as removing highly correlated variables, combining related variables into indices, or applying principal component analysis would be undertaken to ensure the regression model produced reliable and interpretable results.

3.11.1.2 Linearity Test

Regression analysis assumes a linear relationship between the predictor variables (independent variables) and the dependent variable (Latwal, 2020). Testing for linearity is important because violation of this assumption can lead to biased estimates, incorrect conclusions, and reduced predictive accuracy of the model. The null hypothesis for the linearity test was that there is a linear relationship between the independent and dependent variables, while the alternative hypothesis stated that the relationship is non-linear.

In this study, linearity was assessed using scatter plots, which plot the residuals on the horizontal (X) axis and the predicted or observed Y values on the vertical (Y) axis (Creswell, 2020). A linear pattern in the scatter plot indicates that the assumption of linearity is met. If the scatter plot revealed a non-linear pattern, corrective measures such as variable transformation (logarithmic or polynomial transformation) or inclusion of interaction terms would be applied to achieve linearity and ensure valid regression results.

3.11.1.3 Heteroscedasticity Test

In linear regression analysis, the presence of heteroscedasticity can compromise the reliability of results by producing biased and inefficient coefficient estimates, which may lead to incorrect inferences (Saunders et al., 2023). Testing for heteroscedasticity is therefore important to ensure that the variance of the error terms remains constant across all levels of the independent variables, a key assumption of regression analysis. The null hypothesis for the test states that the variance of the error term is constant (homoscedasticity), while the alternative hypothesis asserts that the variance of the

error term varies across observations (heteroscedasticity). This study employed the Breusch-Pagan test to detect heteroscedasticity. If heteroscedasticity is detected, corrective measures such as applying robust standard errors, transforming variables, or using weighted least squares regression would be undertaken to stabilize the variance and ensure valid and reliable regression results.

3.11.1.4 Normality Test

Assessing normality is essential in regression analysis because many statistical tests, including t-tests and F-tests, assume that the variables or residuals are normally distributed. Violation of this assumption can lead to biased estimates, incorrect significance tests, and unreliable conclusions (Schindler, 2021). The null hypothesis for the normality test states that the data follows a normal distribution, while the alternative hypothesis asserts that the data does not follow a normal distribution. In this study, the Shapiro-Wilk test was employed to evaluate the normality of the variables. A p-value greater than the selected significance level (0.05) indicates that the data is normally distributed, whereas a p-value below 0.05 suggests a deviation from normality. If violations of normality were detected, corrective measures such as variable transformation (logarithmic or square root transformations) or using non-parametric statistical techniques would be applied to ensure the validity and robustness of the regression results.

3.11.2 Hypothesis Testing

Hypotheses were evaluated using multiple linear regression analysis. At a 95% confidence level and a significance threshold of 0.05, an independent variable was deemed to have a significant effect on the dependent variable if the p-value was below 0.05. For illustration purposes, the study tested five hypotheses (H_{01} , H_{02} , H_{03} , H_{04} , H_{05}), all stated in null form and evaluated at a significance level of $p < 0.05$ using multiple regression analysis. Prior to hypothesis testing, categorical data were statistically transformed into continuous data using SPSS to facilitate correlation, linear, and multiple regression analyses. The following procedure was adopted for testing the hypotheses;

Example in testing hypothesis one;

Null hypothesis (**H₀₁**): Knowledge management capability has no statistically significant influence on organizational performance of referral hospitals in Kenya

H_{a1}: There is statistically significant influence of knowledge management capability on organizational performance of referral hospitals in Kenya

H₀₁: $\beta_1=0$; and H_a: $\beta_1 \neq 0$ and test statistic set at $p < 0.05$ significance level

If the results indicate **$\beta_1 \neq 0$** and the **p-value is 0.03**, then the finding is considered significant at the **$p < 0.05$** level.

Verdict: Reject the null hypothesis (**H₀₁**) and accept the alternative hypothesis (**H_{a1}**), which indicates that there is a statistically significant influence of knowledge management capability on the organizational performance of referral hospitals in Kenya.

Thus, this hypothesis testing procedure was used to systematically test all the null hypotheses of the study (**H₀₁, H₀₂, H₀₃, H₀₄, H₀₅**).

Table 3. 2: Hypothesis Testing

Hypothesis	Data collection tool	Type of Analysis	Interpretation of Results
H₀₁: Knowledge management capability has no statistically significant influence on performance of referral hospitals in Kenya	Questionnaire	Pearson Correlation coefficient Regression analysis	If $p < 0.05$, reject H ₀ and accept H _A , indicating a statistically significant influence of knowledge management capability on organizational performance.
H₀₂: Strategic collaboration capability has no statistically significant influence on performance of referral hospitals in Kenya	Questionnaire	Pearson Correlation coefficient Regression analysis	If $p < 0.05$, reject H ₀ and accept H _A , indicating a statistically significant influence of strategic collaboration capability on organizational performance.
H₀₃: Talent management capability has no statistically significant influence on performance of referral hospitals in Kenya	Questionnaire	Pearson Correlation coefficient Regression analysis	If $p < 0.05$, reject H ₀ and accept H _A , indicating a statistically significant influence of talent management capability on organizational performance.
H₀₄: ICT capability has no statically significant influence on performance of referral hospitals in Kenya	Questionnaire	Pearson Correlation coefficient Regression analysis	If $p < 0.05$, reject H ₀ and accept H _A , indicating a statistically significant influence of ICT capability on organizational performance.
H₀₅: Organizational structure has no statistically significant moderating effect on the influence of dynamic capabilities on performance of referral hospitals in Kenya	Questionnaire	Pearson Correlation coefficient Regression analysis	If $p < 0.05$ for the interaction term, reject H ₀ and accept H _A , indicating that organizational structure significantly moderates the relationship between dynamic capabilities and organizational performance.

3.12 Operationalization of Variables

The study seeks to examine the influence dynamic capabilities on organizational performance of referral hospitals in Kenya as moderated by organizational structure. Table 3.3 outlined general variables, specific variable types, variable indicators,

measurement of variables and supporting literature. The operationalization table shows how each research variable was measured and quantified in the study. Dependent variables such as organizational performance were captured through indicators including service efficiency, turnaround time, and customer satisfaction. Independent variables, representing the dimensions of dynamic capabilities, were measured using Likert-scale items that captured respondents' perceptions on knowledge management, strategic collaboration, talent management, and ICT capability. The operationalization ensures that abstract concepts are translated into measurable constructs, facilitating systematic data collection, statistical analysis, and interpretation in alignment with the study objectives.

Table 3. 3: Operationalization of Research Variables

General Variable	Specific Variable Type	Variable Indicators	Measurement of the variables	Supporting Literature
Dependent Variable	Organizational Performance	• Efficiency in service delivery (number of patients served) • Turnaround time (time taken per client) • Customer satisfaction	Ordinal scale (Likert Scale)	Gatimu & Minja (2024); Adan & Mweta (2025)
Independent Variables	Knowledge management capability	• Acquisition/learning • Knowledge Sharing • Storage of knowledge	Ordinal scale (Likert Scale)	Nor et al. (2021); Haider and Kayani (2021)
Independent Variables	Strategic collaborative capability	• Equipment leasing agreements • Partnership in training • Sharing of medical information	Ordinal scale (Likert Scale)	Tahili et al. (2025); Idolor et al. (2025)
Independent Variables	Talent management capability	• Attraction • Development • Retention	Ordinal scale (Likert Scale)	Shabeer and Mahmood (2025); Igwe et al. (2025)
Independent Variables	ICT capability	• Communication automation • Digital consultation • Payment systems	Ordinal scale (Likert Scale)	Bettioli et al. (2022); Jin et al. (2022)

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presented data analysis and summarized the findings of the study. The primary aim of the study was to investigate the impact of dynamic capabilities on the organizational performance of referral hospitals in Kenya. In particular, the study investigated the impact of knowledge management capability, strategic collaboration capability, talent management capability, and organizational structure and ICT capability on organizational performance of referral hospitals in Kenya. The findings were illustrated using figures and tables.

4.2 Questionnaires' Response Rate

The sample size of this study consisted of all the 159 individuals that comprised of 47 County referral hospitals' CEOs/Chief administrators, 47 County referral hospitals' Medical/clinical services in charge, 47 County referral hospitals' nursing in charge, 6 national referral CEOs/Chief administrators, 6 national referral Medical/clinical services in charge and 6 national referral hospitals' Nursing in Charge.

Table 4. 1: Questionnaires' Response Rate

Unit of analysis	Unit of observation	Sample Size	Responses	Percent
County referrals (47)	CEOs/Chief administrators	47	40	85.11
	Medical/clinical services in charge	47	42	89.36
	Nursing in Charge	47	39	82.98
National referrals (6)	CEOs/Chief administrators	6	5	83.33
	Medical/clinical services in charge	6	5	83.33
	Nursing in Charge	6	4	66.67
Total		159	135	84.90

Out of the 159 questionnaires distributed, 135 were duly completed and returned, yielding an 84.90% response rate. According to Babbie (2021), a response rate of 75% is generally considered sufficient for data analysis, drawing conclusions, and making recommendations. Therefore, the response rate of 84.90% achieved in this study was adequate for these purposes. A high response rate improves the reliability and representativeness of survey findings by minimizing non-response bias and enhancing the credibility of the results (Field, 2024).

4.3 Pilot Test Results

4.3.1 Reliability Results

In assessing reliability, a Cronbach's alpha coefficient of 0.7 was considered the critical value. Items with coefficients below 0.7 were considered not reliable while those with coefficients of above 0.7 were considered reliable.

Table 4. 2: Reliability Results

Variables	Average Cronbach's Alpha	No. of Items
Knowledge Management Capability	0.735	10
Strategic Collaboration Capability	0.786	10
Talent Management Capability	0.869	9
ICT Capability	0.849	11
Organizational Structure	0.786	13
Organizational Performance	0.838	9

From the findings, as presented in Table 4.2, the Cronbach's alpha coefficients for the various constructs were as follows: knowledge management capability had a coefficient of 0.735, strategic collaboration capability had a coefficient of 0.786, talent management capability had a coefficient of 0.869, information and communication technology capability had a coefficient of 0.849, organizational structure had a coefficient of 0.808, and organizational performance had a coefficient of 0.838. This implies that knowledge management capability, strategic collaboration capability, talent management capability, information and communication technology capability, organizational structure and organizational performance were reliable.

4.3.2 Validity Results

According to Bell et al. (2022), validity refers to the extent by which acquired outcomes from data analysis accurately reflect the phenomenon being studied. Validity is categorized into three: content validity, face validity and construct validity. Face validity is the likelihood that a given question is misunderstood or misinterpreted. Face validity was enhanced through pilot test and by revising any ambiguous or unclear questions. According to Bell (2022) a proper way of enhancing face validity is through pre-testing. Content validity, or logical validity, evaluates how well a measure captures all relevant aspects of a social construct. Content validity was enhanced through seeking experts' opinions in the area of study, specifically supervisors. Construct validity entails assessing how well an item is developed and is operationalized to measure a particular construct (Creswell & Clark, 2021).

Construct validity is the process of finding and accumulating judgmental evidence based on research that have been conducted by other scholars by using specific instrument for measurement (Saunders et al., 2023). Construct validity evaluation need to examine the association of the measure being assessed with variables said to be correlated or theoretically correlated to the construct gauged by instrument. According to Neuman (2022), for the items to have construct validity, they need to explain a variance of 0.5 or above towards the construct. The AVE for the construct also should be above 0.4 (Kumar, 2019). SPSS Analysis of Moment Structures (AMOS) version 24 was used to perform these tests of construct validity, with the findings detailed in Table 4.3.

Table 4. 3: Validity Results

Variables	Average Variance Explained
Knowledge Management Capability	0.827
Strategic Collaboration Capability	0.816
Talent Management Capability	0.896
ICT Capability	0.838
Organizational Structure	0.811
Organizational Performance	0.813

From the results, knowledge management capability had an average variance explained of 0.827, strategic collaboration capability had an average variance explained of 0.816, talent management capability had an average variance explained of 0.896, ICT capability had an average variance explained of 0.838, organizational structure had an average variance explained of 0.811 and organizational performance had an average variance explained of 0.813.

Table 4. 4: Average Variance Explained for Knowledge management capability

	Variance Explained	Average Variance explained
Acquisition/learning		0.814
Employees obtain new knowledge from external sources (via seminars, conferences, subscription journals, educational courses and expert)	.869	
Employees depend on written sources (documentation of earlier implemented projects, organizational procedures, instructions etc.)	.728	
Employees exchange knowledge with their co-workers.	.844	
Knowledge Sharing		0.832
Knowledge is orally shared by employees at meetings or informal congregations (during lunch, within the hallway).	.853	
Knowledge is shared by employees via formal procedures (project reports, organizational procedures as well as instructions	.763	
General leadership/management motivates employees to take part in formal education systems in order to attain a greater level	.880	
Storage of knowledge		0.835
Employees record lessons learned from expert networks, projects subscription journals,).	.707	
There is a structured format, including templates / forms, that one has to follow when recording lessons learned	.958	
Structured format assists me capture major points of lessons taught	.957	
Average		0.827

From the results, as shown in Table 4.4, acquisition/learning had an average variance explained of 0.814, knowledge sharing had an average variance explained of 0.832 and storage of knowledge had an average variance explained of 0.835. The average variance explained for knowledge management capability was 0.827. This implies that the constructs and statements measuring knowledge management capability were valid.

Table 4. 5: Average Variance Explained for Strategic Collaboration capability

	Variance Explained	Average Variance explained
Equipment leasing agreements		0.776
Our hospital engages in equipment leasing agreements with other health facilities to improve service delivery.	.742	
Equipment leasing arrangements enable our facility to access advanced medical equipment when needed.	.840	
Through equipment leasing agreements, our hospital reduces capital costs and improves efficiency.	.746	
Partnership in training		0.801
Partnership in training employees ensures the organization employees gain new skills hence improving their productivity	.785	
I have gained a lot of skills through partnership trainings organized by our hospital	.891	
Health facilities collaborate with private partners in the development of infrastructure	.782	
Sharing of medical information		0.871
We share medical information with other health workers from other hospitals	.798	
Our organization arranges meeting purposed for sharing medical information with experts from other hospitals	.893	
Through sharing of medical information with workers from other hospitals we gain a lot of knowledge	.922	
Average		0.816

From the results, as shown in Table 4.5, building coalitions had an average variance explained of 0.776, partnership in training had an average variance explained of 0.801 and sharing of medical information had an average variance explained of 0.871. The average variance explained for strategic collaboration capability was 0.816. This implies that the constructs and statements measuring strategic collaboration capability were valid.

Table 4. 6: Average Variance Explained for Talent Management Capability

	Variance Explained	Average Variance explained
Talents Attraction		0.872
In our organization, there is a process of recognizing current staff that have the potential to excel in their career	.920	
Competency mapping aid in identification of individual's training needs and performance appraisals.	.797	
There is a platform for comparing the present and desired level of skills and competencies of staff in the organization	.899	
Talent development		0.947
On-job training enables staff to familiarize with the working environment as they feel they are part of it	.928	
There is a method of teaching the skills, competencies and knowledge required for employees to carry out a particular job within the place of work	.954	
Organization gives partially paid scholarship to workers who want to advance their studies	.960	
Talent retention		0.871
Our organization provide competitive salaries to employees	.774	
Provision of incremental bonuses improves the morale of staff with respect to attaining organizational goals.	.900	
Job promotion involves advancement in terms of benefits, salary and designation.	.939	
Average		0.896

According to the results, as shown in Table 4.6, talents attraction had an average variance explained of 0.872, talent development had an average variance explained of 0.947 and talent retention had an average variance explained of 0.871. The average variance explained for talent management capability was 0.896. This implies that the constructs and statements measuring talent management capability were valid.

Table 4. 7: Average Variance Explained for ICT Capability

	Variance Explained	Average Variance explained
Communication automation		0.790
Our organization uses emails as a means of communication	.850	
We have created WhatsApp group for communication	.702	
Our organization uses telephone call for communication	.865	
Digital consultation	.750	
We use emails to consult from our supervisors	.743	
Telephone calls are used for consultation		0.853
WhatsApp groups are used for consultation in our organization	.792	
Payment systems	.856	
Cash is not accepted in our institution	.912	
All payments are made through M-pesa pay bill		0.870
Payments in our organization are made through bank transfer/bank payments	.865	
Communication automation	.895	
Our organization uses emails as a means of communication	.850	
Average		0.838

According to the results, as shown in Table 4.7, electronic communication had an average variance explained of 0.790, electronic consultation had an average variance explained of 0.853 and electronic payment had an average variance explained of 0.870. The average variance explained for ICT capability was 0.838. This implies that the constructs and statements measuring ICT capability were valid.

Table 4. 8: Average Variance Explained for Organizational Structure

	Variance Explained	Average Variance explained
Chain of command		0.791
In our organization communication effectively flow down the chain of command	.717	
In our organization, the power to make critical decision diminishes from the senior staff to subordinate staff.	.814	
The power to make critical decision is placed in the hands of a few organizational staff	.842	
Span of control		0.814
Span of control in our organization clearly indicate the approach that is used to interact with organizational employees	.835	
Staff in our organization are efficient in discharging their functions with minimal assistance from their superiors	.772	
Supervisors and heads of departments delegate duties to employees	.813	
The structure in the organization enable staff to respond to the patients issues	.836	
Work specialization		0.828
Health facilities emphasize on team work to improve efficiency in service delivery	.793	
Employees are allocated tasks depending on their competency skills	.817	
Specialization of work in our organization enable staff to be promoted to senior ladder	.884	
Our hospital has a functional Customer Care Department	.789	
Customers always provide satisfactory remarks for the services	.873	
our health facility empowers the employees to increase their skills and competence	.812	
Average		0.811

As shown in Table 4.8, chain of command had an average variance explained of 0.791, span of control had an average variance explained of 0.814 and work specialization had an average variance explained of 0.828. The average variance explained for organizational structure was 0.811. This implies that the constructs and statements measuring organizational structure were valid.

Table 4. 9: Average Variance Explained for Organizational Performance

	Variance Explained	Average Variance explained
Efficiency in service delivery (service utilization)		0.778
Medical equipment in our health facility are available	.835	
Number of outpatients serviced per day has been increasing	.727	
The number of in-patient serviced per day has been increasing	.772	
Turnaround time		0.827
Turnaround time is very low	.846	
There is little queuing in the hospital	.795	
There are few customer complaints regarding the turnaround time	.842	
Average		0.806

As shown in Table 4.9, efficiency in service delivery (service utilization) had an average variance explained of 0.778 and turnaround time had an average variance explained of 0.827. The average variance explained for organizational structure was 0.806. This implies that the constructs and statements measuring organizational performance were valid.

4.4 General Information

General information of the participants included details about their job descriptions and the duration they had been in their current positions.

4.4.1 Job Description

Participants were asked to indicate their job roles. The results were as shown in Figure 4.1.

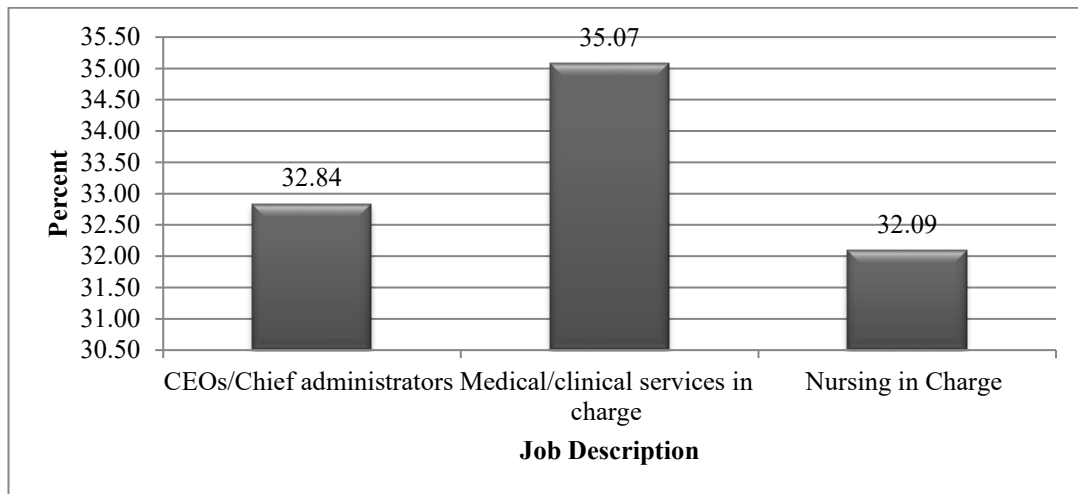


Figure 4. 1: Job Description

As shown in Figure 4.1, 35.07% of respondents were medical/clinical services in charge, 32.84% were CEOs/Chief administrators, and 32.09% were nursing in charge. This distribution demonstrates that the study captured perspectives from key managerial and operational staff across referral hospitals, ensuring a comprehensive understanding of organizational performance from multiple functional areas. Such representation enhances the reliability of the findings, as input was obtained from individuals responsible for strategic decision-making, clinical management, and nursing services. These results are consistent with Cheruiyot, Kavale, and Chebii (2025), who emphasized the importance of engaging diverse hospital personnel in research to capture holistic insights on health facility performance and service delivery outcomes.

4.4.2 Duration of Working in the Current Position

Participants were asked to indicate the length of time they had worked in their current positions. The results were as presented in Figure 4.2.

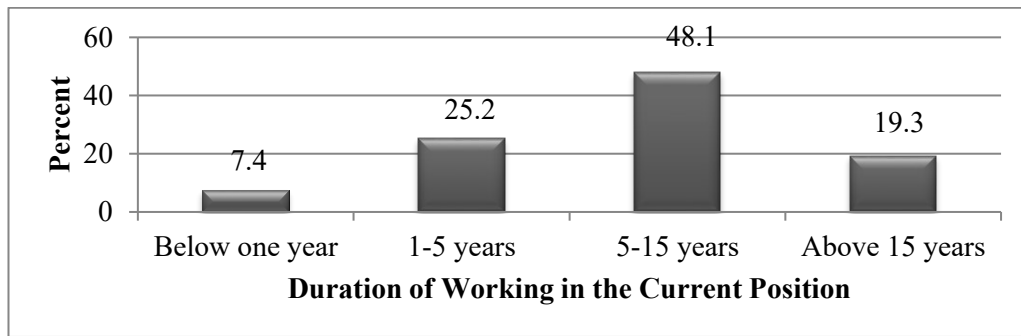


Figure4. 2: Duration of Working in the Current Position

As shown in Figure 4.2, 48.1% of respondents had been in their current roles for 5 to 15 years, 25.2% for 1 to 5 years, 19.3% for more than 15 years, and 7.4% for less than 1 year. This distribution indicates that the majority of respondents had over 5 years of experience in their roles, suggesting they possessed substantial knowledge of dynamic capabilities and organizational performance in referral hospitals. These findings align with Cheruiyot, Kavale, and Chebii (2025), who highlighted that engaging experienced personnel in health sector research provides more reliable and informed insights into hospital operations and service delivery outcomes.

4.5 Descriptive Statistics

This section provides descriptive statistics on knowledge management capability, strategic collaboration capability, talent management capability, ICT capability, and organizational performance in referral hospitals. It also examines the moderating effect of organizational structure on the relationship between dynamic capabilities and organizational performance. The quantitative results were derived from closed-ended questions and items rated on a 5-point Likert scale, where 1 represents "strongly disagree," 2 represents "disagree," 3 represents "neutral," 4 represents "agree," and 5 represents "strongly agree."

4.5.1 Knowledge Management Capability

The first objective of the study was to assess the impact of knowledge management capability on the organizational performance of referral hospitals in Kenya. Participants were asked to specify their level of agreement with different statements related to the knowledge management capability of these hospitals. The Likert scale

used a 5-point format, where 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree. The findings are shown in Table 4.10.

Table 4. 10: Influence of Knowledge Management Capability on Organizational Performance of Referral Hospitals in Kenya

	5	4	3	2	1	N	Mean	Std. Deviation
Employees obtain new knowledge from external sources (via seminars, conferences, subscription journals, educational courses, expert)	18.5%	65.9%	10.4%	4.4%	0.7%	135	3.97	0.732
Employees depend on written sources (documentation of earlier implemented projects, organizational procedures, instructions etc.)	12.6%	60.7%	21.5%	5.2%	0.0%	135	3.807	0.718
Employees obtain knowledge from their co-workers	20.7%	65.2%	12.6%	1.5%	0.0%	135	4.052	0.627
Knowledge is orally shared by employees at meetings or informal congregations (during lunch, within the hallway).	10.4%	71.1%	17.0%	1.5%	0.0%	135	3.904	0.571
Knowledge is shared by employees via formal procedures (project reports, organizational procedures as well as instructions	13.3%	68.1%	16.3%	2.2%	0.0%	135	3.926	0.618
General leadership/management motivates employees to take part in formal education systems in order to attain a greater level	13.3%	64.4%	17.0%	5.2%	0.0%	135	3.859	0.704
Employees record lessons learned from expert networks, projects subscription journals,).	11.9%	62.2%	16.3%	7.4%	2.2%	135	3.741	0.846
There is a structured format, including templates / forms, that one has to follow when recording lessons learned	9.6%	55.6%	20.7%	13.3%	0.7%	135	3.6	0.866
Structured format assists me capture major points of lessons taught	19.3%	43.7%	22.2%	14.8%	0.0%	135	3.674	0.953

From the results, the respondents agreed with a mean of 4.052 (SD=0.627) that employees exchange knowledge with their co-workers. Additionally, they agreed that employees acquire new knowledge from external sources such as seminars, conferences, subscription journals, educational courses, and experts, as indicated by a mean score of 3.970 (SD = 0.732). These results align with Nor, Mohamad and Fikry (2021) findings, which suggest that externalized knowledge, when effectively captured by those who need it, can enhance firm profitability and productivity. Moreover, with a mean of 3.807 (SD=0.718), the respondents agreed that the employees depend on written sources (documentation of earlier implemented projects, organizational procedures and instructions etc).

With a mean of 3.926 (SD = 0.618), participants agreed that knowledge is shared among employees through formal procedures such as project reports, organizational procedures, and instructions. This finding is consistent with Haider and Kayani (2021) argument that knowledge within an organization can be disseminated through database systems, intranet, or non-IT tools like project reports, research collaboration, and brainstorming sessions. Additionally, respondents agreed, with a mean score of 3.904 (SD = 0.571), that knowledge is shared orally during meetings or informal gatherings (e.g., during lunch or in the hallway). Furthermore, they agreed, with a mean score of 3.859 (SD = 0.704), that general leadership and management encourage employees to participate in formal education to achieve higher levels of knowledge.

With a mean score of 3.741 (SD = 0.846), respondents agreed that employees record lessons learned from expert networks, project subscription journals, and other sources. Additionally, they agreed that using a structured format helps them capture key points from these lessons, as indicated by a mean score of 3.674 (SD = 0.953). These findings align with Kenyatta and Kiugu (2023) research, which suggests that knowledge storage enables individuals to search for and retrieve codified knowledge without needing to contact the original source, thus saving time and organizational resources and improving performance. Furthermore, respondents agreed that there is a structured format, including templates or forms, for recording lessons learned, as reflected by a mean score of 3.600 (SD = 0.866).

Participants were asked to identify the challenges they faced in implementing knowledge management within their hospitals. The results were as presented in Table 4.11.

Table 4. 11: Challenges in Implementing Knowledge Management

Themes	Frequency (n)	Percentage (%)
Limited career progression / lack of support for further learning	25	18.5%
Inadequate knowledge-sharing infrastructure (tools, systems, capacity)	25	18.5%
Long working hours / uncondusive work environment	15	11.1%
Stagnation / loss of institutional knowledge	20	14.8%
Limited access to resources and training (literature, seminars, conferences)	15	11.1%
Insufficient financial support / poor prioritization of staff development	15	11.1%
Poor communication between employees and government officials	10	7.4%
Total	135	100%

Table 4.11 presents the key challenges in implementing knowledge management in hospitals as reported by participants. The respondents highlighted limited career progression and lack of support for further learning (18.5%), and inadequate knowledge-sharing infrastructure, including insufficient tools, systems, and capacity (18.5%). These findings align with Nor et al. (2021), who emphasize that effective knowledge management capability depends on strong systems, structures, and continuous learning mechanisms to support knowledge creation and sharing in health facilities.

Long working hours and uncondusive work environments (11.1%), alongside stagnation and loss of institutional knowledge due to weak knowledge transfer systems (14.8%), further reflect barriers that limit the effective deployment of dynamic capabilities. These challenges converge with Haider and Kayani (2021), who argue that knowledge management and talent-related capabilities require supportive organizational conditions, including time, motivation, and structured processes, to ensure knowledge is effectively captured and utilized.

Additionally, limited access to resources and training opportunities (11.1%), insufficient financial support for staff development (11.1%), and poor communication between employees and government officials (7.4%) highlight systemic and structural weaknesses. These findings are consistent with Alo et al. (2025), who note that organizational structures and administrative systems significantly influence the effectiveness of capability development and knowledge utilization in public institutions.

The participants were asked to indicate the challenges they faced and the strategies they proposed for enhancing key organizational capabilities within their hospitals.

Table 4. 12: Enhancing Knowledge Management

Themes	Frequency (n)	Percentage (%)
Promote knowledge sharing through supportive policies	25	18.5%
Provide adequate organizational and management support	25	18.5%
Enhance knowledge-sharing practices and timely dissemination	20	14.8%
Encourage teamwork and collaboration among staff	20	14.8%
Provide training and learning opportunities despite tight schedules	20	14.8%
Strengthen interactions between employees and management	15	11.1%
Address resistance to change and foster employee engagement	10	7.4%
Total	135	100%

Table 4.12 presents the key strategies for enhancing knowledge management in hospitals as proposed by participants. The respondents emphasized promoting knowledge sharing through supportive policies (18.5%) and providing adequate organizational and management support (18.5%). These recommendations are consistent with Mwadime and Kising'u (2025), who argue that effective knowledge management capability in health facilities depends on strong institutional frameworks and leadership support that facilitate knowledge creation and dissemination.

They also recommended enhancing knowledge-sharing practices and ensuring timely dissemination of information (14.8%), encouraging teamwork and collaboration among staff (14.8%), and providing training and learning opportunities despite tight schedules (14.8%). These findings converge with Wachinga and Deya (2021), who emphasize that talent management and knowledge management capabilities are strengthened through continuous learning, collaboration, and structured knowledge transfer systems that enhance organizational adaptability and performance.

Further, strengthening interactions between employees and management (11.1%) and addressing resistance to change while fostering employee engagement (7.4%) were also highlighted. These strategies align with Kenyatta and Kiugu (2023), who note that supportive organizational structures and effective communication systems enhance the implementation of dynamic capabilities by improving coordination, employee involvement, and responsiveness to change.

4.5.2 Strategic Collaboration Capability

The second objective of the study was to evaluate the impact of strategic collaboration capability on the organizational performance of referral hospitals in Kenya. Respondents were asked to rate their level of agreement with various statements related to the strategic collaboration capability of these hospitals. The Likert scale used a 5-point format, where 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree. The findings are presented in Table 4.13.

Table 4. 13: Influence of Strategic Collaboration Capability on Organizational Performance of Referral Hospitals in Kenya

	5	4	3	2	1	N	Mean	Std. Deviation
Our hospital engages in equipment leasing agreements with other health facilities to improve service delivery.	11.9%	62.2%	12.6%	11.1%	2.2%	135	3.704	0.898
Equipment leasing arrangements enable our facility to access advanced medical equipment when needed.	15.6%	8.9%	11.1%	4.4%	0.0%	135	3.956	0.668
Through equipment leasing agreements, our hospital reduces capital costs and improves efficiency.	14.1%	74.8%	11.1%	0.0%	0.0%	135	4.03	0.503
Partnership in training employees ensures the organization employees gain new skills hence improving their productivity	25.2%	63.7%	8.9%	1.5%	0.7%	135	4.111	0.677
Our hospital has made partnerships in training with other hospitals	21.5%	49.6%	17.0%	1.5%	0.7%	135	3.8	0.929
We share medical information with other health workers from other hospitals	9.6%	36.3%	20.0%	31.9%	2.2%	135	3.193	1.062
Our organization arranges meeting purposed for sharing medical information with experts from other hospitals	8.1%	65.2%	14.8%	10.4%	1.5%	135	3.682	0.825
Through sharing of medical information with workers from other hospitals we gain a lot of knowledge	9.6%	53.3%	22.2%	13.3%	1.5%	135	3.563	0.894

Participants generally agreed that equipment leasing agreements enhance service delivery and access to medical resources in health facilities. The statement that “equipment leasing arrangements enable the facility to access advanced medical equipment when needed” recorded a higher mean score of 3.956 (SD = 0.668), indicating a strong level of agreement among respondents. Similarly, respondents agreed that hospitals engage in equipment leasing agreements with other health facilities to improve service delivery, as shown by a mean score of 3.704 (SD = 0.898). These findings imply that inter-facility collaboration through resource-sharing mechanisms such as equipment leasing plays a critical role in improving operational efficiency and service delivery.

With a mean of 4.111 (SD=0.677) participants agreed that partnership in training employees ensures the organizations’ employees gain new skills hence improving their productivity. Moreover, they agreed that the hospitals have made partnerships in training with other hospitals as presented by a mean of 3.800 (SD=0.929). The results align with Idolor, Adebisi and Ifere (2025) arguments that health partnerships use several approaches in order to develop skills and also knowledge of health employees, such as formal in-service courses; on-the-ward monitoring and teaching; development of curriculum for pre-service training.

Respondents agreed with a mean of 3.682 (SD=0.825) that the organization arranges meeting purposed for sharing medical information with experts from other hospitals. These observations concur with Moeliadi et al (2025) arguments that meetings through computers and communication systems helps improve health care information sharing by overcoming limitations which are imposed by location and time dimensions. In addition, with a mean of 3.563 (SD=0.894), they agreed that through sharing of medical information with workers from other hospitals they gain a lot of knowledge. They also agreed that they share medical information with other health workers from other hospitals. This is depicted by a mean of 3.193 (SD=1.062).

Participants were asked to identify the challenges associated with implementing strategic collaborations and alliances in their hospitals.

Table 4. 14: Challenges in Implementing Strategic Collaborations and Alliances

Themes	Frequency (n)	Percentage (%)
Poor infrastructural collaboration / limited partner engagement	25	18.5%
Shortage of specialists / low staff motivation	20	14.8%
Information not shared among employees	15	11.1%
Misalignment among stakeholders / competing agendas	20	14.8%
Weak governance and inadequate management	20	14.8%
Poor resource allocation / institutional isolation	20	14.8%
Weak inter-organizational communication	15	11.1%
Total	135	100%

Table 4.14 presents the key challenges in implementing strategic collaborations and alliances in hospitals as reported by participants. The respondents highlighted poor infrastructural collaboration and limited engagement with partners (18.5%), shortage of specialists and low staff motivation (14.8%), and information not being shared among employees (11.1%). Misalignment among stakeholders and competing agendas (14.8%), weak governance and inadequate management (14.8%), poor resource allocation and institutional isolation (14.8%), and weak inter-organizational communication (11.1%) were also identified as significant barriers. These findings align with Mtange and Deya (2024), who observed that reluctance to share information, poor infrastructural collaboration, competing agendas, and weak governance hinder the effective implementation of strategic alliances in healthcare organizations.

Participants were asked to propose methods for enhancing strategic collaboration and alliances within their hospitals.

Table 4. 15: Enhancing Strategic Collaboration and Alliances

Themes	Frequency (n)	Percentage (%)
Develop a clear framework for collaboration (public–private)	20	14.8%
Proper training programs to strengthen skills	20	14.8%
Establish clear communication pathways and follow-ups	15	11.1%
Arrange regular inter-hospital meetings / expert consultations	15	11.1%
Foster strong partnerships with stakeholders and donors	15	11.1%
Provide adequate funding and resources	15	11.1%
Increase staff numbers	10	7.4%
Promote teamwork and collaborative culture	10	7.4%
Involve all employees in training and collaboration initiatives	10	7.4%
Monitor and evaluate collaboration outcomes	5	3.7%
Total	135	100%

Table 4.15 presents the key strategies for enhancing strategic collaboration and alliances in hospitals as proposed by participants. The respondents emphasized developing a clear framework for collaboration, particularly between public and private sectors (14.8%), and implementing proper training programs to strengthen staff skills (14.8%). They also recommended establishing clear communication pathways and follow-ups (11.1%), arranging regular inter-hospital meetings and expert consultations (11.1%), and fostering strong partnerships with stakeholders and donors (11.1%). Providing adequate funding and resources (11.1%), increasing staff numbers (7.4%), promoting teamwork and a collaborative culture (7.4%), involving all employees in training and collaboration initiatives (7.4%), and monitoring and evaluating collaboration outcomes (3.7%) were also highlighted. These recommendations align with Barasa and Simiyu (2024), who note that public–private collaborations are essential for addressing emerging public health challenges and improving healthcare delivery through effective coordination and knowledge sharing.

4.5.3 Talent Management Capability

The third objective of the study was to examine the influence of talent management capability on organizational performance of referral hospitals in Kenya. Participants were asked to rate their level of agreement with various statement concerning talent management capability of referral hospitals in Kenya. The Likert scale used a 5-point format, where 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree. Findings were as presented in Table 4.16.

Table 4. 16: Influence of Talent Management Capability on Organizational Performance of Referral Hospitals in Kenya

	5	4	3	2	1	N	Mean	Std. Deviation
In our organization, there is a process of recognizing current staff that have the potential to excel in their career	10.4%	73.3%	9.6%	5.9%	0.7%	135	3.867	0.7
Competency mapping aid in identification of individual's training needs and performance appraisals.	14.1%	73.3%	9.6%	3.0%	0.0%	135	3.985	0.598
There is a platform for comparing the present and desired level of skills and competencies of staff in the organization	17.0%	67.4%	7.4%	8.1%	0.0%	135	3.933	0.755
On-job training enables staff to familiarize with the working environment as they feel they are part of it	31.1%	62.2%	5.2%	1.5%	0.0%	135	4.23	0.61

There is a method of teaching the skills, competencies and knowledge required for employees to carry out a particular job within the place of work	12.6%	62.2%	15.6%	8.9%	0.7%	135	3.77	0.81
Organization gives partially paid scholarship to workers who want to advance their studies	7.4%	38.5%	28.1%	19.3%	6.7%	135	3.207	1.052
Our organization provide competitive salaries to employees	2.2%	18.5%	18.5%	44.4%	16.3%	135	2.459	1.042
Provision of incremental bonuses improves the morale of staff with respect to attaining organizational goals.	10.4%	59.3%	14.1%	14.1%	2.2%	135	3.615	0.93
Job promotion involves advancement in terms of benefits, salary and designation.	22.2%	68.9%	5.2%	2.2%	1.5%	135	4.082	0.702

Participants agreed with a mean of 3.933 (SD=0.755) that there is a platform for comparing the present and desired level of skills and competencies of staff in the organizations. Participants agreed with a mean of 3.985 (SD=0.598) that in their organization, competency mapping aid in identification of individual's training needs and performance appraisals. Participants also agreed with a mean of 3.867 (SD=0.700) that in the organizations, there is a process of recognizing current staff that have the potential to excel in their career. These findings conform to Kongrode, Aujiapongpan and Ru-Zhue (2023) findings that recognizing staff that have the potential to excel in

their career enhances the employees' ability to attain their goals.

With a mean of 4.230 (SD=0.610), participants agreed that on-job training enables staff to familiarize with the working environment as they feel they are part of it. These outcomes align with Shabeer and Mahmood (2025) observations that talent development programmes like on-job training enables staff to familiarize with the working environment and is a significant positive forecaster of staff performance. In addition, they agreed with a mean of 3.770 (SD=0.810) that there is a method of teaching the skills, competencies and knowledge required for employees to carry out a particular job within the place of work. Nonetheless, the respondents were neutral that the Organization gives partially paid scholarship to workers who want to advance their studies as depicted by a mean of 3.207 (SD=1.052).

Participants agreed with a mean of 4.082 (SD=0.702) that job promotion involves advancement in terms of benefits, salary and designation. Furthermore, they agreed with a mean of 3.615 (SD=0.930) that provision of incremental bonuses improves the morale of staff with respect to attaining organizational goals. These outcomes align with Igwe, Obidigbo and Dulora (2025) discoveries that incremental bonuses improve the morale of staff and enable them to attain organizational goals. Nonetheless, the respondents disagreed with a mean of 2.459 (SD=1.042) that the organization provide competitive salaries to employees.

Participants were asked to identify the challenges encountered in implementing talent management capabilities within their hospitals. Several themes emerged from their responses.

Table 4. 17: Challenges in Implementing Talent Management Capability

Themes	Frequency (n)	Percentage (%)
Long working hours / limited opportunities for growth	30	22.2%
Lack of experience with technology / overwork / fatigue	25	18.5%
Insufficient resources (low salaries, bonuses, remuneration)	25	18.5%
Limited time allocated for talent development / training	20	14.8%
Ineffective talent attraction and retention strategies	15	11.1%
Lack of structured recognition / follow-up mechanisms	10	7.4%
Limited funding for staff advancement and motivation	10	7.4%
Total	135	100%

Table 4.17 presents the key challenges in implementing talent management capability in hospitals as reported by participants. The respondents highlighted long working hours that limited opportunities for personal growth, additional training, and specialization, contributing to employee stagnation and high turnover rates (22.2%). They also reported lack of experience with technology, overwork, and fatigue among health workers (18.5%), as well as insufficient resources including low salaries, bonuses, and other forms of remuneration (18.5%). Limited time allocated for talent development and training (14.8%), ineffective talent attraction and retention strategies (11.1%), lack of structured recognition and follow-up mechanisms (7.4%), and limited funding for staff advancement and motivation (7.4%) were also identified as significant challenges. These findings align with Mgbemena et al. (2022), who observed that inadequate resources, poor remuneration, insufficient training opportunities, and employee stagnation contribute to high turnover in healthcare organizations.

Participants were asked to suggest ways of improving talent management capability within their hospitals.

Table 4. 18: Enhancing Talent Management Capability

Themes	Frequency (n)	Percentage (%)
Regular training and skills development	35	25.9%
Timely payment of salaries and competitive compensation	25	18.5%
Promotion of qualified employees	20	14.8%
Scholarships and further education opportunities	15	11.1%
Creating a conducive and motivating work environment	15	11.1%
Fostering committed leadership in talent development	15	11.1%
Reducing corruption / ensuring transparency	10	7.4%
Total	135	100%

Table 4.18 presents the key strategies for enhancing talent management capability in hospitals as proposed by participants. The respondents emphasized providing regular training and skills development to optimize employee potential and equip staff with new competencies (25.9%). They also recommended ensuring timely payment of salaries and offering competitive compensation (18.5%), promoting qualified employees to higher positions (14.8%), and providing scholarships and opportunities for further education (11.1%). Additionally, creating a conducive and motivating work environment (11.1%), fostering committed leadership in talent development (11.1%), and reducing corruption while ensuring transparency (7.4%) were highlighted as important strategies. These recommendations align with Nduhura et al. (2022), who note that training and structured talent management practices are essential for enabling employees to effectively perform their duties and realize their full potential.

4.5.4 ICT Capability

The fourth objective of the study was to evaluate the impact of ICT capability on the organizational performance of referral hospitals in Kenya. Participants were asked to rate their agreement level with various statements concerning the ICT capability of these hospitals. The Likert scale used a 5-point format, where 5 = Strongly Agree, 4 =

Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree. The findings are shown in Table 4.19.

Table 4.19: Influence of ICT Capability on Organizational Performance of Referral Hospitals in Kenya

	1	2	3	4	5	N	Mean	Std. Deviation
Our organization uses emails as a means of communication	11.9%	68.1%	14.1%	3.7%	2.2%	135	3.837	0.765
We have created WhatsApp group for communication	14.1%	52.6%	10.4%	15.6%	7.4%	135	3.504	1.139
Our organization uses telephone call for communication	16.3%	69.6%	12.6%	1.5%	0.0%	135	4.007	0.592
We use emails to consult from our supervisors	16.3%	61.5%	15.6%	5.9%	0.7%	135	3.867	0.780
Telephone calls are used for consultation	14.8%	76.3%	7.4%	0.7%	0.7%	135	4.037	0.565
WhatsApp groups are used for consultation in our organization	10.4%	49.6%	15.6%	19.3%	5.2%	135	3.407	1.074
Cash is not accepted in our institution	13.3%	40.0%	25.2%	16.3%	5.2%	135	3.400	1.073
All payments are made through M-pesa pay bill	10.4%	45.2%	28.9%	12.6%	3.0%	135	3.474	0.945
Payments in our organization are made through bank transfer/bank payments	15.6%	62.2%	17.8%	2.2%	2.2%	135	3.867	0.780

From the results, the respondents agreed with a mean of 4.007 (SD=0.592), the respondents agreed that the organizations use telephone call for communication. Participants also agreed with a mean of 3.837 (SD=0.765) that the organizations use emails as a means of communication. These findings conform to Bettiol et al (2022) findings that electronic communication for example sending messages and e-mail via electronic health record, between physicians and patients potentially have benefits

over telephone communication and office visits. The respondents agreed that they have created WhatsApp group for communication. This is shown by a mean of 3.504 (SD=1.139).

Participants agreed with a mean of 4.037 (SD=0.565) that telephone calls are used for consultation. In addition, they agreed that they use emails to consult from the supervisors as shown by a mean of 3.867 (SD=0.780). These findings concur with Jin, Chen and Li (2022) findings that the use of electronic consultation such as email can provide the solution to quicker access to specialty advice to care providers without having to meet face to face. In addition, the respondents were neutral that WhatsApp groups are used for consultation in the organization. This is depicted by a mean of 3.407 (SD=1.0741.057).

Participants agreed with a mean of 3.867 (SD=0.780) that payments in their organizations are made through bank transfer/bank payments. These outcomes align with Richard, Oloko and Deya (2024) findings that electronic payment enhances faster payment, transparency and better tracing of transactions, which induces cost savings, reduces time and encourages trusting associations between sellers and buyers. Nonetheless, the respondents were neutral that all payments are made through M-pesa pay bill as depicted by a mean of 3.474 (SD=0.945). Moreover, they were neutral that Cash is not accepted in the institution as shown by a mean of 3.400 (SD=1.073).

Participants were asked to identify the challenges associated with implementing ICT capability within their hospitals.

Table 4. 20: Challenges in Implementing ICT Capability

Themes	Frequency (n)	Percentage (%)
System downtime, breakdowns, and operational vulnerabilities	30	22.2%
Rapid technological changes / need for adaptation	20	14.8%
Shortage of skilled health IT personnel	20	14.8%
Inadequate training time and low staff motivation	15	11.1%
Poor Internet infrastructure / insufficient broadband	15	11.1%
Financial constraints (installation costs, equipment shortage)	20	14.8%
Cybersecurity risks and lack of backup systems	15	11.1%
Total	135	100%

Table 4.20 presents the key challenges in implementing ICT capability in hospitals as reported by participants. The respondents highlighted system downtime, frequent breakdowns, and operational vulnerabilities (22.2%), rapid technological changes and the need for adaptation (14.8%), and a shortage of skilled health IT personnel (14.8%). They also reported inadequate training time and low staff motivation (11.1%), poor Internet infrastructure and insufficient broadband access (11.1%), financial constraints including high installation costs and equipment shortages (14.8%), and cybersecurity risks combined with a lack of backup systems (11.1%). These findings align with Gitau, Nzuki, and Musau (2022), who observed that financial limitations, system breakdowns, high installation costs, and cyber risks pose significant challenges to implementing ICT capability in healthcare organizations.

Participants were asked to propose ways to enhance ICT capability within their hospitals.

Table 4. 21: Enhancing ICT Capability in Hospitals

Themes	Frequency (n)	Percentage (%)
Address system downtime / frequent maintenance	25	18.5%
Continuous training and staff capacity building	25	18.5%
Invest in IT infrastructure (computers, Wi-Fi, modern equipment)	30	22.2%
Secure reliable Internet service and backups	15	11.1%
Implement e-services (e-consultation, e-payment systems)	15	11.1%
Ensure security measures (CCTV, theft prevention)	15	11.1%
Replace outdated computers with faster, efficient models	10	7.4%
Total	135	100%

Table 4.21 presents the key strategies for enhancing ICT capability in hospitals as proposed by participants. The respondents emphasized addressing system downtime and conducting frequent maintenance (18.5%), providing continuous training and staff capacity building (18.5%), and investing in IT infrastructure including computers, Wi-Fi networks, and modern equipment (22.2%). They also recommended securing reliable Internet service and backup systems (11.1%), implementing e-services such

as e-consultation and e-payment systems (11.1%), ensuring security measures including CCTV and theft prevention (11.1%), and replacing outdated computers with faster, more efficient models (7.4%). These suggestions align with Gitau, Nzuki, and Musau (2022), who highlight that investing in ICT enhances electronic communication, e-consultation, and e-payment systems, improving service delivery, transaction transparency, and trust between healthcare providers and clients.

4.5.5 Organizational Structure

The fifth objective of the study was to examine the moderating effect of organizational structure on the relationship between dynamic capabilities and organizational performance in referral hospitals in Kenya. Participants were asked to rate their agreement level with various statements related to the organizational structure of these hospitals. The Likert scale used a 5-point format, where 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree. The results are presented in Table 4.22.

Table 4.22: Influence of Organizational Structure on the Relationship between Dynamic Capabilities and Organizational Performance of Referral Hospitals in Kenya

	5	4	3	2	1	N	Mean	Std. Deviation
In our organization communication effectively flow down the chain of command	12.6%	75.6%	3.7%	7.4%	0.7%	135	3.919	0.723
In our organization, the power to make critical decision diminishes from the senior staff to subordinate staff.	25.9%	54.1%	5.9%	12.6%	1.5%	135	3.904	0.976
The power to make critical decision is placed in the hands of a few organizational staff	16.3%	68.1%	7.4%	8.1%	0.00%	135	3.926	0.749
Span of control in our organization clearly indicate the approach that is used to interact with organizational employees	13.3%	75.6%	8.9%	1.5%	0.7%	135	3.993	0.592
Staff in our organization are efficient in discharging their functions with minimal assistance form their superiors	14.1%	77.0%	8.1%	0.00%	0.7%	135	4.037	0.538
Supervisors and heads of departments delegate duties to employees	28.9%	65.9%	5.2%	0.00%	0.00%	135	4.237	0.535
Health facilities emphasize on team work to improve efficiency in service delivery	34.8%	57.0%	4.4%	3.0%	0.7%	135	4.222	0.73
Employees are allocated tasks depending on their competency skills	17.8%	69.6%	7.4%	4.4%	0.7%	135	3.993	0.707
Specialization of work in our organization enable staff to be promoted to senior ladder	17.0%	65.2%	9.6%	5.9%	2.2%	135	3.889	0.835
Our health facility empowers the employees to increase their skills and competence	19.3%	61.5%	12.6%	4.4%	2.2%	135	3.911	0.833

From the results, the respondents agreed with a mean of 3.926 (SD=0.749) that the power to make critical decision is placed in the hands of a few organizational staff. Participants further agreed that in the organization, communication effectively flow down the chain of command. This is shown by a mean of 3.919 (SD=0.723). These outcomes conform to Saputra et al (2024) observations that large number of organizations from for profit organizations to nonprofits to military, employ a chain of command which helps eradicate inefficiencies by ensuring every worker report to one manager, rather than to several bosses. Moreover, the respondents agreed that in the organization, the power to make critical decision diminishes from the senior staff to subordinate staff as shown by a mean of 3.904 (SD=0.976).

With a mean of 4.237 (SD=0.535), participants agreed that supervisors and heads of departments delegate duties to employees. These findings conform to Gutterman (2023) arguments that managers communicate deadlines and expectations to employees, assign tasks and provide motivation on basis of one-to-many. In addition, participants agreed that staffs in the organizations are efficient in discharging their functions with minimal assistance from their superiors. This is indicated by a mean of 4.037 (SD=0.538). Participants agreed with a mean of 3.993 (SD=0.592) that span of control in the organization clearly indicate the approach that is used to interact with organizational employees. These findings concur with Sarwar and Khattak (2024) discoveries that span of control indicates the approach that is used to interact with organizational employees and explains the number of employees that each manager is responsible for in a company.

The respondents agreed that health facilities emphasize on team work to improve efficiency in service delivery as shown by a mean of 4.222 (SD=0.730). Participants agreed with a mean of 3.993 (SD=0.707) that employees are allocated tasks depending on their competency skills. These findings are in line with Odiri and Ideh (2021) findings that work specialization make sure that all workers have specific roles that they are required to carry out based on work experience, skills and experience of each employee's. Furthermore, the respondents agreed that the health facilities empower the employees to increase their skills and competence as shown by a mean of 3.911 (SD=0.833). In addition, the respondents agreed that specialization of work in the

organizations enable staff to be promoted to senior ladder. This is shown by a mean of 3.889 (SD=0.835).

Participants were asked to identify the challenges related to organizational structure in implementing dynamic capabilities within their hospitals.

Table 4. 23: Organizational Structure Challenges

Themes	Frequency (n)	Percentage (%)
Centralized decision-making & limited autonomy	34	25.2%
Poor leadership & micromanagement	27	20.0%
Understaffing & lack of specialization	20	14.8%
Weak communication across departments	20	14.8%
Slow decision-making & lack of delegation	14	10.4%
Inadequate resources (including customer care)	7	5.2%
Resistance to change & lack of trust	13	9.6%
Total	135	100%

Table 4.23 presents the key challenges related to organizational structure in hospitals as reported by participants. The respondents highlighted centralized decision-making and limited employee autonomy (25.2%), poor leadership and micromanagement (20.0%), understaffing and lack of specialization (14.8%), and weak communication across departments (14.8%). They also reported slow decision-making and lack of delegation (10.4%), inadequate resources including customer care (5.2%), and resistance to change combined with lack of trust among staff (9.6%). These findings align with Mutungi (2022), who observed that challenges in organizational structure include rapid staff turnover, poor leadership, inadequate resource allocation, and losses in productivity and profits. Collectively, these challenges underscore the barriers that hospitals face in effectively implementing dynamic capabilities.

The respondents were asked to propose ways to enhance organizational structure in their organization.

Table 4. 24: Enhancing Organizational Structure

Themes	Frequency (n)	Percentage (%)
Clear chain of command / defined reporting structure	30	22.2%
Clear communication of deadlines and expectations	20	14.8%
Task assignment, motivation, and accountability	18	13.3%
Streamlined operations through hierarchy	15	11.1%
Work specialization / breaking tasks into components	15	11.1%
Feedback and reporting mechanisms for employees	12	8.9%
Escalation procedures for unresolved issues	10	7.4%
Improving productivity and efficiency through coordination	15	11.1%
Total	135	100%

Table 4.24 presents the key strategies for enhancing organizational structure to support the implementation of dynamic capabilities in hospitals as proposed by participants. The respondents emphasized adopting a clear chain of command and defined reporting structure (22.2%), ensuring clear communication of deadlines and expectations (14.8%), assigning tasks while providing motivation and accountability (13.3%), streamlining operations through a hierarchical structure (11.1%), and implementing work specialization by breaking complex tasks into smaller components (11.1%). They also recommended establishing feedback and reporting mechanisms for employees (8.9%), escalation procedures for unresolved issues (7.4%), and improving productivity and efficiency through coordination (11.1%). These strategies align with Simon, Njuguna, and Kivaa (2021), who note that a well-defined chain of command is widely used across organizations to streamline reporting, enhance accountability, and improve operational efficiency.

4.5.6 Organizational Performance

The dependent variable in this study was the organizational performance of referral hospitals. Measures of performance included efficiency in service delivery, turnaround time, and customer satisfaction. Participants were asked to specify their level of agreement with various statements related to these aspects of organizational performance. The Likert scale used a 5-point format, where 5 = Strongly Agree, 4 =

Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree. Results are presented in Table 4.25.

Table 4. 25: Aspects of Organizational Performance

	5	4	3	2	1	N	Mean	Std. Deviation
Medical equipment in our health facility are available	14.1%	63.0%	17.8%	3.7%	1.5%	135	3.844	0.762
Number of out-patients serviced per day has been increasing	12.6%	72.6%	10.4%	2.2%	2.2%	135	3.911	0.717
Number of in-patients serviced per day has been increasing	10.4%	63.7%	19.3%	5.2%	1.5%	135	3.763	0.765
Turnaround time is very low	5.2%	60.0%	24.4%	8.1%	2.2%	135	3.578	0.805
There is little queuing in the hospital	20.7%	50.4%	14.1%	14.1%	0.7%	135	3.763	0.964
There are few customer complaints regarding the turnaround time	9.6%	53.3%	27.4%	8.9%	0.7%	135	3.622	0.809

Participants agreed, with a mean score of 3.911 (SD = 0.717), that the number of out-patients serviced per day has been increasing. They also agreed that medical equipment in the health facility is available, with a mean score of 3.844 (SD = 0.762). These findings contrast with Wang et al. (2025) observations that health facilities in Kenya suffer from a lack of infrastructure and essential equipment. Additionally, respondents agreed, with a mean score of 3.763 (SD = 0.765), that the number of in-patients serviced per day has been rising. They also agreed that turnaround time is very low, as indicated by a mean score of 3.578 (SD = 0.805)

Participants were asked to identify the problems affecting organizational performance within their hospitals.

Table 4. 26: Challenges Facing Organizational Performance

Themes	Frequency (n)	Percentage (%)
Low manpower relative to patient numbers / staff shortages	25	18.5%
Heavy workloads / low staff morale / low motivation	20	14.8%
Inadequate medical infrastructure / equipment breakdowns	20	14.8%
Lack of essential reagents / medicine shortages	15	11.1%
Long admission procedures / patient queues	15	11.1%
Insufficient communication channels	15	11.1%
Low staff productivity / absence of measurable goals	15	11.1%
Frequent unexcused absenteeism	10	7.4%
Total	135	100%

Table 4.26 presents the key challenges affecting organizational performance in hospitals as reported by participants. The respondents highlighted low manpower relative to patient numbers and staff shortages (18.5%), heavy workloads leading to low morale and motivation (14.8%), inadequate medical infrastructure and frequent equipment breakdowns (14.8%), lack of essential reagents and medicine shortages (11.1%), long admission procedures and patient queues (11.1%), insufficient communication channels (11.1%), low staff productivity and absence of measurable goals (11.1%), and frequent unexcused absenteeism (7.4%). These observations align with Okoisama and Oshi (2025), who found that 80% of public hospitals lack structured plans for employee motivation and talent management, and with Korwa (2025), which reported that health facilities in Kenya often face staff shortages, sometimes relying on interns or unqualified personnel to fill gaps. Collectively, these challenges underscore the multifaceted constraints affecting effective service delivery in hospitals.

Participants were asked to suggest ways of improving organizational performance within their hospitals.

Table 4. 27: Strategies for Improving Organizational Performance

Themes	Frequency (n)	Percentage (%)
Increase medical equipment and maintain existing machines	20	14.8%
Conduct regular recruitment / address understaffing	20	14.8%
Provide timely and adequate funding / increase budget allocations	15	11.1%
Automate patient response systems / adopt modern technology	15	11.1%
Establish proper communication channels	10	7.4%
Construct additional facilities / acquire new equipment	15	11.1%
Timely payment of staff / ensure safe working conditions	10	7.4%
Strengthen governance, accountability, and transparency	15	11.1%
Optimize management and operational systems	10	7.4%
Promote public-private collaborations and partnerships	5	3.7%
Total	135	100%

Table 4.27 presents the key strategies for improving organizational performance in hospitals as proposed by participants. The respondents emphasized increasing medical equipment and maintaining existing machines (14.8%), conducting regular recruitment to address understaffing (14.8%), providing timely and adequate funding and increasing budget allocations (11.1%), automating patient response systems and adopting modern technology (11.1%), establishing proper communication channels (7.4%), constructing additional facilities and acquiring new equipment (11.1%), ensuring timely payment of staff and maintaining safe working conditions (7.4%), strengthening governance, accountability, and transparency (11.1%), optimizing management and operational systems (7.4%), and promoting public–private collaborations and partnerships (3.7%). These strategies align with Riany (2021), who observed that health facilities in Kenya often lack infrastructure and essential equipment, highlighting the importance of strategic partnerships to support service delivery.

Figure 4.3 shows the average turnaround time in referral hospitals in Kenya, highlighting the efficiency of service delivery across different facilities.

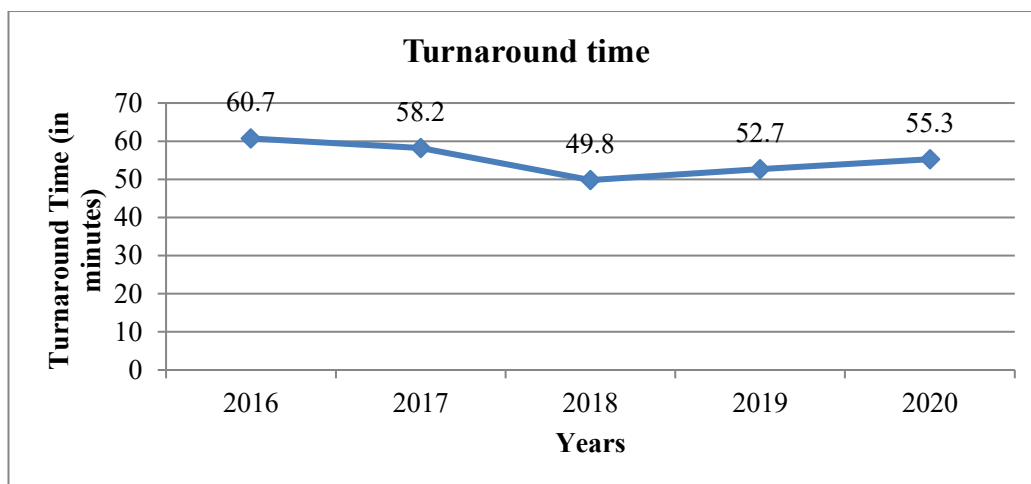


Figure 4. 3: Turnaround time in Health Facilities

Source: Ministry of Health (2024)

From the results, as shown in Figure 4.3 the average turnaround time in referral hospitals in Kenya in 2016 was 60.7 minutes, which decreased to 58.2 minutes in 2017, 49.8 minutes in 2018, but increased to 52.7 minutes in 2019 and 55.3 minutes in 2020. The average patient satisfaction index was 63.7 in 2016, which increased to 70.8 in 2017 and 72.8 minutes in 2018. This suggests that efficient service delivery improves patient satisfaction, consistent with Wang et al. (2025), and contrasts with Castelo and Gomes (2023), who reported low satisfaction due to delays.

Figure 4.4 presents the patient satisfaction index across health facilities, highlighting variations in service quality as perceived by patients.

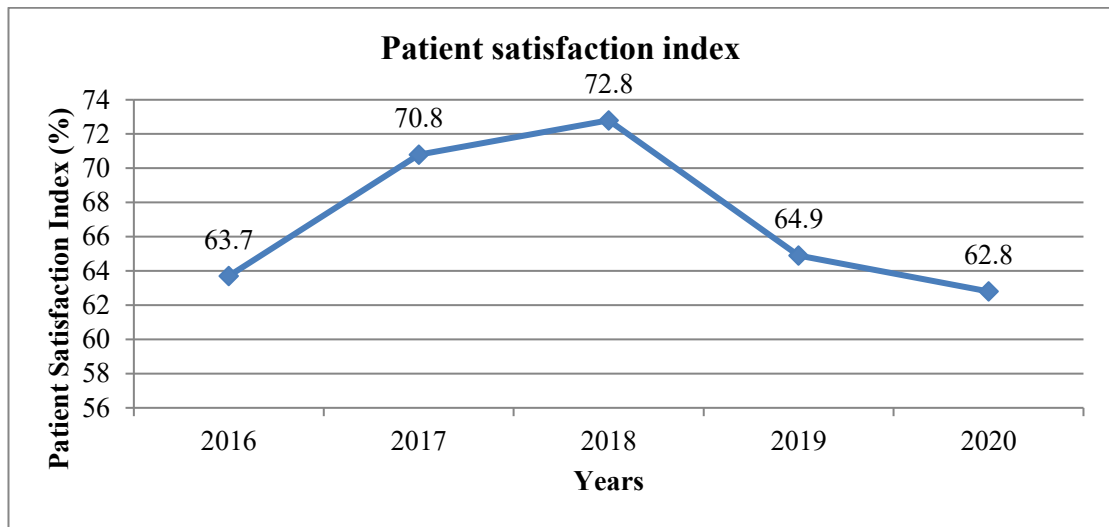


Figure 4. 4: Patient satisfaction index in Health Facilities

Source: Ministry of Health (2024)

In 2019, the patient satisfaction index decreased to 64.9 minutes and 62.8 minutes in 2020. These trends align with the survey findings, where participants agreed that turnaround time is generally low (Mean = 3.578, SD = 0.805) and that patients are mostly satisfied with services (Mean = 3.904–3.948). However, neutrality on satisfaction with service duration (Mean = 3.370, SD = 0.844) reflects the fluctuations in the satisfaction index. This suggests that efficient service delivery improves patient satisfaction, consistent with Wang et al. (2025), and contrasts with Castelo and Gomes (2023), who reported low satisfaction due to delays.

4.6 Diagnostic Tests

The underlying assumptions of linear regression include normality of residuals, absence of minimal multicollinearity, homoscedasticity, and a linear relationship between the independent and dependent variables. If these assumptions are violated, the confidence intervals, significance levels, and coefficient estimates from the regression model may become misleading, biased, or inefficient. Moreover, when one or more of the regression assumptions are violated, the inferences derived from the regression model are incapable of being generalized on other data.

4.6.1 Test for Normality

The Shapiro-Wilk test was employed to assess the normality of the study data. In this test, the null hypothesis assumes that the data are drawn from a population that is normally distributed. A p-value greater than 0.05 indicates that the data do not significantly deviate from normality (Field, 2024).

Table 4. 28: Test for Normality of Data

	Shapiro-Wilk		
	Statistic	df	Sig.
Organizational Performance	.938	135	.293
Knowledge management capability	.949	135	.445
Strategic Collaboration capability	.931	135	.223
Talent Management Capability	.949	135	.445
ICT Capability	.960	135	.640
Organizational Structure	.922	135	.162

In this study, all variables met this criterion: organizational performance had a p-value of 0.293, knowledge management capability 0.445, strategic collaboration capability 0.223, talent management capability 0.445, ICT capability 0.640, and organizational structure 0.162. These results indicate that the data for all variables were normally distributed.

Normality is a crucial assumption in regression analysis because it ensures that the residuals, the differences between observed and predicted values, are approximately normally distributed (Saunders et al., 2023). When this assumption holds, the estimates of regression coefficients are unbiased, the confidence intervals are accurate, and the p-values for significance tests are reliable. Therefore, confirming normality in this study supports the validity of the multiple regression analysis, allowing for meaningful interpretation of the relationships between dynamic capabilities, organizational structure, and organizational performance. Since the data were normally distributed, the regression results can be interpreted with confidence, ensuring that inferences drawn about the influence of the independent variables and moderating effects are statistically sound.

4.6.2 Linearity Test

A fundamental assumption in regression analysis is that the relationship between each independent variable and the dependent variable is linear (Field, 2024). Linearity ensures that changes in the independent variables correspond to proportional changes in the dependent variable, which is essential for accurate estimation of regression coefficients and valid hypothesis testing. In this study, the assumption of linearity was assessed using scatter plots of each predictor variable against organizational performance (the dependent variable). The scatter plots revealed a roughly straight-line pattern for all independent variables, indicating that the relationships were linear. This linearity was further confirmed by the calculation of correlation coefficients, which suggested consistent and proportional changes in the dependent variable relative to changes in the predictors.

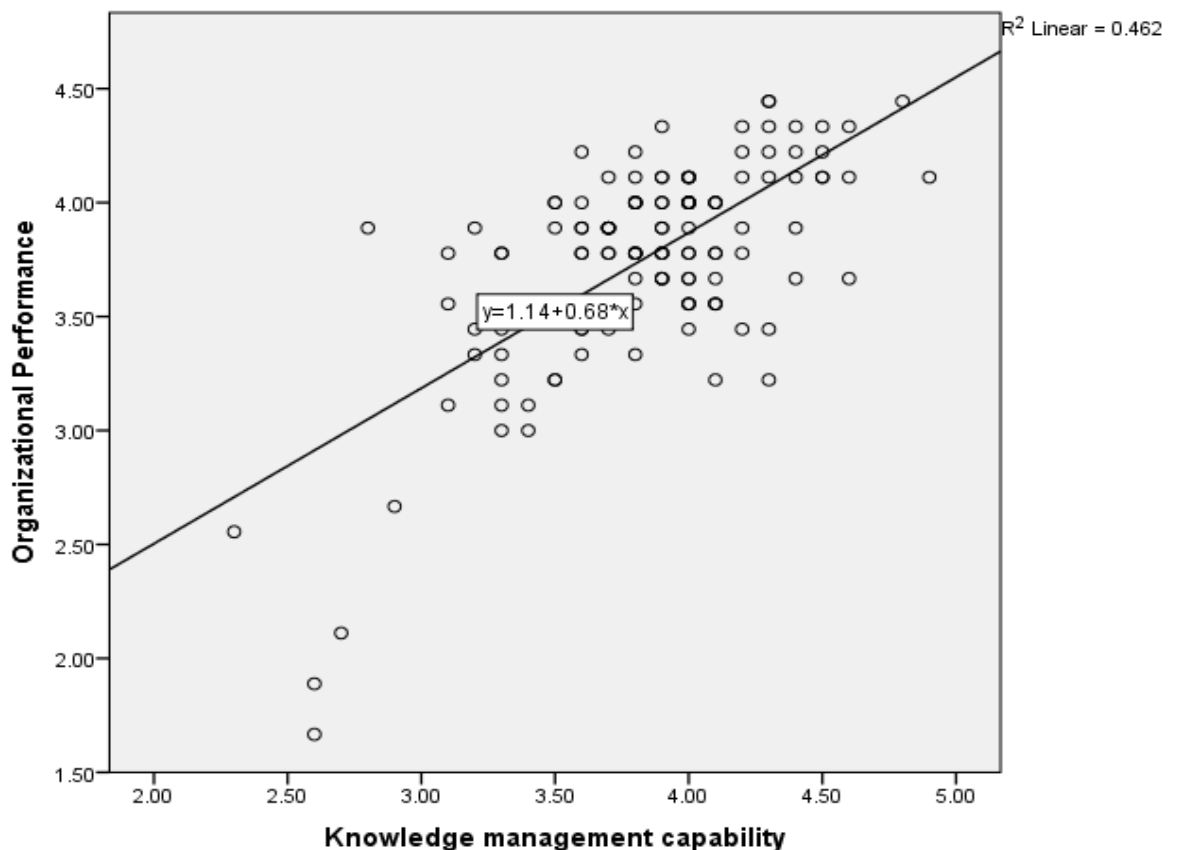


Figure 4.5: Scatter plot for the Knowledge management capability and Organizational Performance

As illustrated in Figure 4.5, the knowledge management capability has a positive linear relationship with organizational performance of referral hospitals in Kenya. The findings suggest that enhancing knowledge management capability is likely to improve the organizational performance of referral hospitals in Kenya. Additionally, the results indicate that knowledge management capability accounts for 46.2% of the variance in organizational performance among these hospitals. This implies a positive association between knowledge management capability and organizational performance in referral hospitals in Kenya.

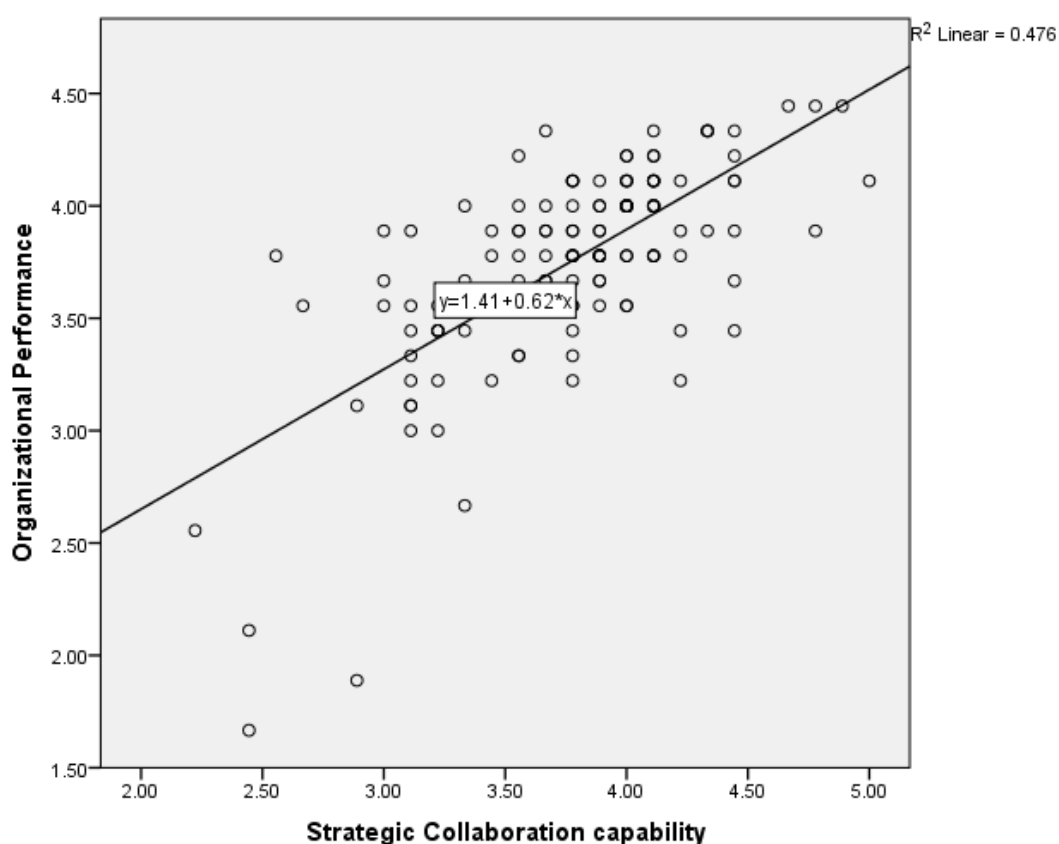


Figure 4.6: Scatter plot for the Strategic Collaboration capability and Organizational Performance

The findings, as shown in Figure 4.6, show that the strategic collaboration capability has a positive linear relationship with organizational performance of referral hospitals in Kenya. The results indicate that an enhancement in the strategic collaboration capability would result to an enhanced organizational performance of referral hospitals in Kenya. The findings further indicate that the strategic collaboration capability could

explain 47.6% of the variance in organizational performance of referral hospitals in Kenya. This is an indication that the strategic collaboration capability positively associates with organizational performance of referral hospitals in Kenya.

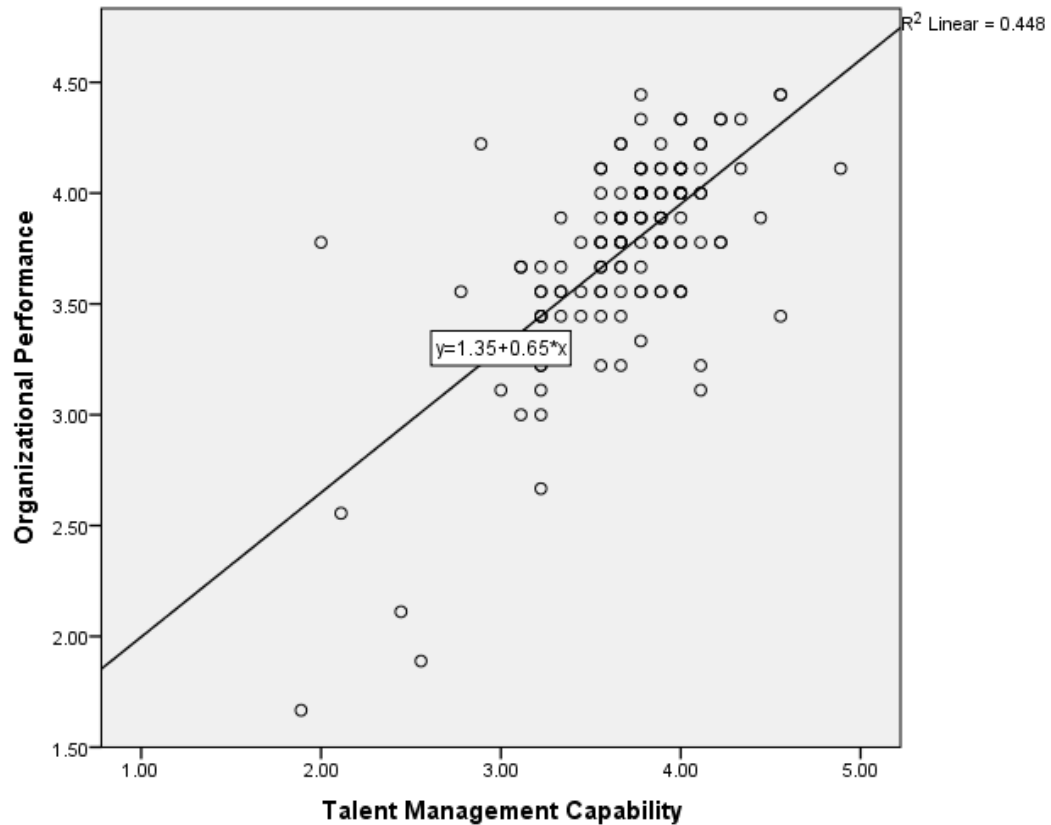


Figure 4.7: Scatter plot for the Talent Management Capability and Organizational Performance

The findings presented in Figure 4.7 indicate that the talent management capability has a positive linear relationship with organizational performance of referral hospitals in Kenya. This suggests that enhancing talent management capability would lead to an increase in organizational performance. The findings also reveal that talent management capability accounts for 44.8% of the variance in organizational performance among referral hospitals in Kenya. This indicates a positive association between talent management capability and organizational performance in these hospitals.

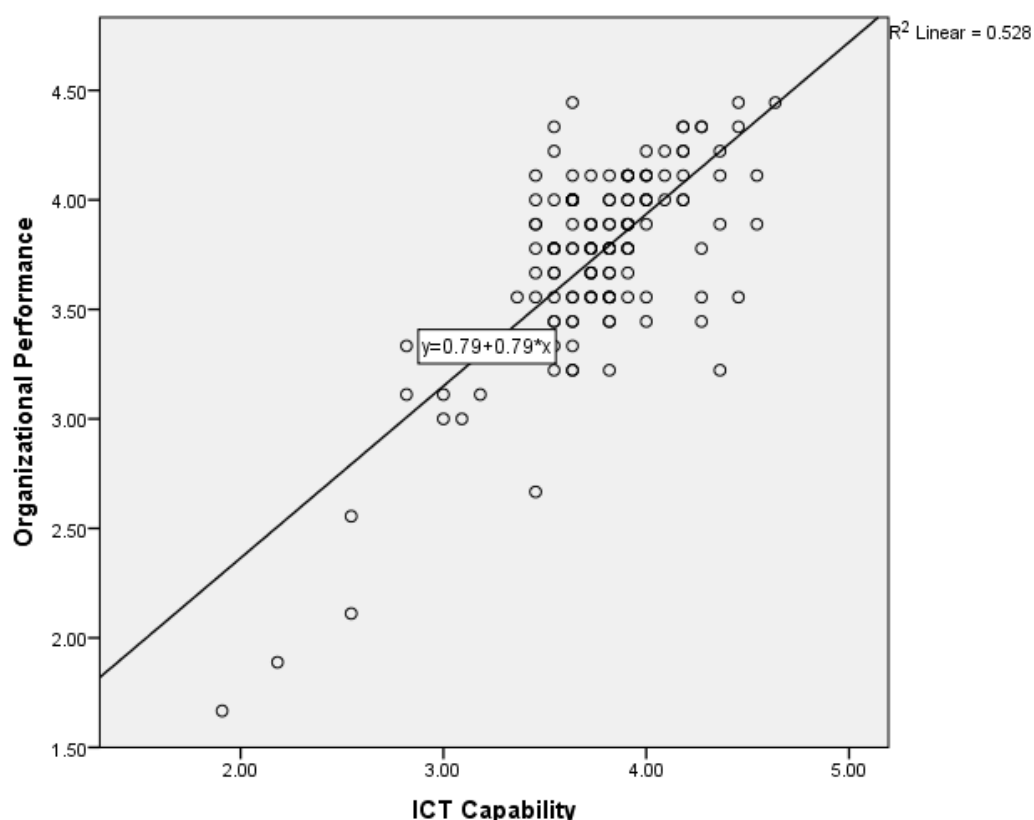


Figure 4.8: Scatter plot for ICT Capability and Organizational Performance

As per the findings presented in Figure 4.8, ICT capability has a positive linear relationship with organizational performance of referral hospitals in Kenya. The findings indicate that an enhancement in ICT capability would result to an enhancement in the organizational performance of referral hospitals in Kenya. The results further indicate that ICT capability could explain 52.8% of the variance in organizational performance of referral hospitals in Kenya. This means that ICT capability positively associates with organizational performance of referral hospitals in Kenya.

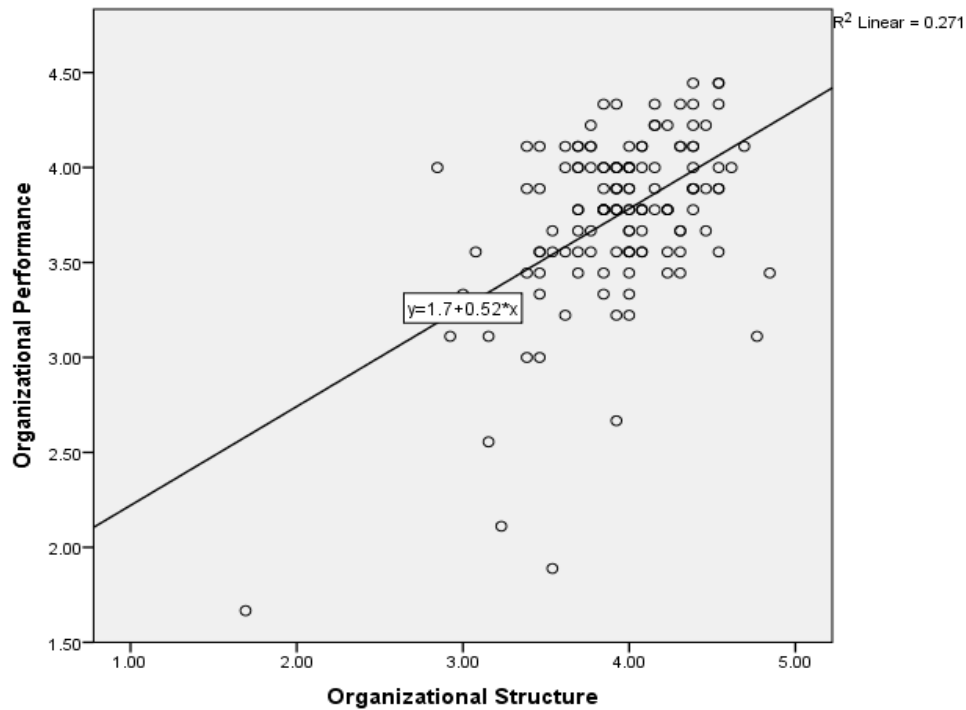


Figure 4.9: Scatter plot for Organizational Structure and Organizational Performance

As illustrated in Figure 4.9, the organizational structure has a positive linear relationship with organizational performance of referral hospitals in Kenya. The results indicate that an enhancement in the organizational structure results to an enhancement in organizational performance of referral hospitals in Kenya. The findings further imply that the organizational structure could explain 27.1% of the variance in organizational performance of referral hospitals in Kenya. This means that organizational structure is positively associated with organizational performance of referral hospitals in Kenya.

4.6.3 Multicollinearity Test

Multicollinearity occurs when two or more independent variables in a regression model are highly correlated, which can inflate the standard errors of regression coefficients and reduce the precision and statistical power of the model (Belle et al., 2022). High multicollinearity makes it difficult to determine the individual effect of each predictor on the dependent variable, potentially leading to misleading conclusions. To detect multicollinearity, this study examined tolerance values and Variance Inflation Factors (VIF). Tolerance measures the proportion of variance in an

independent variable that is not explained by the other independent variables in the model. Low tolerance values, close to 0, indicate that the variable shares a high proportion of variance with others, suggesting potential multicollinearity. VIF is the reciprocal of tolerance and indicates how much the variance of a regression coefficient is inflated due to correlations with other predictors. A VIF value above 10 is generally considered indicative of serious multicollinearity.

Table 4. 29: Collinearity Statistics

	Tolerance	VIF
Knowledge management capability	.441	2.270
Strategic Collaboration capability	.377	2.650
Talent Management Capability	.456	2.192
ICT Capability	.509	1.965

a. Dependent Variable: Organizational Performance

From the results, the VIFs for the variables, knowledge management capability (2.270), strategic collaboration capability (2.650), talent management capability (2.192) and ICT capability (1.965) were all below 10 and tolerances above 0.1. This suggests that there was no severe multicollinearity among the variables. Consequently, the findings of multiple regression analysis are considered reliable, as the independent variables are not highly correlated with each other.

4.6.4 Heteroskedasticity Test

Homoscedasticity, or constant variance of residuals, is a key assumption in regression analysis. A violation of this assumption, known as heteroskedasticity, can lead to inefficient estimates of regression coefficients, distorted standard errors, and unreliable confidence intervals, which in turn affects the validity of significance tests (Saunders et al., 2023). To assess heteroskedasticity, this study employed the Breusch-Pagan test, which evaluates whether the variance of the error term is dependent on the independent variables. The null hypothesis (H_0) for this test asserts that the error variances are equal across all levels of the predictors, while the alternative hypothesis (H_1) suggests the presence of heteroskedasticity.

Table 4. 30: Breusch-Pagan test for Heteroscedasticity

Ho: Constant variance	
Variables: Fitted with values of Organizational performance	
Chi2 (1)	0.85
Prob>chi2	0.3564

As shown in Table 4.30, the Breusch-Pagan test yielded a p-value of 0.3564, which exceeds the significance level of 0.05. This indicates that the null hypothesis cannot be rejected, suggesting that the residuals are homoscedastic. In other words, the variance of the errors is constant across all levels of the independent variables, ensuring that the regression coefficients, standard errors, and significance tests are unbiased and reliable. The satisfaction of the homoscedasticity assumption supports the robustness of the multiple regression results in this study.

4.7 Correlation Analysis

The Pearson product-moment correlation coefficient was used to assess the strength of the relationships between the independent variables (knowledge management capability, strategic collaboration capability, talent management capability, and ICT capability) and the dependent variable (organizational performance). The results are presented in Table 4.31.

Table 4.31: Correlation Coefficients

		OP	OS	KM	SCC	TMC	ICT	C
Organizational Performance (OP)	Pearson	1						
	Correlation							
	Sig. (2-tailed)							
	N	135						
Organizational Structure (OS)	Pearson	.521**	1					
	Correlation							
	Sig. (2-tailed)	.000						
	N	135	135					
Knowledge management capability (KMC)	Pearson	.680**	.212	1				
	Correlation							
	Sig. (2-tailed)	.000	0.065					
	N	135	135	135				
Strategic Collaboration capability (SCC)	Pearson	.690**	.206	.195	1			
	Correlation							
	Sig. (2-tailed)	.000	0.076	0.089				
	N	135	135	135	135			
Talent Management Capability (TMC)	Pearson	.670**	.172	.165	.143	1		
	Correlation							
	Sig. (2-tailed)	.000	0.980	0.108	0.119			
	N	135	135	135	135	135		
ICT Capability (ICTC)	Pearson	.726**	.132	.123	.118	.108	1	
	Correlation							
	Sig. (2-tailed)	.000	0.143	0.152	0.173	0.192		
	N	135	135	135	135	135	135	

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

The first hypothesis of the study stated that knowledge management capability has no statistically significant influence on the organizational performance of referral hospitals in Kenya. Knowledge management capability, operationalized through knowledge sharing, acquisition/learning, and storage of knowledge, was found to have a strong positive influence on organizational performance ($r = 0.680$, $p < 0.01$). This indicates that referral hospitals that effectively acquire, share, and store knowledge achieve higher staff efficiency, faster service delivery, and improved patient care outcomes. The strength of this relationship underscores the critical role of knowledge management in enhancing operational processes, decision-making, and overall hospital effectiveness. These findings align with Wachinga and Deya (2021), who observed that robust knowledge management practices significantly enhance operational efficiency and nursing care performance in teaching hospitals, emphasizing the practical importance of institutionalizing knowledge-sharing mechanisms.

The second hypothesis proposed that strategic collaboration capability has no statistically significant influence on the organizational performance of referral hospitals in Kenya. Strategic collaboration capability, measured by equipment leasing agreements, partnership in training, and sharing of medical information, demonstrated a strong positive relationship with organizational performance ($r = 0.690$, $p < 0.01$). Hospitals that actively engage in partnerships and collaborative initiatives improve service delivery, facilitate resource sharing, foster innovation, and enhance responsiveness to patient needs. The strength of this association highlights the value of deliberate and well-managed collaboration as a core strategy for improving hospital performance. These results are consistent with Barasa and Simiyu (2024), who found that strategic collaboration positively influences health service performance in Embu County, underscoring the importance of alliances in health sector efficiency.

The third hypothesis stated that talent management capability has no statistically significant influence on the organizational performance of referral hospitals in Kenya. Talent management capability, operationalized through talent attraction, talent development, and talent retention, exhibited a strong positive effect on organizational performance ($r = 0.670$, $p < 0.01$). Hospitals with robust talent management practices benefit from motivated, competent, and productive staff, leading to improved service quality, operational efficiency, and patient satisfaction. The strength of this relationship indicates that investing in human capital is critical for sustaining high performance in health institutions. These findings support Tomeyan and Mose (2025), who highlighted that effective talent management significantly enhances employee satisfaction and productivity, reinforcing its strategic value in healthcare organizations.

The fourth hypothesis posited that ICT capability has no statistically significant influence on the organizational performance of referral hospitals in Kenya. ICT capability, measured through communication automation, digital consultation and payment systems, demonstrated the strongest positive correlation with organizational performance among all variables ($r = 0.726$, $p < 0.01$). The findings indicate that hospitals leveraging ICT effectively enhance patient record management, facilitate timely decision-making, streamline administrative processes, and improve overall

efficiency. The strength of this effect underscores ICT as a transformative capability that drives both operational and strategic gains in health service delivery. These results corroborate Gitau, Nzuki, and Musau (2022), who reported that ICT adoption significantly improves service delivery, reduces operational delays, and enhances patient care in hospitals.

The fifth hypothesis stated that organizational structure has no statistically significant moderating effect on the influence of dynamic capabilities on the organizational performance of referral hospitals in Kenya. Organizational structure, measured by chain of command, span of control, and work specialization, was found to positively moderate the relationship between dynamic capabilities and performance ($r = 0.521$, $p < 0.01$). Hospitals with well-defined hierarchies, clear roles, and effective delegation are better able to coordinate knowledge management, strategic collaboration, talent management, and ICT capabilities efficiently. The moderate but significant strength of this relationship highlights the essential role of organizational structure in enhancing the effectiveness of internal capabilities. These findings align with Riany (2021), who noted that a clear and functional organizational structure strengthens the impact of internal capabilities on performance outcomes, reinforcing its role as a critical enabler of hospital efficiency and effectiveness.

4.8 Regression Analysis

Regression analysis is a statistical method used to examine the relationship between one or more independent variables and a dependent variable, helping to determine how predictors influence outcomes. In this study, simple regression, multiple regression, and multivariate regression were used to assess the effect of knowledge management capability on the organizational performance of referral hospitals in Kenya.

4.8.1 Simple Regression Analysis

4.8.1.1 Knowledge Management Capability and Organizational Performance

A simple regress analysis was conducted to investigate the influence of knowledge management capability on organizational performance of referral hospitals in Kenya. The null hypothesis stated:

H₀₁: Knowledge management capability has no statistically significant influence on organizational performance of referral hospitals in Kenya

Table 4. 31: Model Summary, ANOVA and Regression Coefficients for Knowledge Management Capability and Performance

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.680 ^a	.462	.443	.4342		
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.224	1	10.224	96.446	.000 ^b
	Residual	14.099	133	0.106		
	Total	24.323	134			
Regression Coefficients						
Model		Unstandardized Coefficients	Standardized t		Sig.	
		B	Std. Error	Beta		
1	(Constant)	1.092	0.223		4.897	.000
	Knowledge Management Capability	0.542	0.163	0.67	3.325	.000

a. Dependent Variable: Organizational Performance

The model summary (Table 4.32) shows an R value of 0.680 and an R² of 0.462, indicating that knowledge management capability explains 46.2% of the variation in organizational performance, while 53.8% is accounted for by other factors not included in the model. The ANOVA results indicate that the model is statistically significant, with $F(1,133) = 96.446$ and a p-value of 0.000, which is below the 0.05 significance level. This confirms that the regression model fits the data well, leading to the rejection of the null hypothesis (H₀₁) that knowledge management capability has no significant influence on organizational performance.

The regression coefficients (Table 4.33) show a positive and significant relationship, with a beta coefficient ($\beta = 0.542$, $p = 0.000$), leading to the regression equation:

$$Y = 1.092 + 0.542X_1$$

This implies that for every one-unit increase in knowledge management capability, organizational performance increases by 0.542 units. Therefore, knowledge management capability has a statistically significant and positive effect on the performance of referral hospitals in Kenya. These findings agree with Chen and Yu (2024), who showed that knowledge management capability enhances organizational performance. They also align with Alo et al. (2025), who reported that effective knowledge management positively influences organizational outcomes. Similarly, Haider and Kayani (2021)) found that knowledge management capability significantly improves organizational performance.

4.8.1.2 Strategic Collaboration Capability and Organizational Performance

A simple regress analysis was conducted to investigate the influence of strategic collaboration capability on organizational performance of referral hospitals in Kenya. The null hypothesis stated:

H₀₂: Strategic collaboration capability has no statistically significant influence on organizational performance of referral hospitals in Kenya

Table 4. 32: Model Summary, ANOVA and Regression Coefficients for Strategic Collaboration Capability and Performance

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.670 ^a	0.476	0.453	0.2324		
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.343	1	9.343	92.429	.000 ^b
	Residual	13.444	133	0.101		
	Total	22.787	134			
Regression Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.212	0.223		5.435	0.000
	Talent Management Capability	0.487	0.163	0.465	2.988	0.000

The model summary (Table 4.33) shows an R value of 0.670 and an R^2 of 0.476, indicating that strategic collaboration capability explains 47.6% of the variation in organizational performance, while 52.4% is accounted for by other factors not included in the model. The ANOVA results indicate that the model is statistically significant, with $F(1,133) = 92.429$ and a p-value of 0.000, which is below the 0.05 significance level. This confirms that the regression model fits the data well, leading to the rejection of the null hypothesis (H_02) that strategic collaboration capability has no significant influence on organizational performance.

The regression coefficients (Table 4.34) show a positive and significant relationship, with a beta coefficient ($\beta = 0.487$, $p = 0.000$), leading to the regression equation:

$$Y = 1.212 + 0.487X_1$$

This implies that for every one-unit increase in strategic collaboration capability, organizational performance increases by 0.487 units. Therefore, strategic collaboration capability has a statistically significant and positive effect on the performance of referral hospitals in Kenya. These findings agree with Tahili et al. (2025), who demonstrated that collaboration and knowledge sharing enhance organizational performance. They also align with Idolor et al. (2025), who reported that strategic collaboration positively influences organizational outcomes. Similarly, Moeliadi et al. (2025) found that strategic collaboration capability significantly improves organizational performance

4.8.1.3 Talent Management Capability and Organizational Performance

A simple regress analysis was conducted to investigate the influence of talent management capability on organizational performance of referral hospitals in Kenya. The null hypothesis stated:

H₀₃: Talent management capability has no statistically significant influence on organizational performance of referral hospitals in Kenya

Table 4. 33: Model Summary, ANOVA and Regression Coefficients for Talent Management Capability and Performance

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.670 ^a	.448	.444	.33593		
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.203	1	12.203	108.137	.000 ^b
	Residual	15.009	133	.113		
	Total	27.212	134			
Regression Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.346	.232		5.793	.000
	Talent Management Capability	.651	.063	.670	10.399	.000

The r-squared for relationship between talent management capability and performance of referral hospitals in Kenya was 0.448. This implies that talent management capability explains 44.8% of the performance of referral hospitals in Kenya. This further shows that 55.28% of the performance of referral hospitals in Kenya is accounted for by other factors not included in the model, and the error term. ANOVA results showed that the value of F-calculated (108.137) was higher than the value of F-critical (3.871), and the p-value (0.000) was below the significance level (0.05). This indicates that the model fits the data well. The null hypothesis was therefore rejected, and the alternate hypothesis adopted. Therefore, the research study established that the talent management capability significantly influences the performance of referral hospitals in Kenya.

The regression model, derived from the research study results as presented in Table 4.35, is:

$$Y = 1.346 + 0.651X_1$$

Regression analysis results showed that talent management capability has a positive and significant effect on organizational performance of referral hospitals ($\beta_1=0.651$, p-

value=0.000). The beta coefficient was not zero and the p-value was 0.003, which was less than the significance level of 0.05. Therefore, the null hypothesis (H_{01}) was rejected and the alternative hypothesis (H_{a1}) was accepted and hence there is statistically significant influence of talent management capability on organizational performance of referral hospitals in Kenya. The findings agree with Igwe et al. (2025), who showed that effective talent management enhances organizational performance. The findings are also in line with Shabeer and Mahmood (2025), who reported that strategic management of human resources positively influences organizational outcomes.

4.8.1.4 ICT Capability and Organizational Performance

A simple regress analysis was conducted to investigate the influence of ICT capability on organizational performance of referral hospitals in Kenya. The null hypothesis stated:

H₀₄: ICT capability has no statically significant influence on organizational performance of referral hospitals in Kenya

Table 4. 34: Model Summary, ANOVA and Regression Coefficients for ICT Capability and Performance

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.726 ^a	.528	.524	.31088		
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.358	1	14.358	148.563	.000 ^b
	Residual	12.854	133	.097		
	Total	27.212	134			
Regression Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	.794	.244		3.262	.001
1	ICT Capability	.785	.064	.726	12.189	.000

The r-squared for relationship between ICT capability and performance of referral hospitals in Kenya was 0.528. This implies that ICT capability explains 52.8% of the performance of referral hospitals in Kenya. This further shows that 47.2% of the performance of referral hospitals in Kenya is accounted for by other factors not included in the model, and the error term. Table 4.35 shows that the value of F-calculated (148.563) was higher than the value of F-critical (3.871), and the p-value (0.000) was below the significance level (0.05). This indicates that the model fits the data well. The null hypothesis was therefore rejected, and the alternate hypothesis adopted. Therefore, the research study established that the ICT capability significantly influences the performance of referral hospitals in Kenya

The regression model, derived from the research study results as presented in Table 4.36, is:

$$Y = 0.794 + 0.785X_1$$

The results from regression analysis showed that ICT capability has a positive and significant effect on organizational performance of referral hospitals ($\beta_1=0.785$, p-value=0.000). The beta coefficient was not zero and the p-value was 0.000, which was less than the significance level of 0.05. Therefore the null hypothesis (H_{01}) was rejected and the alternative hypothesis (H_{a1}) was accepted and hence there is statistically significant influence of ICT capability on organizational performance of referral hospitals in Kenya. The findings agree with Jin et al. (2022), who demonstrated that ICT adoption positively influences organizational performance. The findings are also in line with Bettiol et al. (2022), who reported that effective ICT capability enhances operational efficiency and strategic outcomes in organizations.

4.8.2 Multiple regression analysis

Multiple regression analysis was conducted to explore the relationships between the independent variable (knowledge management capability, strategic collaboration capability, talent management capability and ICT capability) and dependent variable (organizational performance).

Table 4. 35: Model Summary, ANOVA and Regression Coefficients for Dynamic Capabilities and Performance

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.827 ^a	.684	.675	.25708		
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.620	4	4.655	70.432	.000 ^b
	Residual	8.592	130	.066		
	Total	27.212	134			
Regression Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.044	.224		0.197	.844
	Knowledge management capability	.194	.075	.193	2.602	.010
	Strategic Collaboration capability	.186	.072	.206	2.571	.011
	Talent Management Capability	.212	.071	.218	2.983	.003
	ICT Capability	.394	.075	.365	5.279	.000

As shown in Table 4.36, the R-squared value for the association between dynamic capabilities and organizational performance was 0.684. This indicates that 68.4% of the variance in organizational performance was explained by the independent variables (ICT capability, strategic collaboration capability, talent management capability, knowledge management capability). ANOVA was conducted to assess whether the model adequately fit the data. As indicated in Table 4.37, the F-calculated value was 70.432, while the F-critical value from the F-distribution table was 2.46. Since the calculated F-value exceeded the F-critical value and the p-value (0.000) was below the 0.05 significance level, the model was deemed to be a suitable fit for the data.

Regression equation for the unstandardized coefficients was;

$$Y = 0.044 + 0.194X_1 + 0.186X_2 + 0.212X_3 + 0.394X_4$$

The first hypothesis of the study was that knowledge management capability has no statistically significant influence on organizational performance of referral hospitals in Kenya. The study found that knowledge management capability has a positive and significant impact on the organizational performance of referral hospitals ($\beta_1=0.194$, $p\text{-value}=0.010$). Since the $p\text{-value}$ (0.010) is below 0.05 significance level, the relationship is deemed significant. This indicates that improvements in knowledge management capability are associated with a 0.194 increase in organizational performance. These results align with Gitau et al. (2022), who found that the performance of KEBS was positively and significantly influenced by knowledge creation, storage, sharing, retrieval, and dissemination. Additionally, these findings support Mumin et al. (2024) observation that knowledge management significantly affects organizational performance.

The second hypothesis of the study was that strategic collaboration capability has no statistically significant influence on organizational performance of referral hospitals in Kenya. The study findings revealed that strategic collaboration capability has a positive and significant effect on the organizational performance of referral hospitals ($\beta_2=0.186$, $p\text{-value}=0.011$). Since the $p\text{-value}$ (0.011) is less than the significance level of 0.05, the relationship is deemed significant. This implies that improvements in strategic collaboration capability are associated with a 0.186 increase in organizational performance. The findings are consistent with those of Idolor et al. (2025) who found that strategic collaboration capability had improved the Hospital general Performance more so customer satisfaction, cost management, resource mobilization and employee motivation. The findings are also in concurrence with Moeliadi et al. (2025) argument that strategic collaboration has a significant effect on the performance of the health sector.

The third hypothesis of the study was that talent management capability has no statistically significant influence on organizational performance of referral hospitals in Kenya. The study found that talent management capability has a significant and positive impact on the organizational performance of referral hospitals. ($\beta_3=0.212$, $p\text{-value}=0.003$). Since the $p\text{-value}$ (0.003) is less than the significance level of 0.05, this relationship is considered significant. This suggests that improvements in talent

management capability are associated with a 0.212 increase in organizational performance. These results align with Shabeer and Mahmood (2025), who argued that talent development is a significant positive predictor of staff performance in Deloitte East Africa. They also corroborate Igwe et al. (2025), who found that talent management significantly impacts performance in the health sector.

The fourth hypothesis of the study was that ICT capability has no statistically significant influence on organizational performance of referral hospitals in Kenya. The study established that ICT capability has a positive and significant effect on the organizational performance in referral hospitals ($\beta_4=0.394$, $p\text{-value}=0.000$). The relationship was deemed significant because the $p\text{-value}$ (0.000) is less than the significance level of 0.05. This indicates that improvements in ICT capability are associated with a 0.394 increase in organizational performance. These results are consistent with the findings of Jin et al. (2022), which highlighted a positive correlation between dynamic ICT capabilities and competitive advantage in TVET institutions in western Kenya. Additionally, the findings are consistent with Mumin et al. (2024), who demonstrated that ICT significantly impacts the performance of European hospitals.

4.8.3 Moderating Effect Analysis

The study aimed to determine the moderating effect of organizational structure on the association between the independent and dependent variables. Moderation occurs when the strength or direction of the association between the dependent variable and the independent variables is affected by a third variable, known as the moderating variable. To assess this, the study conducted a moderating effect analysis to evaluate how organizational structure influences the impact of dynamic capabilities on the organizational performance of referral hospitals in Kenya. The null hypothesis was as follows;

H₀₅: Organizational structure has no statistically significant moderating effect on the influence of dynamic capabilities on organizational performance of referral hospitals in Kenya

Table 4. 36: Model Summary, ANOVA and Regression Coefficients for Dynamic Capabilities, Organizational Structure and Performance

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.820 ^a	.672	.670	.25888		
2	.832 ^b	.692	.685	.25294		
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	18.298	1	18.298	273.025	.000 ^b
	Residual	8.914	133	.067		
	Total	27.212	134			
2	Regression	18.830	3	6.277	98.104	.000 ^c
	Residual	8.381	131	.064		
	Total	27.212	134			
Regression Coefficients						
Model		Unstandardized Coefficients	Standardized Coefficients	t	Sig.	
		B	Std. Error	Beta		
1	(Constant)	.141	.219		.644	.520
	Dynamic Capabilities	.960	.058	.820	16.523	.000
2	(Constant)	-2.440	.964		-2.531	.013
	Dynamic Capabilities	1.624	.276	1.388	5.887	.000
	Organizational Structure	.759	.267	.759	2.841	.005
	Dynamic Capabilities * Organizational Structure	.195	.073	1.163	2.659	.009

a. Dependent Variable: Organizational Performance

The first model included dynamic capabilities as the independent variable and organizational performance as the dependent variable. The R-squared value for this model was 0.672, indicating that 67.2% of the variation in organizational performance at referral hospitals can be explained by dynamic capabilities.

The second model comprised of dynamic capabilities, organizational structure, and the interactions between dynamic abilities and organizational structure. The R-squared was 0.692 which implies that 69.2% of the variation of organizational performance of

referral hospitals could be explained by the stated variables. The results depict that the introduction of organizational structure in the second model led to a 2.0% increase in R-squared.

The results, as presented in Table 4.37, reveal that the F-calculated values were 273.025 for the first model and 98.104 for the second model. Since both F-calculated values exceeded the F-critical values of 3.94 for the first model and 2.70 for the second model, both models were determined to be a good fit for the data. Consequently, these models are suitable for predicting the moderating effect of organizational structure on the relationship between dynamic capabilities and organizational performance in referral hospitals in Kenya

Substituting the beta coefficients and the constant term from the initial step in regression modeling would result in the following model:

$$Y = 0.144 + 0.960X_5$$

In the first model, the findings reveal that dynamic capabilities have a positive and statistically significant impact on the organizational performance of referral hospitals in Kenya, as evidenced by an unstandardized beta coefficient of 0.960 with a p-value of 0.000.

In the second regression model, incorporating organizational structure as a moderating variable, the updated model, reflecting the beta values and the constant term, is as follows:

$$Y = -2.440 + 1.624X_5 + 0.759M + 0.195 X_5 * M$$

In the second model, the results show that dynamic capabilities have a positive and statistically significant impact on the organizational performance of referral hospitals in Kenya, with an unstandardized beta coefficient of 1.624 and a p-value of 0.000. These findings align with Shabeer and Mahmood (2025) observation that dynamic capabilities significantly influence organizational performance, and are consistent with Mgbemena et al. (2022) argument that dynamic capabilities significantly impact performance.

The results further show that organizational structure had a positive and statistically significant influence on organizational performance of referral hospitals in Kenya as shown by an unstandardized beta coefficient of 0.759 (p-value=0.005). The findings agree with Wang et al. (2025) observation that organizational structure positively affects organizational performance of firms in Taiwan.

The results showed that the interaction between dynamic capabilities and organizational structure significantly and positively affects the organizational performance of referral hospitals in Kenya, with an unstandardized beta coefficient of 0.195 and a p-value of 0.009. These findings align with Castelo and Gomes (2023), who observed that organizational structure moderates the relationship between dynamic capabilities and customer orientation.

4.9 Optimal Model

An optimal model in statistical analysis refers to a model that best explains the relationships between variables while providing the most accurate predictions. It involves selecting independent variables that significantly impact the dependent variable, while ensuring the model is interpretable and well-fitted. In this study, the optimal model comprises four independent variables ICT capability, talent management capability, knowledge management capability, and strategic collaboration capability and one dependent variable, organizational performance.

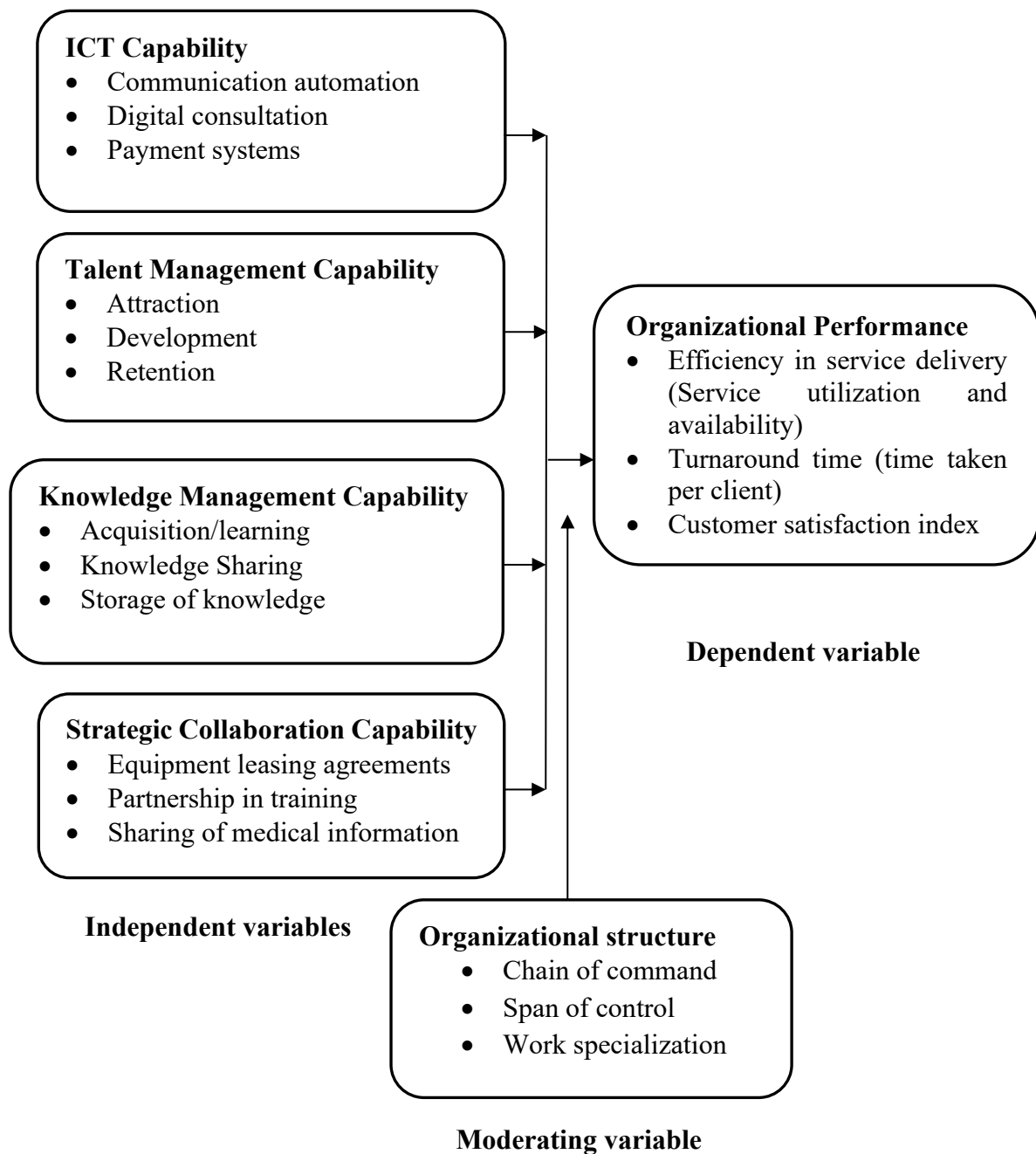


Figure 4. 10: Revised Conceptual Framework

4.10 Test of Null Hypotheses

H₀₁: Knowledge management capability does not have a statistically significant influence on the organizational performance of referral hospitals in Kenya.

The regression analysis showed that knowledge management capability has a positive and significant impact on the organizational performance of referral hospitals ($\beta_1 = 0.193$, $p\text{-value} = 0.010$). Because the beta coefficient is non-zero and the p -value is below the significance level of 0.05, the null hypothesis (H_{01}) was rejected. Therefore, the alternative hypothesis (H_{a1}) was accepted, confirming a statistically significant effect of knowledge management capability on the organizational performance of referral hospitals in Kenya.

H₀₂: Strategic collaboration capability has no statistically significant influence on organizational performance of referral hospitals in Kenya

Regression analysis demonstrated that strategic collaboration capability has a positive and significant impact on the organizational performance of referral hospitals ($\beta_2=0.206$, $p\text{-value}=0.011$). Since the beta coefficient is non-zero and the p -value of 0.011 is below the significance level of 0.05, the null hypothesis (H_{02}) was rejected in favor of the alternative hypothesis (H_{a2}). This indicates a statistically significant effect of strategic collaboration capability on organizational performance in referral hospitals in Kenya.

H₀₃: Talent management capability has no statistically significant influence on organizational performance of referral hospitals in Kenya

The regression analysis results revealed that talent management capability has a positive and significant effect on the organizational performance of referral hospitals ($\beta_3=0.218$, $p\text{-value}=0.003$). Given that the beta coefficient is non-zero and the p -value of 0.003 is below the significance level of 0.05, the null hypothesis (H_{03}) was rejected. Therefore, the alternative hypothesis (H_{a3}) was accepted, confirming a statistically significant impact of talent management capability on the organizational performance of referral hospitals in Kenya.

H₀₄: ICT capability has no statically significant influence on organizational performance of referral hospitals in Kenya

The regression analysis results indicated that ICT capability has a positive and statistically significant effect on the organizational performance of referral hospitals ($\beta_4=0.365$, $p\text{-value}=0.000$). Because the beta coefficient is non-zero and the p -value of 0.000 is below the significance level of 0.05, the null hypothesis (H_{04}) was rejected in

favor of the alternative hypothesis (Ha4). Consequently, ICT capability significantly influences the organizational performance of referral hospitals in Kenya.

H₀₅: Organizational structure does not have a statistically significant moderating effect on the relationship between dynamic capabilities and organizational performance of referral hospitals in Kenya.

Stepwise regression analysis showed that the interaction between dynamic capabilities and organizational structure has a positive and statistically significant impact on the organizational performance of referral hospitals in Kenya ($\beta_7=0.195$, $p\text{-value}=0.009$). Since the beta coefficient is not zero and the p-value of 0.009 is below the significance level of 0.05, the null hypothesis (H₀₅) was rejected. As a result, the alternative hypothesis (Ha5) was supported, demonstrating that organizational structure has a statistically significant moderating effect on the relationship between dynamic capabilities and organizational performance in referral hospitals in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This section provides a summary of the study's findings, conclusions, and recommendations. The primary aim of the study was to assess the impact of dynamic capabilities on the organizational performance of referral hospitals in Kenya. Specifically, the study analyzed how knowledge management capability, strategic collaboration capability, talent management capability, organizational structure, and ICT capability affect the performance of referral hospitals in Kenya.

5.2 Summary of the Findings

This section summarizes the study's findings regarding the effect of knowledge management capability, strategic collaboration capability, talent management capability, ICT capability and organizational structure on the influence of dynamic capabilities on organizational performance of referral hospitals in Kenya.

5.2.1 Knowledge Management Capability and Performance

Descriptive statistics revealed that employees exchange knowledge with their co-workers. Moreover, employees obtain acquire new knowledge from external sources such as seminars, conferences, subscription journals, educational courses, and experts. The study also found that the employees depend on written sources (documentation of earlier implemented projects, organizational procedures, instructions etc.). Further, the study revealed that knowledge is shared by employees via formal procedures (project reports, organizational procedures as well as instructions. Moreover, knowledge is orally shared by employees at meetings or informal congregations (during lunch, within the hallway). The study also found that general leadership and management encourage employees to participate in formal education systems to achieve higher levels of proficiency.

The correlation analysis revealed a positive and significant relationship between knowledge management capability and organizational performance in referral hospitals in Kenya. Regression analysis further confirmed that knowledge

management capability positively and significantly impacts organizational performance. Specifically, the study found that each unit increase in knowledge management capability encompassing acquisition, sharing, and storage leads to a notable and beneficial effect on the performance of referral hospitals in Kenya. These findings support the Knowledge-Based Theory, which posits that knowledge is a critical organizational resource and that effectively managing knowledge enhances performance and provides a sustainable competitive advantage.

5.2.2 Strategic Collaboration Capability and Performance

The descriptive statistics revealed that through equipment leasing agreements the organizations increase accessibility to resources. In addition, the study revealed that the health facilities have made infrastructural collaborations with partners and donors. Further, the hospitals have made collaborations with other hospital in the country. In addition, the hospitals have made partnerships in training with other hospitals. The study established that partnership in training employees ensures the organization employees gain new skills hence improving their productivity. Moreover, the study found that the employees have gained a lot of skills through partnership trainings organized by our hospital. In addition, the organizations arrange meeting purposed for sharing medical information with experts from other hospitals. The study found that employees share medical information with other health workers from other hospitals. The study also found that through sharing of medical information with workers from other hospitals, employees gain a lot of knowledge.

Correlation results demonstrated a positive and significant relationship between strategic collaboration capability and organizational performance in referral hospitals in Kenya. Regression analysis further confirmed that strategic collaboration capability significantly impacts organizational performance. Specifically, the study found that each unit increase in strategic collaboration capability, such as equipment leasing agreements, engaging in joint training, and sharing medical information, positively influences the performance of referral hospitals in Kenya. These findings align with systems theory, which emphasizes that organizations function as interconnected systems and that effective collaboration and coordination among internal and external stakeholders enhance overall organizational performance.

5.2.3 Talent Management Capability and Performance

From descriptive statistics, the study found that there is a platform for comparing the present and desired level of skills and competencies of staff in the organization. The study established that competency mapping aid in identification of individual's training needs and performance appraisals. Moreover, the study established that in the organizations, there is a process of recognizing current staff that has the potential to excel in their career. Furthermore, the study found that on-job training enables staff to familiarize with the working environment as they feel they are part of it. The study revealed that there is a method of teaching the skills, competencies and knowledge required for employees to carry out a particular job within the place of work. Moreover, the study established that job promotion involves advancement in terms of benefits, salary and designation. Furthermore, the study established that provision of incremental bonuses improves the morale of staff with respect to attaining organizational goals. However, the study found that sometimes, the organizations give partially paid scholarship to workers who want to advance their studies. In addition, the study revealed that the organizations do not provide competitive salaries to the employees.

Correlation results indicated a significant and positive relationship between talent management capability and organizational performance in referral hospitals in Kenya. Regression analysis further confirmed that talent management capability positively and significantly impacts organizational performance. The study found that each unit improvement in talent management capability, encompassing talent attraction, development, and retention, leads to a notable enhancement in the organizational performance of referral hospitals in Kenya. These findings are consistent with the Resource-Based View (RBV) Theory, which posits that valuable, rare, and well-managed internal resources, such as skilled and capable human talent, are key drivers of sustained organizational performance and competitive advantage.

5.2.4 ICT Capability and Performance

Descriptive statistics revealed that health facilities have invested in information technology infrastructure such as computers. Furthermore, the study established that the organizations use emails as a means of communication and to consult from the

supervisors. Moreover, telephone calls are used for consultation and communication. The study established the employees have created WhatsApp group for communication. The study also found that the organizations highly encourage electronic payment. However, the study revealed that sometimes, all payments are made through M-pesa pay bill. In addition, the study found that WhatsApp groups are at times used for consultation in the organizations. Moreover, the study established that sometimes, cash is not accepted in the institutions.

Correlation analysis demonstrated a significant and positive relationship between ICT capability and the organizational performance of referral hospitals in Kenya. Regression analysis confirmed that ICT capability positively and significantly affects organizational performance. Specifically, the results indicated that each unit improvement in ICT capability through enhancements in communication automation, digital consultation and payment systems, leads to a notable improvement in the organizational performance of referral hospitals in Kenya. These findings are consistent with the Technology Acceptance Theory, which posits that the perceived usefulness and ease of use of technology influence its adoption and utilization, thereby enhancing organizational efficiency and overall performance.

5.2.5 Moderating Effect of Organizational Structure on Dynamic Capabilities and Organizational Performance

From descriptive statistics, the study revealed that the span of control in the organizations clearly indicate the approach that is used to interact with organizational employees. In addition, the power to make critical decision is placed in the hands of a few organizational staff. The study also found that in the organizations, communication effectively flow down the chain of command. In addition, in the organizations, the power to make critical decision diminishes from the senior staff to subordinate staff. The study found that supervisors and heads of departments delegate duties to employees. The study found that health facilities emphasize on team work to improve efficiency in service delivery. In addition, the study revealed that staffs in the organizations are efficient in discharging their functions with minimal assistance from their superiors. The study also found that the structure in the organizations enable staff to respond to the patients' issues. Moreover, the study established that employees are

allocated tasks depending on their competency skills. In addition, the health facility empowers the employees to increase their skills and competence. The study also found that specialization of work in the organizations enable staff to be promoted to senior ladder. Moreover, the hospitals have a functional Customer Care Department. Further, the study revealed that customers always provide satisfactory remarks for the services.

Correlation analysis results showed that organizational structure has a positive and significant effect on the organizational performance of referral hospitals in Kenya. Stepwise regression analysis revealed that organizational structure significantly moderates the relationship between knowledge management capability, strategic collaboration capability, talent management capability, ICT capability, and the organizational performance of referral hospitals in Kenya. These findings align with the Dynamic Capability Theory, which emphasizes that organizational structures and processes enable firms to integrate, build, and reconfigure internal and external competencies to respond effectively to changing environments, thereby enhancing performance.

5.3 Conclusions

The study concluded that knowledge management capability has a positive and significant impact on the organizational performance of referral hospitals in Kenya. Specifically, the findings revealed that knowledge acquisition and learning, knowledge sharing, and knowledge storage each play a crucial role in shaping performance outcomes. This implies that when referral hospitals invest in systems and practices that facilitate the effective acquisition, dissemination, and preservation of knowledge, they are likely to experience improvements in efficiency, service quality, and overall performance. Therefore, enhancing these knowledge management capabilities is essential for promoting sustainable organizational success in the healthcare sector.

The study further concluded that strategic collaboration capability positively and significantly affects the organizational performance of referral hospitals in Kenya. The findings showed that equipment leasing agreements, engaging in partnerships for staff training, and sharing medical information are key aspects of strategic collaboration that influence performance outcomes. This implies that referral hospitals that actively foster collaborative networks, invest in joint training initiatives, and promote effective

information sharing are more likely to achieve higher efficiency, improved patient care, and overall organizational success. Enhancing these strategic collaboration capabilities is therefore crucial for strengthening the performance of referral hospitals in Kenya.

The study concluded that talent management capability has a significant and positive impact on the organizational performance of referral hospitals in Kenya. The findings revealed that key aspects, including talent attraction, talent development, and talent retention, play a critical role in driving performance outcomes. This suggests that referral hospitals that effectively attract skilled personnel, invest in their professional growth, and implement strategies to retain key talent are more likely to achieve improved efficiency, service quality, and overall organizational success. Therefore, strengthening talent management capabilities is essential for enhancing the performance and sustainability of referral hospitals in Kenya.

The study also concluded that ICT capability has a positive and significant impact on the organizational performance of referral hospitals in Kenya. The findings revealed that critical aspects, including communication automation, digital consultation and payment systems, significantly influence performance outcomes. This indicates that referral hospitals that adopt and effectively utilize ICT tools to facilitate communication, support patient consultations, and streamline payment processes are likely to experience improved efficiency, service delivery, and overall organizational performance. Therefore, enhancing ICT capabilities in these key areas is essential for strengthening the operational effectiveness and sustainability of referral hospitals in Kenya.

The study concluded that organizational structure significantly moderates the relationship between knowledge management, strategic collaboration, talent management, and ICT capabilities, and the organizational performance of referral hospitals in Kenya. The findings highlighted that key structural factor, including chain of command, span of control, and work specialization, influence how these capabilities translate into performance outcomes. This implies that referral hospitals that optimize their organizational structure by clearly defining reporting lines, managing the span of control effectively, and ensuring appropriate work specialization are more likely to

enhance efficiency, coordination, and overall performance. Strengthening these structural aspects is therefore essential for improving hospital performance.

5.4 Recommendation

5.4.1 Policy Recommendations

The study recommends that policymakers strengthen ICT infrastructure in referral hospitals by providing government grants, donor support, and fostering public-private partnerships to enhance operational efficiency and service delivery. Policies should also promote knowledge management and continuous training programs by ensuring adequate budget allocations and encouraging collaborations with educational institutions to provide accessible professional development opportunities for healthcare staff. Additionally, policymakers should develop clear frameworks for strategic collaborations, aligning the interests of external partners, donors, and hospital management. Guidelines should also be established to improve organizational structures, work specialization, and resource allocation, ensuring that hospitals operate efficiently and effectively. These measures will create a supportive environment that enables hospitals to leverage dynamic capabilities for improved performance and patient outcomes.

5.4.2 Managerial Recommendations

Hospital managers should prioritize knowledge management by creating systems that support the acquisition, sharing, and storage of knowledge. This can include formal documentation of procedures, structured project reports, staff participation in training programs, and informal knowledge-sharing platforms such as meetings and discussion groups. Implementing these practices will enhance organizational learning and improve decision-making.

Moreover, managers should strengthen strategic collaboration by establishing partnerships with other hospitals, donors, and training institutions. Encouraging joint training, medical information sharing, and coalition building will enhance employee skills, resource access, and overall hospital performance. Structured inter-departmental and inter-hospital communication protocols should be implemented to ensure timely sharing of critical information.

In addition, hospital managers should invest in talent management by attracting, developing, and retaining skilled staff. Key strategies include competitive compensation, career development programs, on-the-job training, promotions, and recognition of high-performing employees. Focusing on these human resource practices will enhance organizational performance, employee motivation, and retention.

Further, managers should enhance ICT capability by adopting user-friendly information systems, electronic communication platforms, electronic consultation tools, and digital payment systems. Regular staff training, support for technology adoption, and robust cybersecurity measures will ensure efficient use of ICT and improve operational efficiency.

Hospital managers should optimize organizational structures by clarifying roles, decentralizing decision-making, promoting work specialization, and encouraging teamwork. A well-structured organization enables employees to respond effectively to patient needs, improves service delivery, and strengthens organizational capabilities.

5.5 Areas for Further Research

The primary objective of this study was to investigate how dynamic capabilities affect the organizational performance of referral hospitals in Kenya. Since the study was limited to referral hospitals, its findings may not be generalizable to other types of healthcare facilities. Future research should therefore explore the impact of dynamic capabilities on organizational performance in health dispensaries, health centers, and county hospitals in Kenya. Additionally, while ICT capability, strategic collaboration capability, talent management capability, and knowledge management capability collectively explained 67.2% of the variation in organizational performance, there remains a significant portion of unexplained variation. Future studies could focus on key additional factors that may influence hospital performance, including leadership styles, organizational culture, availability of financial resources, employee motivation, patient satisfaction, and the role of government policies and regulatory support. Among these, leadership style, organizational culture, and employee motivation could be prioritized as they directly affect staff engagement and operational efficiency, while

patient satisfaction and resource availability could be explored for their impact on service quality and organizational outcomes.

5.6 Contribution of the Study to Theory and Existing Knowledge

The study on the impact of dynamic capabilities on the performance of referral hospitals, along with the moderating role of organizational structure, provides significant value by contributing both theoretically and practically. Dynamic capabilities theory posits that organizations achieve sustained performance by sensing opportunities, seizing them, and reconfiguring resources to respond to environmental changes. In this study, ICT capability, strategic collaboration, talent management, and knowledge management represent key dynamic capabilities that enhance organizational performance by improving adaptability, efficiency, and service delivery in referral hospitals.

Organizational performance is therefore influenced by the extent to which these dynamic capabilities are developed and effectively deployed within the hospital setting. However, the effectiveness of these capabilities is not uniform across all organizations. The study further posits that organizational structure influences the relationship between dynamic capabilities and performance by shaping how resources, authority, communication, and decision-making processes are coordinated. A flexible and well-integrated structure strengthens the effect of dynamic capabilities by enabling faster information flow, improved coordination, and efficient implementation of innovations. Conversely, rigid structures may weaken or slow down the translation of dynamic capabilities into improved performance outcomes.

It provides empirical evidence and theoretical insights that can contribute to existing theories, and guide practical decision-making in healthcare management. In addition, understanding the dynamic capabilities that drive health facilities' performance can guide decision-making processes, resource allocation, and capability development efforts. The research demonstrates its value in advancing knowledge and supporting effective healthcare management by linking theory with actionable insights.

REFERENCES

- Abdul Mumin, M., Adam, I. O., & Alhassan, M. D. (2024). The impact of ICT capabilities on supply chain fraud and sustainability—a dynamic capability perspective. *Technological Sustainability*, 3(2), 123-146.
- Abou-Moghli, A. (2025). The interplay between knowledge management and organizational performance measurement through the mediating effect of innovation capability. *Knowledge and Performance Management*, 9(1), 45.
- Adan, S. A., & Mweta, T. M. (2025). Influence of Strategic Innovation Practices on Operational Performance of National Referral Hospitals in Kenya. *African Journal of Emerging Issues*, 7(27), 50-62.
- Adhikari, B., Mishra, S. R., & Schwarz, R. (2022). Transforming Nepal's primary health care delivery system in global health era: addressing historical and current implementation challenges. *Globalization and health*, 18(1), 8.
- Aduwo, E., & Deya, J. (2022). Dynamic capabilities and competitive advantage of commercial banks in Kenya. *International Academic Journal of Human Resource and Business Administration*, 4(1), 408-429.
- Afshari, L., & Hadian Nasab, A. (2021). Enhancing organizational learning capability through managing talent: mediation effect of intellectual capital. *Human resource development international*, 24(1), 48-64.
- Akpa, V. O., Asikhia, O. U., & Nneji, N. E. (2021). Organizational culture and organizational performance: A review of literature. *International journal of advances in engineering and management*, 3(1), 361-372.
- Akpan, E. E., Johnny, E., & Sylva, W. (2022). Dynamic capabilities and organizational resilience of manufacturing firms in Nigeria. *Vision*, 26(1), 48-64.

- Aldhaheiri, S. M., & Ahmad, S. Z. (2024). The influence of transformational leadership on organizational performance and knowledge management capability. *International Journal of Productivity and Performance Management*, 73(9), 2830-2857.
- Alisyah, W. N., & Susilowati, L. (2022). Comparison of financial performance in health sector companies listed on the Indonesia stock exchange before and during the Covid-19 pandemic. *Jurnal Keuangan dan Perbankan*, 26(1), 62-74.
- Alo, O. A., Hoque, M. T., & Arslan, A. (2025). Leadership, knowledge management capability (KMC) and process innovation in African SMEs during and after the crisis. *Journal of Knowledge Management*, 29(5), 1708-1729.
- Amoako, T., Huai Sheng, Z., Dogbe, C. S. K., & Pomegbe, W. W. K. (2022). Effect of internal integration on SMEs' performance: the role of external integration and ICT. *International Journal of Productivity and Performance Management*, 71(2), 643-665.
- Anyam, N., Hanmaikyur, T. J., & Kwahar, N. (2023). Organizational Structure and Performance of Development Finance Institutions (DFIs) in Nigeria. *International Academy Journal of Business Administration Annals*, 9(5), 68-90.
- Ariya, G., Sempele, C., & Nderitu, G. (2021). Towards sustainability framework for tour operators as drivers of sustainable tourism agenda in Kenya. *International Journal of Research in Tourism and Hospitality*, 7(1), 9-15.
- Attié, E., & Meyer-Waarden, L. (2022). The acceptance and usage of smart connected objects according to adoption stages: an enhanced technology acceptance model integrating the diffusion of innovation, uses and gratification and privacy calculus theories. *Technological Forecasting and Social Change*, 176, 121485.

- Babbie, E. R. (2021). *The practice of social research* (15th ed.). Wadsworth Publishing Company.
- Baía, E. P., & Ferreira, J. J. (2024). Dynamic capabilities and performance: how has the relationship been assessed? *Journal of Management & Organization*, 30(1), 188-217.
- Balogun, J. A. (2022). *The organizational structure and leadership of the Nigerian healthcare system*. Cham: Springer International Publishing.
- Barasa, N. A., & Simiyu, A. (2024). Strategic collaboration practices and performance of Busia County Government in Kenya. *The Strategic Journal of Business & Change Management*, 11 (2), 602 – 62
- Barney, J (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17 (1), 99–120
- Basabih, M., Prasojo, E., & Rahayu, A. Y. S. (2022). Hospital services under public-private partnerships, outcomes and, challenges: A literature review. *Journal of Public Health Research*, 11(3), 22799036221115781.
- Bell, E., Harley, B., & Bryman, A. (2022). *Business research methods*. Oxford University Press.
- Bell, J. (2022). *Doing your research project: A guide for first-time researchers* (8th ed.). McGraw-Hill Education.
- Bertalanffy, L. V. (1950). An outline of general system theory. *The British Journal for the Philosophy of science*, 1(2), 134-165.
- Bett, L. K., & Anene, E. (2023). Dynamic capabilities and performance of small and medium agrifood enterprises in Nairobi County. *International Academic Journal of Economics and Finance*, 3(10), 279-334.
- Bettioli, M., Capestro, M., Di Maria, E., & Micelli, S. (2022). Disentangling the link between ICT and Industry 4.0: impacts on knowledge-related

performance. *International journal of productivity and performance management*, 71(4), 1076-1098.

Bojesson, C., & Fundin, A. (2021). Exploring microfoundations of dynamic capabilities—challenges, barriers and enablers of organizational change. *Journal of Organizational Change Management*, 34(1), 206-222.

Bosire, C., Kising'u, T. M., & Gichinga, L. W. (2025). Dynamic Capabilities and Performance of Logistics Companies in Mombasa County, Kenya. *Reviewed Journal International of Business Management*, 6(1), 341-365.

Bryman, A. (2022). *Social research methods (5th ed.)*. Oxford University Press.

Castelo, S. L., & Gomes, C. F. (2023). The role of dynamic capabilities on the effectiveness of organizational changes in public sector. *Academia Revista Latinoamericana de Administración*, 36(4), 535-552.

Castelo, S. L., & Gomes, C. F. (2023). The role of dynamic capabilities on the effectiveness of organizational changes in public sector. *Academia Revista Latinoamericana de Administración*, 36(4), 535-552.

Chen, J., & Zhang, M. (2020). The impact of dynamic capabilities on firm performance in emerging markets. *International Business Review*, 4(5), 116–125.

Chen, S., & Yu, D. (2024). Exploring the impact of knowledge management capability on firm performance: the mediating role of business model innovation. *Kybernetes*, 53(10), 3591-3620.

Cheruiyot, B. K., Kavale, S., & Chebii, P. (2025). Strategic positioning and hospital performance in national referral hospitals, Kenya. *International Journal of Research and Innovation in Social Science (IJRISS)*, 9(14), 1941–1959. <https://dx.doi.org/10.47772/IJRISS.2025.914MG00146>

Čirjevskis, A. (2024). Exploring competence-based synergism in strategic collaborations: Evidence from the global healthcare industry. *Journal of Risk and Financial Management*, 17(3), 93.

- Creswell, J. W., & Clark, V. L. (2021). *Designing and conducting mixed methods research* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W., & Creswell, J. D. (2022). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Davis, F. D. (1989). Technology acceptance model: TAM. *Al-Suqri, MN, Al-Aufi, AS: Information seeking behavior and technology adoption*, 205(219), 5.
- Douglas, S. (2023). Case study – Strategic organizational failures at a glove manufacturing ABC company in Sri Lanka. *International Journal of Science and Research (IJSR)*, 12(5), 1913–1919. <https://doi.org/10.21275/SR23522192537>
- Dubat, A., & Noor, I. S. (2024). Strategic Dynamic Capability and Performance of Commercial State Corporations in Nairobi City County Kenya. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, 8(2).
- Fabre, A., & Straub, S. (2023). The impact of public–private partnerships (PPPs) in infrastructure, health, and education. *Journal of Economic Literature*, 61(2), 655-715.
- Fatoki, O. (2021). Dynamic capabilities and performance of hospitality firms in South Africa: The mediating effect of innovation. *Geo Journal of Tourism and Geosites*, 36, 616-623.
- Field, A. (2024). *Discovering statistics using IBM SPSS statistics*. SAGE Publications.
- Freeman, R. E. & Dmytriiev, S. D. (2021). Stakeholder theory and the resource-based view of the firm. *Journal of management*, 47(7), 1757-1770.
- Furnival, J., Boaden, R. & Walshe, K. A. (2019). Dynamic capabilities view of improvement capability. *J Health Organizational Management*, 33(7-8), 821–34.

- García-Morales, V. J., & Martín-Rojas, R. (2023). The role of dynamic capabilities in the performance of SMEs: Evidence from the Spanish context. *Journal of Small Business Management*, 1(3), 90-112.
- Gathambo, M. N., & Muchemi, A. W. (2025). Dynamic Capabilities and Performance of Commercial Banks in Nairobi City County, Kenya. *The Strategic Journal of Business & Change Management*, 12(1), 291-313.
- Gatimu, J., & Minja, D. M. (2024). Influence of transparency on organizational performance of national referral hospitals in Kenya. *International Academic Journal of Arts and Humanities*, 1 (4), 250, 270, 2.
- Gaucher, L., Puill, C., Baumann, S., Hommey, S., Touzet, S., Rudigoz, R. C., ... & Mougeot, F. (2024). The challenge of adopting a collaborative information system for independent healthcare workers in France: a comprehensive study. *Scientific reports*, 14(1), 11429.
- Ge, Y. (2022). RETRACTED ARTICLE: The impact of dynamic knowledge management capability on enterprise innovation performance. *Operations Management Research*, 15(3), 1048-1059.
- Ghosh, S., Hughes, M. & Hughes, P. (2022). Digital transformation of industrial businesses: A dynamic capability approach. *Technovation*, 113, 102414.
- Gitau, L., Nzuki, D., & Musau, F. (2022). Effects of IT capability on performance of manufacturing firms in Nairobi City County Kenya. *Technium Soc. Sci. J.*, 28, 595.
- Grant, R.M. (1996). Toward a Knowledge-Based Theory of the Firm. *Strategic Management Journal*, 17, 109–122.
- Greene, J. C. & Dreyer, L. A. (2021). *Designing & conducting mixed methods research* (3rd ed.). Sage Publications.

- Greene, J., & Dreyer, L. (2021). *Designing and conducting mixed methods research*. SAGE.
- Gui, L., Lei, H., & Le, P. B. (2024). Fostering product and process innovation through transformational leadership and knowledge management capability: the moderating role of innovation culture. *European Journal of Innovation Management*, 27(1), 214-232.
- Gurusinghe, R. N., Arachchige, B. J., & Dayarathna, D. (2021). Predictive HR analytics and talent management: a conceptual framework. *Journal of Management Analytics*, 8(2), 195-221.
- Gutterman, A. S. (2023). Organizational performance and effectiveness. *Available at SSRN 4532570*.
- Haider, S. A., & Kayani, U. N. (2021). The impact of customer knowledge management capability on project performance-mediating role of strategic agility. *Journal of Knowledge Management*, 25(2), 298-312.
- Haji, H. A., Ooko, G., & Katiti, J. (2024). Effect of dynamic capabilities on performance of SACCOs in Mandera County, Kenya. *EPRA International Journal of Multidisciplinary Research*, 10(10), 83-??.
<https://eprajournals.com/pdf/fm/jpanel/upload/2024/October/202410-01-018592>
- Hall, R. (2020). *Qualitative, quantitative and combined methods: Mixing methods in social research*. SAGE Publications Ltd.
- Hossain, M. S. & Hussain, K. (2022). Determinants of sustainable competitive advantage from resource-based view: implications for hotel industry. *Journal of Hospitality and Tourism Insights*, 5(1), 79-98.
- Huang, C., & Wang, Y. (2021). Revisiting dynamic capabilities and performance: The role of competitive environment and organizational learning. *Journal of the Knowledge Economy* 12(1), 1-14.

- Hudu, A., Kwakye, D. O., Bornaa, C. S., Churcher, K. A., & Atepor, S. (2023). Students' Performance and ICT Capabilities in Quadratic Functions Using GeoGebra. *Applied Sciences*, 2(1), 219-231.
- Idolor, E. K., Adebisi, S. A., & Ifere, S. E. (2025). The role of strategic capabilities and entrepreneurial orientation in enhancing the competitive performance of manufacturing small and medium enterprises. *Journal of Global Entrepreneurship Research*, 15(1), 1-24.
- Igwe, N. N., Obidigbo, C. U., & Dulora, P. O. (2025). Talent Management and Performance of Manufacturing Firms in Nigeria. *Innovation Business Management and Accounting Journal*, 4(2), 193-213.
- Iranmanesh, M., Kumar, K. M., Foroughi, B., Mavi, R. K., & Min, N. H. (2021). The impacts of organizational structure on operational performance through innovation capability: innovative culture as moderator: M. Iranmanesh et al. *Review of Managerial Science*, 15(7), 1885-1911.
- Ismail, I. (2022). Entrepreneurs' Dynamic Capabilities, Financial Resource Development and Financial Performance Among Small and Medium Enterprises in Emerging Markets: Experience from Tanzania. *Corporate Finance and Financial Development*, 101, 15-36.
- Jama, L. A., & Mohamud, I. H. (2024). The impact of procurement practices on organizational performance: A literature review. *Journal of Logistics, Informatics and Service Science*, 11(1), 119-135.
- Jin, J., Chen, Z., & Li, S. (2022). How ICT capability affects the environmental performance of manufacturing firms?—Evidence from the World Bank Enterprise Survey in China. *Journal of Manufacturing Technology Management*, 33(2), 334-354.
- Jooss, S., Burbach, R., & Ruël, H. (2021). Examining talent pools as a core talent management practice in multinational corporations. *The International Journal of Human Resource Management*, 32(11), 2321-2352.

- Kanti, K., Kim, K., & Mikidadi, M. (2022). Public-private partnership supported health facilities and progress towards attainment of universal health coverage in Kilimanjaro, Tanzania. *Rwanda Journal of Medicine and Health Sciences*, 5(2), 216-232.
- Kasula, B. Y. (2023). Revolutionizing Healthcare Delivery: Innovations and Challenges in Supply Chain Management for Improved Patient Care. *Transactions on Latest Trends in Health Sector*, 15(15).
- Kazungu, J. & Barasa, E. (2021). Assessing the progress and gaps in strategic health purchasing in Kenya. *Wellcome Open Research*, 6(81), 81.
- Kenyatta, E. A. J., & Kiugu, M. N (2023) Influence of Knowledge Management Capabilities on Organizational Performance in commercial State Corporations in Kenya. *The International Journal of Business Management and Technology* 7(5), 2581-388
- Kero, C. A., & Bogale, A. T. (2023). A Systematic Review of Resource-Based View and Dynamic Capabilities of Firms and Future Research Avenues. *International Journal of Sustainable Development & Planning*, 18(10).
- Kerubo, J. (2023). Analysis of Kenya's progress toward a knowledge based society. *Journal of Education and Practices ISSN 2617-5444 (ONLINE) & ISSN 2617-6874 (PRINT)*, 3(3), 27-44.
- Khoury, J. D., Solary, E., Abla, O., Akkari, Y., Alaggio, R., Apperley, J. F., ... & Hochhaus, A. (2022). The 5th edition of the World Health Organization classification of haematolymphoid tumours: myeloid and histiocytic/dendritic neoplasms. *leukemia*, 36(7), 1703-1719.
- Kokshagina, O. (2021). Managing shifts to value-based healthcare and value digitalization as a multi-level dynamic capability development process. *Technological Forecasting and Social Change*, 172, 121072.

- Komakecha, R. A., Ombatib, T. O., Kikwathab, R. W., & Wainainab, M. G. (2025). Resource-based view theory and its applications in supply chain management: A systematic. *Management Science Letters*, 15, 261-272.
- Kongrode, J., Aujirapongpan, S., & Ru-Zhue, J. (2023). Exploring the impact of dynamic talent management capability on competitive performance: The mediating roles of dynamic marketing capability of startups. *Journal of Competitiveness*, 15(1), 113.
- Korwa, A. K. O. (2025). The Impact of Dynamic Capabilities on the Performance of Quality Management Systems in Manufacturing Companies in Kenya. *The University Journal*, 7(1), 152-164.
- Kothari, C.R. (2023). *Research methodology: methods and techniques*. (5th ed). New Delhi: New Age International Publishers.
- Kulkov, I., Kulkova, J., Rohrbeck, R., Menvielle, L., Kaartemo, V., & Makkonen, H. (2024). Artificial intelligence-driven sustainable development: Examining organizational, technical, and processing approaches to achieving global goals. *Sustainable Development*, 32(3), 2253-2267.
- Kwon, K., & Jang, S. (2022). There is no good war for talent: A critical review of the literature on talent management. *Employee Relations: The International Journal*, 44(1), 94-120.
- Lam, L., Nguyen, P., Le, N., & Tran, K. (2021). The relation among organizational culture, knowledge management, and innovation capability: Its implication for open innovation. *Journal of open innovation: technology, market, and complexity*, 7(1), 66.
- Latwal, G.S. (2020). *Research methodology*. Florida: CRC Press.
- Leemann, N., & Kanbach, D. K. (2022). Toward a taxonomy of dynamic capabilities—a systematic literature review. *Management Research Review*, 45(4), 486-501.

- Lewis, L. (2025). Organizational change. In *Origins, Traditions, and Trends of Organizational Communication* (pp. 415-436). Routledge.
- Li, H., & Zhao, X. (2022). Dynamic capabilities and firm performance: A meta-analysis. *Strategic Management Journal*, 7(1), 1-19.
- Li, H., Zolbin, M.G. & Krimmer, R. (2022). *Well-Being in the Information Society: When the Mind Breaks*. New York: Springer.
- Liao, S. C., Chou, T. C., & Huang, C. H. (2022). Revisiting the development trajectory of the digital divide: A main path analysis approach. *Technological Forecasting and Social Change*, 179, 121607.
- Lubis, N. W. (2022). Resource based view (RBV) in improving company strategic capacity. *Research Horizon*, 2(6), 587-596.
- Markovsky, I., & Dörfler, F. (2021). Behavioral systems theory in data-driven analysis, signal processing, and control. *Annual Reviews in Control*, 52, 42-64.
- Masaba, B. B. & Moturi, J. K. (2020). Devolution of healthcare system in Kenya: progress and challenges. *Public Health*, 189, 135-140.
- Masinde, M. N., Otinga, H. & Miroga, J. (2023). Dynamic capabilities and performance of pharmaceutical firms in Nairobi County, Kenya. *The Strategic Journal of Business & Change Management*, 10(3), 499 – 522.
- Matara, V. (2020). *List of All National Referral Hospitals in Kenya*. Retrieved from <https://victormatara.com/list-of-all-national-referral-hospitals-in-kenya/>
- Mbau, R., Musiega, A., Nyawira, L., Tsofa, B., Mulwa, A., Molyneux, S., ... & Barasa, E. (2022). Analysing the efficiency of health systems: a systematic review of the literature. *Applied health economics and health policy*, 21(2), 205.

- Mgbemena, G. C., Enetanya, I. D., Nsofor, M. N., & Ogbogu, F. O. (2022). Talent management and organization performance in pharmaceutical companies in Anambra State, Nigeria. *International Journal of Business & Law Research*, 10(4), 1-16.
- Migdadi, M. M. (2022). Knowledge management processes, innovation capability and organizational performance. *International journal of productivity and performance management*, 71(1), 182-210.
- Ministry of Health (2021). *Health Sector: Human Resources Strategy*. Retrieved from <http://www.health.go.ke/>
- Ministry of Health (2024). *Health Sector: Human Resources Strategy*. Retrieved from <http://www.health.go.ke/>
- Mire, H. K., Sabwami, P. B., & Ayora, J. M. (2024). Training and Development on Employee Performance, A Case of Garissa County Referral Hospital, Kenya. *Asian Journal of Education and Social Studies*, 50(7), 165-180.
- Moeliadi, S., Arief, M., Gunadi, W., & Rahim, R. K. (2025). The impact of collaboration capability, ambidextrous leadership and digital capability on bank performance sustainability. *Banks and Bank Systems*, 20(1), 231.
- Mtange, H. M., & DEYA, J. (2024). Strategic Collaborations and Performance of Oil Marketing Firms in Kenya. *Journal of Business and Strategic Management*, 9(8), 1-16.
- Mukhwana, D. B., Deya, J., & Kariuki, P. (2025). Dynamic Capabilities and Performance of Insurance Companies in Kenya. *Journal of Business and Strategic Management*, 10(4), 49–67. <https://doi.org/10.47941/jbsm.2683>
- Muthengi, F. K., & Ragui, M. (2023). Corporate Governance and Organizational Performance of Referral Hospitals in Kenya: A Case of Kenyatta National Hospital. *International Journal of Business Management, Entrepreneurship and Innovation*, 5(2), 1-12.

- Muthoka, J. M., & K'Obonyo, P. (2021). Effect of dynamic capabilities on competitive advantage of manufacturing firms in Nairobi City County, Kenya. *The Strategic Journal of Business & Change Management*, 8(3), 1409–1423. <https://strategicjournals.com/index.php/journal/article/view/2416>
- Mutungi, S. S. (2022). *A Framework for Enhancing the Organizational Performance of Local Contractors in Kenya*. Retrieved from <http://ir.jkuat.ac.ke>.
- Mwadime, A. W., & Kising'u, T., (2025). Knowledge Management Capability and Performance of Savings and Credit Cooperative Societies in Mombasa County, Kenya. *International Journal of Research and Innovation in Social Science* 9(8), 2454-6186
- Mwajambia, R. H., & Kising'u, T. M. (2022). Effect of dynamic managerial capabilities on firm performance: Evidence from travel agencies and tour operators in Kenya. *The Strategic Journal of Business & Change Management*, 9 (2), 645 – 665.
- Nduhura, T., Nturanabo, M., Nakajubi, S., & Nalukwago, F. (2022). Effect of Talent Management on Employee Performance at National Water and Sewerage Corporation (NWSC), Masaka, Uganda. *International Journal of Academic and Applied Research*, 6.
- Neuman, W. (2022). *Social research methods: Qualitative and quantitative approaches* (9th ed.). Pearson Education.
- Niamat, R., & Qureshi, F. H. (2025). Dynamic capabilities and environmental performance of high-tech SMEs in Pakistan—the role of Eco-innovation and female executives. *Organizacija*, 58(2), 158-174.
- Noori, A., & Zabihi, M. R. (2023). E-learning acceptance in higher education: Application of flow theory, technology acceptance model & e-service quality. *Quarterly Journal of Research and Planning in Higher Education*, 19(1), 111-136.

- Nor, N. S. M., Mohamad, S. J. S., & Fikry, A. (2021). Knowledge management capabilities and hotel performance in Malaysia: The role of market orientation. *International Journal of Academic Reserach in Economics and Management Sciences*, 10(3).
- Nshimiyimana, C. (2021). Effect of Strategic Alliance Management on the Performance of Microfinance Institutions in Rwanda. *International Journal of Scientific and Research Publications*, 11(5), 167-189.
- Ochie, C., Nyuur, R. B., Ludwig, G., & Cunningham, J. A. (2022). Dynamic capabilities and organizational ambidexterity: New strategies from emerging market multinational enterprises in Nigeria. *Thunderbird International Business Review*, 64(5), 493-509.
- Odori V.I.O & Ideh A.O, 2021. "Determinants of Organizational Performance in Nigeria: Evidence from Service Firms. *Humanities and Social Sciences Letters, Conscientia Beam*, 9(1), 86-95.
- Okoisama, T. C., & Oshi, J. E. (2025). 4. Dynamic Capabilities and Economic Sustainability of Petroleum Tank Farms in South-South, Nigeria. *Nigerian Academy of Management Journal*, 20(1), 38-55.
- Omeke, M., Ngoboka, P., Nkote, I. N., & Kayongo, I. (2021). Dynamic capabilities and enterprise growth: the mediating effect of networking. *World Journal of Entrepreneurship, Management and Sustainable Development*, 17(1), 1-15.
- Omieno, K. (2022). A Critical Review of Technology Adoption Theories and Models for E-Learning Systems, Kenya. *International Journal of Innovation Engineering and Science Research*, 6(2), 7-15.
- Omondi, M. P. (2024). Closing the gap towards a successful referral system, a case study of a tertiary teaching and referral hospital, Kenya: pre-post intervention study design. *East & Central African Journal of Surgery*, 29(4).

- Omungu, F., & Kavale, S. (2025). Dynamic capabilities and performance of telecommunication companies in Kenya. *International Journal of Research and Innovation in Social Science*, 1(1), 1-13. <https://doi.org/10.47772/IJRISS.2025.9020012>
- Owich, J., Kiongera, N., & Odero, J. (2022). Effect of Supply Chain Collaboration Practices on Supply Chain Performance of County Referral Hospitals in Western Region, Kenya. *International Journal of Economics, Commerce and Management*, 10(11), 72-91.
- Özkan, U. B. (2023). Validity and reliability in document analysis method: A theoretical review in the context of educational science research. *Education*, 56, 823-848.
- Panya, F., & Petchsawang, P. (2025). Innovation capability as a mediator of the relation between talent management and entrepreneurial firm performance. *Journal of Small Business and Enterprise Development*, 32(1), 56-75.
- Patton, W., & McMahon, M. (2021). Career development and systems theory: Connecting theory and practice. *Career Development and Systems Theory*, 12(9), 111-134.
- Pereira, V., & Bamel, U. (2021). Extending the resource and knowledge based view: A critical analysis into its theoretical evolution and future research directions. *Journal of Business Research*, 132, 557-570.
- Pesqueira, A. M., Sousa, M., & Pereira, R. (2023). Individual dynamic capabilities influential factors in blockchain technology innovation from hospital settings. *perspectives*, 17, 18.
- Picard, R. (2024). Healthcare Practices in the Digital Revolution Era: Exploring a Collaborative Territorial Initiative in France. In *Disruptive Digitalisation and Platforms* (pp. 159-169). Routledge.

- Pundziene, A., & Geryba, L. (2023). Managing technological innovation: dynamic capabilities, collaborative innovation, and born-digital SMEs' performance. *IEEE Transactions on Engineering Management*, 71, 6968-6981.
- Quagraine, N., & Li, C. & Nana, Q.. (2021). Dynamic Capabilities and Competitive Advantage of Telecommunication Companies in Ghana. The Role of Innovation Capability. *International Journal of Scientific Research in Computer Science Engineering and Information Technology*, 7, 146-160.
- Rakova, B., Yang, J., Cramer, H., & Chowdhury, R. (2021). Where responsible AI meets reality: Practitioner perspectives on enablers for shifting organizational practices. *Proceedings of the ACM on Human-Computer Interaction*, 5(CSCW1), 1-23.
- Rapp, A. C., & Corral-Granados, A. (2024). Understanding inclusive education—a theoretical contribution from system theory and the constructionist perspective. *International Journal of Inclusive Education*, 28(4), 423-439.
- Rejali, S., Aghabayk, K. & Shiwakoti, N. (2023). Comparison of technology acceptance model, theory of planned behavior, and unified theory of acceptance and use of technology to assess a priori acceptance of fully automated vehicles. *Transportation research part A: policy and practice*, 168, 103565.
- Riany, K. G. (2021). Organizational structure and the performance of state corporations in Kenya. *European Business & Management*, 7(6), 206-215.
- Richard, A., Oloko, M., & Deya, J. (2024). Information and Communication Capability and Organizational Performance of Referral Hospitals in Kenya. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, 8(1).
- Rono, L. C., Korir, M. K., & Komen, J. K. (2021). Effect of dynamic capabilities on competitive advantage of manufacturing firms in Nairobi, Kenya. *American*

Journal of Management Science and Engineering, 6(1), 11–17.
<https://doi.org/10.11648/j.ajmse.20210601.12>

Rutainurwa, V., Mwenda, B., & Israel, B. (2024). ICT-enabled supply chain integration capabilities and firms' financial performance: an empirical study of Tanzania's manufacturing SMEs. *Cogent Business & Management*, 11(1), 2393235.

Saputra, N., Putera, R. E., Zetra, A., Azwar, Valentina, T. R., & Mulia, R. A. (2024). Capacity building for organizational performance: A systematic review, conceptual framework, and future research directions. *Cogent Business & Management*, 11(1), 2434966.

Sarwar, M. A., & Khattak, A. N. (2024). Aspects and dimensions of organizational performance: A qualitative-exploratory literature review. *Journal of Development and Social Sciences*, 5(3), 587-595.

Saunders, M., Lewis, P., & Thornhill, A. (2023). *Research methods for business students* (9th ed). Pearson Education.

Saunders, M., Lewis, P., & Thornhill, A. (2023). *Research methods for business students* (8th ed.). Pearson Education.

Schindler, P. S. (2021). *Business research methods* (13th ed.). McGraw-Hill Education.

Shabeer, R. M., & Mahmood, H. (2025). The impact of talent management on organizational performance: A case of banking sector in Pakistan. *The Critical Review of Social Sciences Studies*, 3(2), 537-552.

Shi, L., & Singh, D. A. (2022). *Essentials of the US health care system*. Jones & Bartlett Learning.

- Shin, N., & Park, S. (2021). Supply chain leadership driven strategic resilience capabilities management: a leader-member exchange perspective. *Journal of Business Research*, 122, 1-13.
- Sijabat, E. A. S., & Prasetya, A. (2023). The Effect of Dynamic Capability On New Established Company's Performance: Mediating Role of Entrepreneurial Creativity. *JPAS (Journal of Public Administration Studies)*, 8(1), 12-20.
- Simon, S., Njuguna, B., & Kivaa, T. (2021). An Evaluation of the Organizational Performance of Local Contractors in Kenya. *East African Journal of Engineering*, 3(1), 1 - 21. <https://doi.org/10.37284/eaje.3.1.289>
- Singh, S. K., Gupta, S., Busso, D., & Kamboj, S. (2021). Top management knowledge value, knowledge sharing practices, open innovation and organizational performance. *Journal of business research*, 128, 788-798.
- Singh, S. K., Mazzucchelli, A., Vessal, S. R., & Solidoro, A. (2021). Knowledge-based HRM practices and innovation performance: Role of social capital and knowledge sharing. *Journal of International Management*, 27(1), 100830.
- Skene, K. R. (2021). No goal is an island: the implications of systems theory for the Sustainable Development Goals: KR Skene. *Environment, Development and Sustainability*, 23(7), 9993-10012.
- Tahili, M. H., Halim, R., Haris, S., Djaelangkara, R., & Rafika, I. (2025). The Role of Strategic Collaboration on the Capacity Development in Central Sulawesi Province in Indonesia. *Journal Management & Economics Review (JUMPER)*, 3(3), 455-470.
- Teece, D., Pisano, G. & Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18(7), 509–533.
- Tetik, S. & Zaim, H. (2021). Effects of Talent Management Practices on Organizational Engagement: A QuasiExperimental Study. *Eurasian Journal of Business and Economics*, 14(27), 91-109

- Tomeyan, S. C., & Mose, T. (2025). Talent management and employee performance in private universities in Kenya. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, 9(1).
- Toraman, Y. (2022). User acceptance of metaverse: Insights from technology acceptance model (TAM) and planned behavior theory (PBT). *EMAJ: Emerging Markets Journal*, 12(1), 67-75.
- Tsvetkova, A., & Partridge, M. (2021). Knowledge-based service economy and firm entry: an alternative to the knowledge spillover theory of entrepreneurship. *Small Business Economics*, 56(2), 637-657.
- Wachinga, J., & Deya, J. (2021). Influence of Knowledge Management Capabilities on the Performance of Mobile Telephone Firms in Kenya. *Asian Journal of Economics, Business and Accounting*, 21(15), 28-46.
- Wamalwa, L. S. (2023). Transactional and transformational leadership styles, sensing, seizing, and configuration dynamic capabilities in Kenyan firms. *Journal of African Business*, 24(3), 444-466.
- Wang, D., Huang, R., Li, K., & Shrestha, A. (2025). Organizational structure and dynamic capabilities on business model innovation in project-driven enterprises: evidence from the construction industry. *Engineering, Construction and Architectural Management*, 32(1), 578-600.
- Wang, Q., & Zhao, G. (2021). ICT self-efficacy mediates most effects of university ICT support on preservice teachers' TPACK: Evidence from three normal universities in China. *British Journal of Educational Technology*, 52(6), 2319-2339.
- Wang, X., Gu, Y., Ahmad, M., & Xue, C. (2022). The impact of digital capability on manufacturing company performance. *Sustainability*, 14(10), 6214.

- Weiss, L., & Kanbach, D. (2022). Toward an integrated framework of corporate venturing for organizational ambidexterity as a dynamic capability. *Management Review Quarterly*, 72(4), 1129-1170.
- World Bank (2020). *Kenya*. <https://documents1.worldbank.org>
- World Health Organization (2022). *Primary health care strategy improves access to essential and life-saving health services*. Retrieved from <https://www.who.int>
- World Health Organization (2022). *The Abuja Declaration*. Retrieved from <https://www.paho.org>
- Yildiz, R. O., & Esmer, S. (2023). Talent management strategies and functions: a systematic review. *Industrial and commercial training*, 55(1), 93-111.
- Zaridis, A., Vlachos, I., & Bourlakis, M. (2021). SMEs strategy and scale constraints impact on agri-food supply chain collaboration and firm performance. *Production Planning & Control*, 32(14), 1165-1178.

APPENDICES

Appendix I: Questionnaire

The questionnaire is structured to gather information from referral hospitals in Kenya. The main objective of this study is to evaluate the relationship between dynamic capabilities and the organizational performance of referral hospitals in Kenya. All data collected will be treated with academic professionalism and with confidentiality. Please complete the questionnaire below as instructed.

PART A: General Information

1. Job Description?
2. How many years of have you worked in your position?

- | | |
|----------------|-----|
| Below one year | [] |
| 1-5 years | [] |
| 5-15 years | [] |
| Above 15 years | [] |

PART B

SECTION I: Knowledge management capability

3. Kindly rate the following aspects of knowledge management capability in your organization. Please rate each statement by marking (✓) the appropriate option. Use the following scale: 1 for Strongly Disagree, 2 for Disagree, 3 for Neutral, 4 for Agree, and 5 for Strongly Agree.

	1	2	3	4	5
Acquisition/learning					
Employees obtain new knowledge from external sources (via seminars, conferences, subscription journals, educational courses, expert)					
Employees depend on written sources (documentation of earlier implemented projects, organizational procedures, instructions etc.)					
Employees obtain knowledge from their co-workers.					
Knowledge Sharing					
Knowledge is orally shared by employees at meetings or informal congregations (during lunch, within the hallway).					
Knowledge is shared by employees via formal procedures (project reports, organizational procedures as well as instructions					
General leadership/management motivates employees to take part in formal education systems in order to attain a greater level					
Storage of knowledge					
Employees record lessons learned from expert networks and projects subscription journals					
There is a structured format, including templates / forms, that one has to follow when recording lessons learned					
Structured format assists me capture major points of lessons taught					

4. Kindly indicate the challenges faced with reference to implementation of knowledge management.

- i.
- ii.
- iii.

5. Suggest various ways of improving knowledge management capability.
- i.
 - ii.
 - iii.

SECTION II: Strategic Collaboration capability

6. Kindly rate the following aspects of Strategic Collaboration/Alliances in your organization. Please indicate your rates on each statement by ticking (✓) appropriately. Where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree.

	1	2	3	4	5
Equipment leasing agreements					
Our hospital engages in equipment leasing agreements with other health facilities to improve service delivery.					
Equipment leasing arrangements enable our facility to access advanced medical equipment when needed.					
Through equipment leasing agreements, our hospital reduces capital costs and improves efficiency.					
Partnership in training					
Partnership in training employees ensures the organization employees gain new skills hence improving their productivity					
Our hospital has made partnerships in training with other hospitals					
Health facilities collaborate with private partners in the development of infrastructure					
Sharing of medical information					
We share medical information with other health workers from other hospitals					

Our organization arranges meeting purposed for sharing medical information with experts from other hospitals					
Through sharing of medical information with workers from other hospitals we gain a lot of knowledge					

7. Kindly indicate the challenges faced with reference to implementation of strategic collaboration/Alliances in your organization

- i.
- ii.
- iii.

8. Suggest ways of improving strategic collaboration/Alliances in your organization

- i.
- ii.
- iii.

SECTION III: Talent Management Capability

9. Kindly rate the following aspects of Talent Management in your organization.

Please indicate your rates on each statement by ticking (✓) appropriately.

Where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree.

	1	2	3	4	5
Talents Attraction					
In our organization, there is a process of recognizing current staff that have the potential to excel in their career					
Competency mapping aid in identification of individual's training needs and performance appraisals.					
There is a platform for comparing the present and desired level of skills and competencies of staff in the organization					
Talent development					

On-job training enables staff to familiarize with the working environment as they feel they are part of it					
There is a method of teaching the skills, competencies and knowledge required for employees to carry out a particular job within the place of work					
Organization gives partially paid scholarship to workers who want to advance their studies					
Talent retention					
Our organization provide competitive salaries to employees					
Provision of incremental bonuses improves the morale of staff with respect to attaining organizational goals.					
Job promotion involves advancement in terms of benefits, salary and designation.					

10. Kindly indicate the challenges faced with reference to implementation of talent management capability in your organization

- i.
- ii.
- iii.

11. Suggest various ways of improving talent management capability in your organization

- i.
- ii.
- iii.

SECTION IV: ICT Capability

12. Kindly rate the following aspects of ICT Capability in your agency. Please indicate your rates on each statement by ticking (✓) appropriately. Where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree.

	1	2	3	4	5
Communication automation					
Our organization uses emails as a means of communication					
We have created WhatsApp group for communication					
Our organization uses telephone call for communication					
Digital consultation					
We use emails to consult from our supervisors					
Telephone calls are used for consultation					
WhatsApp groups are used for consultation in our organization					
Payment systems					
Cash is not accepted in our institution					
All payments are made through M-pesa pay bill					
Payments in our organization are made through bank transfer/bank payments					

13. Kindly indicate the challenges faced with reference to implementation of ICT Capability in your organization

- i.
- ii.
- iii.

14. Suggest various ways of improving ICT Capability in your organization

- i.
- ii.
- iii.

SECTION V: Organizational Structure

- 15 Kindly specify the degree to which the below aspects of organizational structure in your organization? Where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree.

	1	2	3	4	5
Chain of command					
In our organization communication effectively flow down the chain of command					
In our organization, the power to make critical decision diminishes from the senior staff to subordinate staff.					
The power to make critical decision is placed in the hands of a few organizational staff					
Span of control					
Span of control in our organization clearly indicate the approach that is used to interact with organizational employees					
Staff in our organization are efficient in discharging their functions with minimal assistance form their superiors					
Supervisors and heads of departments delegate duties to employees					
Work specialization					
Health facilities emphasize on team work to improve efficiency in service delivery					
Employees are allocated tasks depending on their competency skills					
Specialization of work in our organization enable staff to be promoted to senior ladder					
our health facility empowers the employees to increase their skills and competence					

- 16 Kindly indicate the challenges faced with reference to organizational structure in the implementation of dynamic capabilities

- i.
- ii.
- iii.

- 17 Suggest ways of improving organizational structure in the implementation of dynamic capabilities

- i.
- ii.
- iii.

SECTION VI: Organizational Performance

18. Kindly rate the below measures of organizational performance within your institution. Please indicate your rates on each statement by ticking (✓) appropriately. Where 1 is strongly disagree, 2 is disagree, 3 is neutral, 4 is agree and 5 is strongly agree.

	1	2	3	4	5
Efficiency in service delivery (service utilization and availability)					
Medical equipment in our health facility are available					
Number of out-patients serviced per day has been increasing					
Number of in-patients serviced per day has been increasing					
Turnaround time					
Turnaround time is very low					
There is little queuing in the hospital					
There are few customer complaints regarding the turnaround time					

19. Kindly indicate the challenges faced with reference to organizational performance in your organization

- i.
- ii.
- iii.

20. Suggest ways of improving organizational performance in your institution

- i.
- ii.
- iii.

Appendix II: Data Collection Checklist

	Health Facility	Turnaround time	Patient satisfaction index
2016			
2017			
2018			
2019			
2020			

Appendix III: List of Public Referral Hospitals in Kenya

County Referral Hospitals in Kenya

No	County	Hospital
1	Mombasa	Coast General Teaching and Referral Hospital
2	Kwale	Msambweni County Referral Hospital
3	Kilifi	Kilifi County Referral Hospital
4	Tana River	Hola County Referral Hospital
5	Lamu	King Fahd Lamu County Referral Hospital
6	Taita/Taveta	Moi County Referral Hospital-Voi
7	Garissa	Garissa County Referral Hospital
8	Wajir	Wajir County Referral Hospital
9	Mandera	Mandera County Referral Hospital
10	Marsabit	Marsabit County Referral Hospital
11	Isiolo	Isiolo County Referral Hospital
12	Meru	Meru Teaching and Referral Hospital
13	Tharaka-Nithi	Chuka County Referral Hospital
14	Embu	Embu Level 5 Hospital
15	Kitui	Kitui County Referral Hospital
16	Machakos	Machakos Level 5 Hospital
17	Makueni	Makueni County Referral Hospital
18	Nyandarua	J.M Kariuki Memorial Hospital
19	Nyeri	Nyeri County Referral Hospital
20	Kirinyaga	Kirinyaga County Referral Hospital
21	Murang'a	Murang'a County Referral Hospital
22	Kiambu	Kiambu County Referral Hospital
23	Turkana	Lodwar County Referral Hospital
24	West Pokot	Kapenguria County Referral Hospital
25	Samburu	Samburu County Referral Hospital
26	Trans Nzoia	Kitale County Referral Hospital
27	Elgeyo/Marakwet	Iten County Referral Hospital
28	Nandi	Kapsabet County Referral Hospital
29	Baringo	Baringo County Referral Hospital

30	Laikipia	Nanyuki Teaching and Referral Hospital
31	Nakuru	Nakuru Level 6 Hospital
32	Narok	Narok County Referral Hospital
33	Kajiado	Kajiado County Referral Hospital
34	Kericho	Kericho County Referral Hospital
35	Bomet	Longisa County Referral Hospital
36	Kakamega	Kakamega County General Teaching and Referral Hospital
37	Vihiga	Vihiga County Referral Hospital
38	Bungoma	Bungoma County Referral Hospital
39	Busia	Busia County Referral Hospital
40	Siaya	Siaya County Referral Hospital
41	Kisumu	Jaramogi Oginga Teaching and Referral Hospital
42	Homa Bay	Homabay County Teaching and Referral Hospital
43	Migori	Migori County Referral Hospital
44	Kisii	Kisii Teaching and Referral Hospital
45	Nyamira	Nyamira County Referral Hospital
46	Nairobi City	Mbagathi County Referral Hospital
47	Uasin Gishu	Uasin Gishu Referral hospital
	county	

National Referral Hospitals in Kenya

No	County	Hospital
1.	Nairobi	Kenyatta National Hospital
2.	Nairobi	National Spinal Injury Referral Hospital
3.	Nairobi	Mathari National Teaching and Referral Hospital
4.	Nairobi	Kenyatta University Teaching Referral and Referral Hospital
5.	Uasin Gishu	Moi Teaching and Referral Hospital
6.	Kisumu	Jaramogi Oginga Odinga Teaching & Referral Hospital

Source: Ministry of Health (2022)

Appendix IV: Introduction Letter



**JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY
OFFICE OF THE DIRECTOR (BPS)**

P.O. BOX 62000
NAIROBI – 00200
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Email: director@bbs.jkuat.ac.ke

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REF: JKU/2/11/ HDB411-C004-2225/2018

10TH MARCH, 2022

ACHIAMBO RICHARD ONGWARY
C/o SOBE
JKUAT

Dear Mr. Achiambo,

RE: APPROVAL OF RESEARCH PROPOSAL AND APPOINTMENT OF SUPERVISORS

Kindly note that your PhD. research proposal entitled: "DYNAMIC CAPABILITIES, ORGANIZATIONAL STRUCTURE AND PERFORMANCE OF REFERRAL HOSPITALS IN KENYA" has been approved. The following are your approved supervisors:-

1. Prof. Margaret Oloko
2. Dr. Jared Deya

Yours sincerely,

PROF. LOSENGE TUROOP
DIRECTOR, BOARD OF POSTGRADUATE STUDIES

Copy to: Dean, SOBE
/cm



JKUAT is ISO 9001:2015 and ISO 14001:2015 Certified
Setting Trends in Higher Education, Research, Innovation and Entrepreneurship



Appendix V: NACOSTI Permit

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 353058	Date of Issue: 25/August/2022
RESEARCH LICENSE	
	
This is to Certify that Mr. Richard Ongwary Achiambo of Jomo Kenyatta University of Agriculture and Technology, has been licensed to conduct research in Baringo, Bomet, Bungoma, Busia, Elgeyo-Marakwet, Embu, Garissa, Homabay, Isiolo, Kajjado, Kakamega, Kericho, Kiambu, Kilifi, Kirinyaga, Kisii, Kisumu, Kitui, Kwale, Laikipia, Lamu, Machakos, Makueni, Mandera, Marsabit, Meru, Migori, Mombasa, Muranga, Nairobi, Nakuru, Nandi, Narok, Nyamira, Nyandarua, Nyeri, Samburu, Siaya, Taita-Taveta, Tanariver, Tharaka-Nithi, Transnzoia, Turkana, Uasin-Gishu, Vihiga, Wajir, Westpokot on the topic: DYNAMIC CAPABILITIES, ORGANIZATIONAL STRUCTURE AND PERFORMANCE OF REFERRAL HOSPITALS IN KENYA for the period ending : 25/August/2023.	
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