INFLUENCE OF ENTERPRISE RESOURCE PLANNING SYSTEM INTEGRATION ON THE PERFORMANCE OF HEALTH INSURANCE PROGRAMS. A CASE OF NAIROBI COUNTY

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DECLARATION AND APPROVAL

Declaration by student

This is my study project and thus has not been used in any other education institution.

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Signature: Date: 12th November 2024

Supervisory approval

The student has been permitted to present this project for review by my permission as the supervisor.

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DEDICATION

This work is dedicated to my parents, Charles and Rebecca Ndegwa, and my son, Charles, for their unwavering support, patience, and encouragement throughout my journey.

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First and foremost, I want to express my deepest gratitude to God for His guidance, strength, and wisdom throughout my journey. His divine intervention and blessings have been my constant source of inspiration and perseverance, enabling me to navigate the challenges and triumphs of my master's program.

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ABBREVIATIONS AND ACRONYMS

ERP: Enterprise Resource Planning

ICT: Information Communication & Technology

KM: Knowledge Management

MRP: Manufacturing Resource Planning

SAP: National Rainbow Coalition

TMS: Top Management Support

UHC: Universal Health Coverage

ABSTRACT

This study investigated the influence of Enterprise Resource Planning (ERP) system integration on the performance of health insurance programs in Nairobi County, Kenya. ERP systems consist of interconnected applications that share a single database, enabling real-time information exchange and improving productivity, collaboration, and decision-making within organizations. The research focused on how ERP's knowledge management, top management support, staff training, and communication integration impact the performance of health insurance programs. Using systems theory and the service gap model, the study adopted a descriptive research design targeting ICT personnel and departmental heads from five prominent health insurance firms: Britam, Jubilee Insurance, CIC Insurance, APA Insurance, and Liberty Life Assurance. A total of 183 respondents were targeted, with data collected through online and in-person questionnaires. A pilot test with 30 respondents from MINET Insurance Firm helped assess the questionnaire's validity and reliability. The analysis revealed significant relationships between the independent variables (communication integration, knowledge management, top management support, and staff training) and project performance. Correlation analysis showed that communication integration had the strongest positive correlation with performance ($r = .641$, $p = .000$), followed by knowledge management ($r = .624$, $p = .000$) and top management support ($r = .601$, $p = .000$). Regression analysis further indicated that these variables explained 52.4% of the variance in project performance. Communication integration and knowledge management had the most substantial positive effects, with coefficients of 0.594 and 0.543, respectively. The study concludes that health insurance organizations should enhance knowledge management through digital platforms, engage top management in open communication, and provide continuous role-specific staff training. It also recommends improving communication integration with standardized collaboration protocols. Future research should explore ERP system integration within the Social Health Insurance Fund framework.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

Chapter One introduces the study, focusing on the impact of Enterprise Resource Planning (ERP) system integration on the performance of health insurance programs in Nairobi County, Kenya. It outlines the research objectives, significance, and scope of the study.

1.1 Background to the Study

The impact of increasing global business rivalry has encouraged organizations to use information systems to improve or retain their competitiveness, notably to improve customer service, cut cycle times, as well as decrease costs (Syofyan, 2020). Systems for enterprise resource planning, or ERPs, are integrated information platforms that cover every facet of a business' operations (Owusu-Mainu, Twum, Konadu, & Ohene-Amoako, 2019). Escobar and Escobar (2010) state that ERP systems consist of numerous modules that are customized to meet the needs of the company. All of these modules are combined in the database, according to Chiarini, Vagnoni, and Chiarini (2018), to facilitate quicker information gathering, storing, and distribution across organizational units.

Enterprise Resource Planning (ERP) systems have gained significant traction globally, impacting various industries, including health insurance programs. Globally, the integration of ERP systems has enhanced efficiency and improved data management, leading to more accurate claims processing, member management, and reporting. According to Mishra (2023), ERP integration in health services was shown to contribute to a reduction in administrative overheads and enhanced the quality of patient care.

Dagher and Kuzic (2019) did a research in Australia on factors impacting the use of ERP systems in a few Australian companies. Five senior managers who were involved in the installation of ERP in their individual organisations participated in the research, which was conducted across five companies. The researchers were able to effectively demonstrate how important elements including financial resources, user involvement, and support from upper management all affect ERP deployment. Furthermore, they noted that while some major and small Australian businesses have already installed ERP, others are still in the process of doing so because of the system's complexity and associated costs (Budiman et al., 2021).

Small and medium-sized businesses (SMES) in Nigeria are being urged to adopt the Odoo ERP system since it is seen to have the ability to reduce errors and boost productivity. After conducting a study in 2020 on the factors influencing the adoption of ERP systems by medium-sized businesses in Oyo State, Aremu et al. came to the conclusion that organizational structure and technology advancements encourage the use of ERP systems in businesses. They added that in order to prevent failure when switching from one system to another, organizations must pay closer attention to organizational structure. They also mentioned that communication, senior management support, and technology infrastructures are important elements that affect ERP adoption.

Regionally, in Sub-Saharan Africa, ERP systems are becoming increasingly popular in health insurance programs due to their ability to streamline processes and improve healthcare outcomes. According to a study by Mwaura and Nduta (2022), ERP integration has been linked to improved resource allocation, leading to more efficient and effective healthcare delivery. The study found

that ERP systems facilitate the seamless coordination of healthcare services across various facilities, leading to better patient management and reduced operational costs.

In Nairobi County, Kenya, local health insurance programs have embraced ERP systems to enhance performance and service delivery. A study by Omondi et al. (2023) in the Journal of Health Informatics in Africa highlighted the benefits of ERP system integration in Nairobi's health insurance programs. The study found that the integration of ERP systems resulted in improved claims processing, faster member registration, and enhanced communication between different departments. These improvements have led to better overall program performance and member satisfaction. Despite the progress, challenges remain in ERP system integration in health insurance programs locally. Issues such as lack of expertise, high implementation costs, and resistance to change can impede successful integration. However, studies such as those by Wanjiru and Kamau (2024) suggest that these challenges can be overcome through comprehensive training, stakeholder engagement, and strategic planning

Enterprise Resource Planning (ERP) has the ability to save costs and increase operational efficiency, claim Monk and Wagner (2019). Kenyan businesses have so learned from successful international organizations that they must restructure their business procedures in order to remain competitive. In addition, Kenyan companies—particularly those in the manufacturing sector—must collaborate closely with respectable establishments both domestically and abroad that have effectively deployed the ERP system in order to fulfil their ambitions and eventually attain cost leadership and operational effectiveness. (Ganesh and others, 2018).

When setting up SAP enterprise-level resource planning (ERP), an organization must assess how its operations are currently conducted, develop a plan, decide how to execute it, deploy and assess

ERP software, manage data, handle change, provide user training, and offer post-maintenance support (Andrew, 2020). It can be difficult to choose the best ERP system to meet all organizational needs. Since such technologies will have an impact on all divisions within corporations and organizations, they require much preparation and thought (Avalara.com, 2022). The ERP will affect sections; however it will also have an effect on compliance. Many organizations are ignorant of how important compliance is when making decisions about ERP, including which modules to add, which core ERP to choose, and how to integrate third-party systems. In order to make decisions about tax administration, collection, and reporting, observation is both difficult and necessary. (Aroba, Chinsamy, et al., 2023).

1.1.1 Enterprise Resource Planning

According to Silva and Oliveira (2020), management controls an organization's collection of resources, which comprises both tangible and intangible assets, including ICT infrastructure. This collection of assets basically establishes an organization's inherent capacity to add value at any given moment. An integrated information system used in an organization to support resource management and business operations is called ERP system. ERP systems have several modules that serve various functions. Furthermore, the systems enable data to be collected from key corporate activities such as finance, human resources, sales, manufacturing, and so on and stored in a single centralized repository (Laudon & Laudon, 2018). SAP business suite, Microsoft Dynamics suite, and Oracle E-business suite are examples of enterprise resource planning systems developed by prominent software manufacturers throughout the world (Laudon & Laudon, 2018). The primary benefit of employing an ERP lies in the enhanced operational efficiency (Laudon & Laudon, 2018). Additionally, ERP leads to enhanced corporate processes and the integration of all

departments onto a unified technological platform (Sundara et al., 2021). The adoption of ERP is a thorough process that encompasses organizational transformation (Laudon & Laudon, 2018). Proper identification of variables impacting ERP deployment in enterprises is critical in order to maximize the chances of success.

Regardless of the time and resources required for deployment, ERPs are helpful to a business. The systems increase resource and information timeliness, which in turn improves company operations and efficiency (Macharia, 2019). Using ERP requires a company to have exceptional data security in order to approve different expansion methods. The advantage of this integration is that it guarantees that the customer receives high-quality goods and services within the allotted time frame and boosts customer satisfaction by offering prompt responses (Macharia, 2019).

1.1.2 Project Performance

Kerzner (2022) defines performance as the extent to which an organization's objectives are achieved with respect to its available resources, as indicated by a diverse range of criteria. Project performance refers to how well a project is doing in terms of achieving its goals and objectives. It's about evaluating whether the project is on track, meeting its deadlines, staying within its budget, and producing the desired outcomes. Despite the advancements in the field of project management, a significant proportion of projects fail to meet their expected performance levels (Njeri & Were, 2017). Various factors including inadequate project expertise, deficiencies in project preparation, insufficient assets, and inadequate support from top management, unqualified leadership, and communication breakdown among project team members are responsible for project failure. Project failure refers to a situation in which a project does not meet its intended objectives, goals, or expectations within the specified scope, budget, and timeline. A project is

considered to have failed when it falls significantly short of delivering the desired outcomes or when it is terminated prematurely due to various reasons despite the empirical significance of individual performance and job performance outcomes, there has been a dearth of efforts devoted to clarifying the performance concept.

The effectiveness of project implementation can be enhanced by the workforce's understanding of the importance of particular scheduling techniques. This context comprises of various elements such as the critical path, scheduling specifications, relevant software, and notably, the advantages and disadvantages associated with different schedule and delay methodologies (Kerzner, 2022). The success of any project is contingent upon executive support, as they play a critical role in facilitating the mobilization and allocation of an organization's resources towards the attainment of project objectives (Njeri & Were, 2017). This level of support fosters a sense of commitment among managers to allocate sufficient resources, thereby reducing the likelihood of project failure resulting from resource limitations. The achievement of a project can be evaluated based on the process's ability to fulfil the technical objectives of the assignment and the efficient utilization of the resulting output.

Zwikael and Meredith (2019) note that while positive outcomes are typically measured based on project objectives, evaluating project management success relies on conventional performance benchmarks like quality, time, and cost. For certain projects, employing cost, time, and quality as performance indicators works well, but it could not cover all facets of performance management. This is because they are insufficient for a thorough performance assessment because of their inflexibility in evaluations (Kabeyi, 2019). For example, in building and energy-related endeavours, success may imply the absence of disasters or casualties. To assess the project team's

capacity to identify important success elements, evaluate upper-management support, conformity with client needs, and the accessibility of qualified persons facilitating the project.

1.1.3 Health Insurance Programs in Kenya

Kenya's health insurance landscape is characterized by a mix of private insurance providers offering a variety of products to meet the diverse needs of the population. Major health insurers in Kenya include AAR Insurance, Britam Insurance, Jubilee Insurance, and CIC Insurance, among others. These companies provide a range of health plans, including individual, family, and corporate coverage, with varying levels of benefits and premiums (CIC Insurance, 2024). Private health insurance in Kenya plays a significant role in supplementing public health services, offering additional access to private healthcare facilities, specialist consultations, and treatments not always covered by public programs.

AAR Insurance is one of the leading private health insurers in Kenya, offering comprehensive health coverage that includes outpatient and inpatient services, maternity care, dental and optical care, and emergency medical evacuation (AAR Insurance, 2024). The company's plans cater to different customer needs, from basic plans for individuals and families to high-end packages with extensive benefits. Similarly, Britam Insurance provides a variety of health insurance plans, including individual, family, and group health coverage, as well as specialized plans for chronic illnesses and critical conditions (Britam, 2024). These plans often include wellness benefits and preventive care, enhancing overall health and well-being.

Another key player in the Kenyan health insurance market is Jubilee Insurance, which offers a range of health plans designed to provide access to quality healthcare services for individuals and groups. The company's products include both local and international health insurance plans,

offering coverage within Kenya and abroad (Jubilee Insurance, 2024). Despite the availability of these private health insurance options, challenges such as affordability and limited access in rural areas persist. Nevertheless, the presence of multiple insurers in the market fosters competition and innovation, potentially driving improvements in coverage and services for Kenyan consumers.

1.2 Statement of the Problem

Health insurance programs play a crucial role in safeguarding individuals and families from the financial risks associated with unexpected medical expenses. By providing coverage for various healthcare services such as hospital stays, surgeries, prescription medications, and preventive care, health insurance programs help ensure access to essential medical treatments without causing undue financial hardship. Moreover, health insurance promotes overall health and well-being by encouraging individuals to seek timely medical care and preventive services, contributing to better health outcomes and reduced healthcare costs in the long run (World Health Organization, 2023; AlMuhayfith & Shaiti, 2020).

Despite the importance of health insurance, many challenges persist in Kenya's health insurance sector. One key issue is the low penetration of health insurance coverage across the population, with many individuals and families still unable to access affordable and comprehensive health plans (Institute of Economic Affairs, 2023). This lack of access often leads to out-of-pocket payments for healthcare, placing a significant financial burden on households, particularly those with low incomes. The disparities in health insurance access also exacerbate inequalities in health outcomes between urban and rural populations, as well as between higher and lower income groups (Chege, Wang, & Suntu, 2020).

Despite the significant potential of Enterprise Resource Planning (ERP) systems to enhance operational efficiency, financial accountability, and customer service in health insurance programs, their integration has remained limited and under-researched in many developing regions, including Kenya. Studies have shown that ERP systems can streamline processes, reduce redundancy, and improve data accuracy across health services, yet health insurance programs in Nairobi County have lagged in fully implementing these systems (Sulaiman & Khalid, 2024; Opoku-Asante et al., 2022). While developed countries have achieved notable success with ERP in health insurance, the same has not been replicated in Nairobi, largely due to challenges such as cost, technical limitations, and organizational resistance (Xu et al., 2021). This study addressed this gap by examining the influence of ERP system integration on the performance of health insurance programs in Nairobi, focusing on efficiency, transparency, and customer service outcomes.

Numerous studies have been done on the use of ERP in different industries. For instance, Gilbert (2021) carried out a study based on a case study at Kenya Medical Research Institute (KEMRI) that employed the Technology-Organization-Environment theoretical framework to analyse variables that effect ERP installations. This study employed a descriptive survey research design. The study discovered a relationship between ERP implementation and technical, organisational, and environmental factors. Technological factors included ICT infrastructure, strong ERP product and technical knowledge, management of change, project management, and reengineering of business processes. Environmental factors included ICT Involvement. However, the previous study looked at the variables that influence ERP implementation, whereas the current study looks at the impact of ERP installation. Karuri (2021) conducted research on the links between ERP

Implementation characteristics and Organizational performance, using Egerton University as a case study. The study investigated associations using descriptive statistics such as partial correlation and Logit regression. Questionnaires were utilized to collect data from the respondents, who included student leaders, the finance team, department heads, and champions. The findings revealed a favourable relationship between ERP implementation features and organizational performance. The study focused on several ERP characteristics. The current study examined the influence of enterprise resource planning system integration on the performance of health insurance programs in Nairobi County, Kenya.

1.3 Purpose of the Study

This study determined the influence of enterprise resource planning system integration and the performance of health insurance programs in Nairobi County, Kenya.

1.4 Objectives of the Study

The following study objectives guided this study;

i) To establish the effect of enterprise resource planning's knowledge management on performance of health insurance programs in Nairobi County.

ii) To establish the influence of enterprise resource planning's top management support on performance of health insurance programs in Nairobi County.

iii) To examine the effect of enterprise resource planning staff training on performance of health insurance programs in Nairobi County.

iv) To determine the influence of communication integration on performance of health insurance programs in Nairobi County.

1.5 Research Questions

i) What is the effect of enterprise resource planning knowledge management on performance of health insurance programs?

ii) How does enterprise resource planning top management support influence performance of health insurance programs?

iii) What is the effect of enterprise resource planning staff training on performance of health insurance programs?

iv) How does communication integration influence performance of health insurance programs?

1.6 Significance of the Study

The study of enterprise resource planning (ERP) system integration in health insurance programs in Nairobi County offers significant benefits to a variety of stakeholders. For health insurance providers, understanding the impact of ERP integration can lead to enhanced operational efficiency, cost savings, and improved service delivery. These improvements can help insurers stay competitive in the market and meet regulatory standards more effectively. Additionally, smoother transactions and streamlined data sharing between healthcare providers and insurers can improve relationships and support better patient care.

For policyholders and beneficiaries, the integration of ERP systems can provide better access to accurate and timely information regarding their coverage, claims, and benefits. This can enhance their experience with health insurance providers and help them better understand their insurance policies. Moreover, ERP integration can facilitate quicker claims processing, which can lead to more timely reimbursement for healthcare expenses.

Finally, for regulatory bodies overseeing the health insurance sector, insights into ERP system integration can inform policy decisions and oversight practices. It ensures that health insurance programs operate efficiently, transparently, and in compliance with national standards and regulations. The study also contributes valuable insights for researchers and academics interested in the intersection of technology and health insurance, providing a foundation for future research in this important area.

1.7 Scope of the Study

This study intended to examine the influence of enterprise resource planning (ERP) system integration on the performance of health insurance programs in Kenya. The independent variables for the study included ERP's knowledge management, top management support, staff training, and communication integration. The study targeted five major health insurance firms in the region—Britam, Jubilee Insurance, CIC Insurance, APA Insurance, and Liberty Life Assurance—and specifically engaged ICT personnel and departmental heads from these organizations. The research encompassed the evaluation of ERP system integration, its influence on operational efficiency, and its potential effects on overall program performance. This study was carried out between July and September 2024.

1.8 Study Limitations

Some respondents were not cooperative during the data collection phase, which impacted the scope and depth of data gathered. To address this, the researcher encouraged participants to provide honest responses and assured them that survey information would remain confidential and be used solely for the study's purposes. Additionally, the study encountered challenges in ERP system implementation, such as technical difficulties, stakeholder resistance, and unforeseen obstacles,

which limited the ability to observe the full potential of ERP integration benefits. The study's limited timeframe also posed a constraint, as the long-term effects of ERP integration may not have been fully visible within the research period. Some benefits or challenges related to ERP system integration might have emerged over a longer duration, which the study was unable to capture. Furthermore, external factors—such as shifts in government policies, fluctuations in economic conditions, and advancements in healthcare technology—also influenced health insurance program performance independently of ERP integration. These variables made it difficult to isolate the specific impact of ERP systems from other factors affecting health insurance programs.

1.9 Delimitations of the Study

This study was delimited to Nairobi County, Kenya, with a focus on five leading health insurance firms: Britam, Jubilee Insurance, CIC Insurance, APA Insurance, and Liberty Life Assurance. These firms were chosen due to their substantial market influence and diverse customer bases, which provided a representative sample of ERP system integration within the region's health insurance sector. The research specifically targeted ICT personnel and departmental heads, as these individuals are key decision-makers and operators in the planning, implementation, and management of ERP systems within their organizations. Additionally, the study concentrated on analyzing the impact of ERP system integration on the performance of health insurance programs, with an emphasis on critical components such as knowledge management, top management support, staff training, and communication integration. By narrowing its focus to these aspects, the study aimed to provide a detailed understanding of how ERP systems influence both the operational and strategic facets of health insurance firms in Nairobi County, shedding light on

specific areas where ERP integration can enhance program effectiveness. This delimitation also helped control for external variables by concentrating on prominent firms and key personnel most directly involved in ERP-related decision-making processes.

1.10 Assumptions of the Study

It was assumed that key stakeholders, including healthcare providers, administrators, and policymakers, supported the ERP integration initiative. Positive stakeholder engagement was crucial for the effective functioning of ERP systems. The study also assumed that the data available for analysis, including information related to ERP implementation and health insurance program performance, was accurate and reliable. Inaccurate or incomplete data could have affected the validity of the study's conclusions. Additionally, it was assumed that ERP systems within health insurance programs had been successfully implemented without major technical glitches or significant disruptions. This assumption was critical for assessing the intended impact of ERP integration on performance.

1.11 Operational Definition of Key Terms

Knowledge Management – refers to the methodical process of gathering, arranging, preserving, and disseminating the collective knowledge of an organization in order to improve its capacity to meet its goals. It entails locating, producing, expressing, disseminating, and incorporating insights and experiences within an organization.

Top Management support- Refers to the influence of senior leadership in the successful integration and performance of ERP systems.

Staff training- Refers to the impact of training programs associated with the ERP system on the performance of health insurance programs.

Communication- refers to the integration of communication processes within the ERP system and its impact on the performance of health insurance programs

Program performance-refers to the measurement and evaluation of how well a program or set of activities is achieving its intended goals, objectives, and outcomes

ERP integration- refers to the process of incorporating and aligning an ERP system with an organization's existing software, systems, and business processes

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter provides the empirical studies on the independent variables. It also highlights the theories that will guide the study.

2.1 Theoretical Framework

Finding a set of claims or guiding ideas that explain events or facts that have been verified by many replications or broad acceptance is known as a theoretical review (Kisavi, 2019). The three theories listed below served as the foundation for this research investigation.

2.1.1 Systems Theory

A system, as explained by Porter-O'Grady and cited in Hespanha (2020), is a network of multiple interconnected components forming a unified entity. These components work together harmoniously for the benefit of an organization. This interconnected nature holds significant importance for service-oriented organizations like the health insurance firms to achieve optimal efficiency and effectiveness. The outcomes of this system are perceived by users who evaluate the service as either okay or not okay. Individuals interacting with health insurance firms encounter experiences shaped by the coordinated processes and elements within a defined system. To ensure

the delivery of high-quality service to patients, it is crucial for these processes to align seamlessly and operate cohesively for overall success.

Hespanha (2020) elucidated fundamental principles integral to systems theory, affirming that a system comprises interconnected sub-parts that collaboratively function. Every sub-part is essential to the overall system's functioning, and any malfunction affects the system as a whole. For a system to perform properly, it must have an ideal environment with necessary inputs and outputs that improve its functionality. The beneficiary of a well-functioning system is the consumer, particularly in healthcare, where the patient is the ultimate consumer. In system design, the service element takes a central position, surrounded by essential components. These elements involve stakeholders, and the system should enhance the performance of each stakeholder. Management assumes a pivotal role in ensuring the proper functioning of the system, with responsibilities encompassing coordination, organization, and streamlining of activities aligned with the system's goals. The efficiency of the system is evaluated by the output it produces.

The interconnectedness of healthcare activities makes the systems theory applicable to this study. Systems theory was relevant to the study of enterprise resource planning (ERP) system integration in health insurance programs because it helps us understand how different parts of a health insurance program work together as a whole. In simple terms, systems theory focuses on how various components, like people, processes, and technology, interact and influence each other within a larger system, such as a health insurance program.

2.1.2 The Service Gap Model

This model, formulated by Zeithaml and Bitner (2010), outlines five gaps in customer expectations that require addressing to adequately meet customer needs. These gaps involve a misalignment

between consumer expectations and organizational expectations, a discrepancy between perceived consumer desires and the quality of service delivered, a variance between the service delivered and the quality specified, a divergence in consumer information provided by management and the intended service delivery, and a distinction between customer perception and the actual service performance.

In practical applications, the Service Gap Model is valuable for organizations seeking to enhance their service quality and customer satisfaction. For example, in health insurance programs, understanding these gaps can guide management in aligning their services with customer expectations. By addressing the identified gaps, organizations can implement strategies that improve customer interactions, enhance service delivery, and ultimately lead to higher customer satisfaction and loyalty (Zeithaml et al., 2006).

One of the primary assumptions of the Service Gap Model is that customer expectations are formed based on various factors, including previous experiences, word-of-mouth, and marketing communications. Critics argue that the model may oversimplify the complexity of customer expectations, which can vary significantly among different customer segments and situations. Additionally, some researchers suggest that the model does not adequately consider the dynamic nature of customer expectations, which can change over time (Dabholkar et al., 1996). These criticisms highlight the need for organizations to conduct ongoing research to stay attuned to evolving customer expectations.

The Service Gap Model was relevant to the study objective of examining the influence of ERP top management support on the performance of health insurance programs. Understanding the gaps between what customers expect from the service and what they perceive they are receiving can

inform leadership strategies to bridge these gaps effectively. Through utilizing the Service Gap Model, health insurance organizations can ensure that management support aligns with customer expectations, leading to improved service quality and overall program performance.

2.1.3 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) was developed by Fred Davis in 1989 to explain how users come to accept and use technology. According to Davis, two primary factors influence technology acceptance: perceived ease of use and perceived usefulness. If users believe that a technology is easy to use and will improve their job performance, they are more likely to adopt it. This model has been widely used in various fields to understand user behavior towards new technologies, especially in organizational settings (Davis, 1989).

TAM is applicable in many contexts, including healthcare, where the adoption of technology can significantly impact service delivery. For instance, in health insurance programs, understanding how employees perceive the ease of using an Enterprise Resource Planning (ERP) system can help organizations facilitate a smoother implementation process. The model helps organizations identify potential barriers to technology acceptance, allowing them to develop targeted training and support initiatives that address user concerns and enhance acceptance (Venkatesh & Bala, 2008).

One assumption of TAM is that user acceptance is primarily driven by rational considerations regarding ease of use and usefulness. However, critics argue that the model oversimplifies the complexities of user behavior. Factors such as organizational culture, social influence, and individual differences can also play significant roles in technology adoption but are not fully captured by TAM (Venkatesh et al., 2003). This limitation suggests that while TAM provides a

useful framework, it may need to be combined with other theories to capture a more comprehensive view of technology acceptance.

In relation to the study objectives, TAM was particularly relevant when examining the influence of ERP knowledge management on the performance of health insurance programs. Understanding how employees perceive the ease of use and usefulness of the ERP system can inform training and support strategies, ultimately enhancing performance outcomes. By leveraging TAM, organizations can better tailor their ERP implementations to meet user needs, fostering greater acceptance and improving overall program performance (Davis et al., 1989).

2.2 Evolution of Enterprise Resource Planning

Automating and integrating every aspect of an organization's core business is referred to by the industry term ERP. Kang et al. (2020) state that in order to obtain a competitive edge, every business that uses ERP systems aims to boost productivity, effectiveness, and organizational competitiveness. Al-Adwan (2020) also emphasized the enhanced market share and competitive edge that businesses achieve with the implementation of ERP.

ERP is a cutting-edge software solutions that the Gartner Group created in the early 1990s to improve the capabilities of programs (Dziembek, 2021). According to Kemboi et al. (2019), ERP has industrial roots and is intended to replace MRP and MRP II. In the 1970s, the time order release system—an information system centered on production, scheduling, and the issuing of purchase orders and production orders according to the business owner's schedule—was incorporated into MRP. This made guaranteed that components and subassemblies arrived at the assembly site on time (Handityo et al., 2021). ERP is seen as a complement to current capabilities and an advancement over MRP. It is a state-of-the-art system that has developed throughout time

in financial and industrial information systems, coordinating the flow of tangible items and knowledge (Rouhani & Mehri, 2018).

The introduction of Manufacturing Resource Planning II, a more user-friendly system, in the early 1980s is where ERP first emerged. MRP-II was created to aid manufacturing firms schedule a wide range of resources and enable resource planning throughout the whole organisation. Its main objective, which encompassed the transfer of inventories and related financial procedures, was to shed light on the importance of production and material schedules (Goundar et al., 2021).

2.3 Empirical Studies

2.3.1 Knowledge Management and Performance of Projects

Dutta and Kumar (2021) highlight that when used effectively, an organization's knowledge can be a powerful asset for enhancing competitiveness. However, mismanagement of this knowledge can lead to more problems than solutions. To remain competitive in a rapidly evolving technological landscape, organizations must harness the strategic value of technical software and integrate current technologies. To achieve the best possible organisational performance, knowledge management, or KM, and enterprise resource planning (ERP) technologies must be implemented.

Altaie and Dishar (2024) investigated how Knowledge Management (KM) procedures and Artificial Intelligence (AI) applications could work together in building project management. To fully benefit from this integration, they emphasised how crucial it is to provide engineers with the required training and support their professional growth. Eighty-five engineers from the public and commercial construction sectors were surveyed as part of the study, which examined the level of

advantages associated with adopting KM processes and AI technologies. The results showed considerable variance in the regression analysis and a positive association between demographic characteristics and the benefits of applying KM and AI. Thus, in order to improve decisionmaking, accomplish corporate goals, and enable efficient management and information exchange inside building projects, the researchers advised implementing AI systems based on knowledge management procedures.

In their 2024 study, Valencia-Arias et al. focused on the importance of knowledge management (KM) for organisational innovation in small and medium-sized firms (SMEs).The study emphasised how knowledge management (KM) affects goal achievement and decision-making, especially when it is augmented by information and communication technologies (ICTs). It did, however, recognize that resource limits and knowledge gaps prevent SMEs from fully implementing KM, highlighting the necessity for current scientific literature to address these issues. Following the PRISMA principles for systematic literature reviews, the researchers performed a bibliometric analysis using the Scopus database to investigate research trends in this field. The study's conclusion emphasised the significance of conducting additional research on both recognised and novel knowledge management themes, such as intellectual capital, entrepreneurial orientation, and absorptive capacity.

The difficulties of applying Enterprise Resource Planning (ERP) systems for Knowledge Management (KM) in a telecommunications corporation were examined by Raimee and Aman (2023), who emphasised the critical role that efficient KM plays in managing mergers and acquisitions (M&A).They discovered a number of elements, such as organisational culture, leadership, and business strategy, that affect successful integration. But they also pointed out that

a lot of M&As fall short because of things like mismatches in culture, undervaluation, and inadequate integration procedures, with employee resistance standing in the way of these problems. The study suggested a model that takes financial, workplace environment, and strategic factors into account in order to minimize employee opposition. In addition to providing insightful guidance for business owners, legislators, and regulatory agencies in navigating the challenges of integration, this model emphasises the significance of developing a sustainable working environment to assist knowledge management initiatives throughout mergers and acquisitions.

Nine important CSFs that affect project management performance were identified by Gunasekera and Chong (2018) after they studied Knowledge Management (KM) critical success factors (CSFs) in Sri Lankan construction companies. They discovered through quantitative research that performance results were correlated with T-shaped skills, training, teamwork, organisational structure, leadership, IT support, culture, performance measurement, and benchmarking. Although other characteristics had little effect on project success, multiple regression analysis revealed that T-shaped skills, teamwork, benchmarking, and transformational leadership were major positive impacts. In KM implementation, the study emphasised the need of T-shaped skills, cooperation, leadership, and benchmarking.

Enterprise Resource Planning (ERP) possesses an impressive capacity to collect information pertaining to everyday business operations, furnishing organizations with a substantial volume of data that, following meticulous processing and integration, can be harnessed as knowledge. As such, ERP systems become essential channels for information collection, analysis, and sharing inside a company (Liang et al., 2022). The integration of ERP with knowledge management introduces a notable transformation in the available knowledge for capturing, storing, utilizing,

and sharing. In this manner, ERP facilitates the expansion of organizational knowledge about business processes as proficiency with ERP systems advances, rendering knowledge management an intriguing and evolving undertaking.

The management of the organization's remaining physical resources is made simpler by ERP thanks to KM, which establishes a system for managing all knowledge resources. . It is necessary to develop a KM system for knowledge management since it incorporates both organizational information found in ERP-controlled business processes as well as personal knowledge that is only partially managed by an ERP. The most important aspect of business management is the ERP system basis (Liu et al., 2020).

An organization must conceive the choice of the information at its disposal, efficiency of the system in use, the effect that system users have on the system, and the organizational impact when assessing the efficacy of ERP implementation (Sedera and Lokuge, 2019). An effective ERP system reduces costs by managing many aspects of the business concurrently, lowering total employee workload and costs, and lowering system expenses, according to Gill, Amin, et al. (2020). Automation of routine processes by an ERP system with knowledge management integration increases output accuracy and productivity. The balanced scorecard, according to Barth and Koch (2019), may quantify the potential financial worth of policy coordination, foster collaboration, and reduce the overall cost of the supply chain system.

Researchers Muniz-Rodriguez et al. (2024) looked at how knowledge management and organisational learning helped small and medium-sized businesses (SMEs) in Spain's Basque Country accelerate their digital transformation. Examining five industrial SMEs and how they leveraged their intellectual capital for digital growth, the study focused on how fast transitions

impact sustainable development. In order to offer research-based tactics and organisational measures that will aid in this transition, the writers emphasised important components from learning management and corporate knowledge theories. Leaders of SMEs, public and private organisations, and governments who are interested in boosting sustainable competitiveness will find great value in the analysis's conclusions.

Shawar (2024) examined the relationship between employee performance and knowledge management (KM) procedures at the Hebron Municipality, with a particular emphasis on the Water and Wastewater Department. Based on the Knowledge Creation Theory—which holds that knowledge is created through shared experiences and social interactions—104 employees were polled through a systematic random sample method. A quantitative method was used, and the data were analysed using SPSS version 24 and structural equation modelling, or SEM. The findings showed that while knowledge application and codification had little effect, knowledge generation and sharing greatly improved worker performance. The results emphasised how crucial it is to apply knowledge management (KM) procedures in an efficient manner, especially by cultivating a culture of ongoing learning and sharing of knowledge, in order to enhance employee performance and, in turn, organisational results and citizen satisfaction.

2.3.2 Top Management Support and Performance of Projects

Sheikh and Sulphey (2020) assert that the successful completion of any project inside an organization depends on the backing of top management. Executives frequently neglect to schedule time for themselves and other essential team members for trial runs or superuser education, even when they are willing to pay the project. Super-users are vital to the functioning of the system; hence they need to be trained. The ERP project needs

senior management's commitment and support, which includes allocating sufficient financial and human resources. Lack of funding might result in a knowledge transfer that is inefficient since suppliers might hurry the implementation (Sheikh & Sulphey, 2020). Sheikh and Sulphey (2020) also underlined the need for high management to clearly designate the ERP implementation project as a top priority. This implies that in order to guarantee successful execution, the top leadership must allocate the necessary time and resources.

Xue et al. (2024) examined how organisational components affected building professionals' use of emerging information and construction management technology (EICMT), with a particular emphasis on the moderator and mediator roles. Using an online questionnaire, the study collected 507 valid replies. Mplus 8.0 was used for path analysis and bootstrapping testing. The findings showed that the adoption of EICMT was directly impacted by corporate normative pressure and technologically enabling conditions. Additionally, the study verified that top management support moderated the link between organisational components and EICMT implementation, whereas perceived ease of use mediated the relationship between technology facilitating conditions and EICMT implementation. The architecture, engineering, and construction (AEC) industry's adoption of EICMT is better understood now thanks to this research, which also provides useful insights for practitioners looking to improve corporate norms, culture, and technological conditions for successful digital transformation.

It is commonly acknowledged that top management support (TMS) is the single most crucial factor in the accomplishment of all organizational activities and procedures. This viewpoint has led to the suggestion that TMS be integrated into the ERP deployment process at every stage. Al-Mashari [2018] argued that TMS should continue throughout the ERP installation process and not just at

the start and facilitation stages. TMS is crucial for the software's overall performance even at the stages after implementation (Meghana et al., 2018).

Shao et al. (2024) investigated the relationship between employees' inventive performance and digitally enabled tasks and top management support and transformational supervisory leadership. Two samples were used by the researchers to test their model: 206 employees from diverse joint ventures across multiple industries and 230 sales representatives from a car manufacturing company. The results showed that, through the use of a data-driven culture, top management support considerably improved digitally enabled task performance more than inventive performance. On the other hand, task performance was less affected by transformational supervisory leadership, which was mediated by digital self-efficacy, than inventive performance made possible by digital means. By fusing information systems leadership theory with managerial support in a digital setting, this study expanded the literature on technology use and offered useful advice for utilizing digital technologies in businesses.

Balogh (2024) investigated how the function of top management in corporate innovation programs, emphasizing its importance in retaining a competitive advantage. The study found that corporate innovation frequently entails hazardous and uncertain undertakings, needing active engagement from senior executives throughout the innovation lifecycle, including resource allocation, change approval, evaluation, and potential for future use. The study combined a literature analysis with primary research, which included questionnaires and in-depth interviews with senior executives to analyse their attitudes of business innovation and leadership positions. The findings indicated a complete approach to executive innovation management, pinpointing crucial aspects that influence innovation practices. Based on the findings, the study made four

recommendations to improve senior management's performance in corporate innovation programs.

Al-Husseini (2024) investigated how top management support influences employee creativity, focusing on the mediating roles of knowledge management and absorptive capacity. Surveying 284 academics in Iraq, the study employed structural equation modeling with AMOS to establish positive relationships among management support, knowledge management practices, absorptive capacity, and creativity. Findings highlighted the significance of top management in fostering an environment that enhances knowledge sharing and creativity.

Wagdi and Fathi (2024) examined the impact of top management team (TMT) diversity on firm performance in emerging markets from 2013 to 2022. Analyzing 70 non-financial firms across several countries, they identified three diversity dimensions: gender, education, and foreign nationality. Results indicated positive links between TMT diversity and business success, particularly regarding education and nationality, while gender diversity had limited effects. The study advocated promoting TMT diversity to boost performance, emphasizing the need for further research on diversity dynamics.

Zaribaf and Bayrami (2018) categorize management's significance into three primary roles: managing the strategy process, managing partnerships, and managing manager training. Organizing operations, streamlining processes, lining up the organizational structure, and preserving employee dedication to the ERP deployment are the core responsibilities of management. The function of the board, as defined by Matthias and Sascha (2018), is to guarantee consistency in the use of resources, business procedures, and desired business strategies. Beer and

Eisenstat (2019) identified insufficient down-the-line management skills and development as well as poor coordination across functions as ERP implementation killers.

2.3.3 Staff Training and Performance of Projects

Mohd and Bulengela (2024) investigated the link between staff training and worker productivity at the Kigamboni Municipal Council in Dar Es Salaam, Tanzania. Recognizing the importance of training in human resource management, the study sought to investigate how training affected employee performance and identify factors impacting training programs at the council. Data was collected using a mixed-method approach, which included both probability and non-probability sampling techniques. The quantitative component of the research included 95 respondents, while the qualitative component included 15 interviews. SPSS was used to analyse data quantitatively, while content analysis was used for qualitative insights. The findings revealed that employees acknowledged the positive influence of training on job performance; however, limited training opportunities were perceived to negatively affect performance. Additionally, various factors were identified as impacting the implementation of training programs. The study concluded that organizations must strategically manage training initiatives to maximize employee potential and enhance overall performance.

Anyanwu and Ibekwe (2024) investigated the relationship between staff training and marketing performance at PZ Cussons and Macdon Industries in Abia and Anambra States, Nigeria. Utilizing a survey research design, the study employed questionnaires for data collection, targeting a population of 105 employees within the sales and marketing departments of both companies. A census method was implemented to include the entire sample size. Data analysis involved mean statistics, and the Pearson product-moment correlation coefficient was utilized, supported by SPSS

21.0 and Microsoft Excel software for hypothesis testing. The findings revealed significant relationships: orientation training positively influenced customer patronage and retention, while seminar and workshop training also had a significant impact on customer patronage and sales force retention. The study recommended the importance of induction and orientation for sales staff to enhance their effectiveness in customer acquisition and retention, alongside regular organization of seminars and workshops to further improve performance.

Ogunode, Ukozor, and Chijioke (2024) explored the relationship between training programs and the job performance of academic staff in Nigerian tertiary institutions using secondary data from print and online sources. The comprehensive review revealed a significant link between ongoing training and improved job performance among academics. The findings highlighted how training positively influenced the effective execution of teaching, research, and community service programs. The study concluded that continuous training initiatives are crucial for enhancing performance in tertiary institutions, as well-trained academic staff demonstrate increased proficiency in their roles. The researchers advocated for structured training programs tailored to the specific needs of academic positions, emphasizing the importance of continuous professional development and institutional support. This research called for educational institutions to prioritize training as a strategic investment to advance higher education in Nigeria.

Changalima and Mwagike (2024) looked into the efficiency of the Force Account Approach (FAA) in building projects within local government in Dodoma, Tanzania, as well as the moderating function that staff competency on communication plays. With the use of data from 229 project participants and the PROCESS macro for analysis, the study investigated three hypotheses. The findings showed that staff competency and communication both had a major

impact on how effective the FAA was in construction projects. Furthermore, the study demonstrated that staff competency moderated the association between FAA effectiveness and communication, with a greater effect shown at higher competency levels. The results demonstrated how staff competency affects effective communication within the FAA, underscoring the importance of this process in improving project outcomes. Notwithstanding many drawbacks, the research provided insightful information for theoretical comprehension and real-world construction management applications. A business must set aside money for the significant cost of retraining and staff development. In order to meet deadlines for any ERP rollout, this is necessary (Sheikh & Sulphey, 2020). Because of this, suppliers may find it difficult to schedule enough time so that the majority of their staff can acquire the knowledge on ERP. An organization can develop the skills necessary to properly use an ERP system by training the end users. To ensure that users are informed about how the ERP project will impact their jobs, the organization needs to develop communication strategies, training films, demos, and regular reports (Caserio & Trucco, 2018). If management commits to supporting the ERP deployment and provides enough resources, users and subordinates will be more open to the project. Therefore, a company must make sure that every user is convinced of the system's value.

Implementing ERP aids in raising employee productivity and streamlining work procedures. Employees need clear instructions from management and the perseverance to reach desired goals in order to meet organizational goals. Enterprise resource planning (ERP) systems may be successfully implemented by firms through inspiring staff through training. Top management is required to provide a welcoming and effective workplace where worker thoughts and perspectives

are valued (Al-Zoubi & Al-Haija, 2018; Bekele, 2019). For an ERP deployment to be effective, both technical and business abilities are required (Sumner, 2018).

Programs for new hire orientation involve teaching new employees how to do their duties effectively. Leading SMEs, however, are aware of the value of employee training and the fact that orientation is a wonderful chance to introduce staff to the SMEs, its products, culture, and rules. These components can significantly increase worker satisfaction and staff retention when included to the new employee orientation checklist (Bartram & Gibson, 2010). Employee skill acquisition or improvement in a particular business sector is one of the main advantages of employee training. For SMEs, enhanced skills instantly translate into lower costs, more production, and greater efficiency. Additionally, they raise spirits and may even inspire workers to work harder and more productively. This is a real win-win situation for the SMEs and Employee (McNamara, 2018).

2.3.4 Communication Integration and Performance of Projects

The integration of Enterprise Resource Planning (ERP) systems plays a pivotal role in shaping communication dynamics within an organization and, consequently, influences the overall performance of projects. ERP systems centralize data, ensuring that project-related information is easily accessible to all relevant stakeholders. This enhances communication efficiency as team members can access real-time data, reducing delays and miscommunications. ERP facilitates realtime collaboration among project teams. Integrated communication tools within ERP systems enable instant sharing of updates, progress reports, and feedback. This promotes seamless coordination, particularly in projects with diverse teams or geographically dispersed members (Sumner, 2018).

In their 2024 study, Hatamleh et al. investigated methods for enhancing project risk management in Jordan through integration and communication. Project Integration Management (PIM), Project Communications Management (PCmM), and Project Risk Management (PRiM) procedures were investigated in the study using closed-ended interviews with twelve experts. After the interviews, a standardized questionnaire was administered. In order to create a model that incorporated validity and reliability assessments and illustrated the connections between the processes, AMOS was utilised to examine the data and apply structural equation modelling (SEM). The Jordanian construction industry's contractors and consultants claim that PIM and PCmM were connected and improved PRiM. Additionally, the researchers suggested a 13-step procedure to improve PRiM implementation in developing nations, emphasizing the significance of integration and effective communication techniques in project risk management.

Hidayat and Sembiring (2024) examined how communication and organisational culture affected workers' performance at PT Tata Bara Utama in Central Kalimantan, with a focus on the mediating effect of work dedication. The study used a quantitative methodology, gathering information from employees via questionnaires. The data was analysed using Structural Equation Modelling (SEM) to look at the correlations between the variables. The findings showed that employee performance was positively impacted by organisational culture and communication. Additionally, it was discovered that the relationship between employee performance and organisational culture and communication was mediated by job commitment. The results emphasised the significance of cultivating a positive organisational culture and employing efficient communication tactics to augment employee dedication and, eventually, productivity in the work environment.

In their 2024 study, Katelo, Rintari, and Kambura examined how organisational performance in Kenya's Isiolo County Government was affected by change communication. With a descriptive research methodology, the study included 1,702 staff members, 61 managers, and 42 directors from 16 departments. 36 directors, 50 managers, and 239 staff members were eventually sampled by simple random selection. In order to guarantee validity and reliability, a pre-test was carried out before data were gathered using structured questionnaires. According to the analysis, strategic managers informed staff members clearly about changes and did so in an effective manner. Nonetheless, a crucial void was noted by the study, indicating insufficient avenues for employees to provide input on the modifications. In order to improve communication feedback, promote inclusivity, and ultimately improve organisational performance, the researchers suggested creating policy frameworks.

Al-Battaineh (2018) assessed the impact of innovation strategies on the functional performance of small and medium-sized enterprises (SMEs) located in Hassan Industrial City, Jordan. The survey chose 160 managers at random from 20 SMEs in Hassan Industrial City. The data demonstrated that three of the four primary factors of innovation strongly affected organizational functional performance. These three areas were monitoring reports communication via online communication methods, process innovation, and management innovation, all of which had a substantial impact on the organizational functional performance.

Shonubi and Akintaro (2020) did research in Nigeria on strategic communication and the success of manufacturing organizations. In this study, effective communication was discovered to be crucial to organizational effectiveness. Consequently, it was discovered that in order to facilitate strategic decision-making, which is essential for improved performance, efficient research and

proactive communication planning are required. According to the study, administrators ought to recognise clear concepts before speaking, fully comprehend the physical and human circumstances, and determine the purpose of communication in order to work as effectively and efficiently as possible.

Chepkosgei et al. (2020) examined how communications tactics affect the performance of commercial and financial state businesses in Kenya. The study's conclusions suggest that the success of Kenya's Economic and Commerce State Corporations is influenced by strategic communication. In order to enhance information sharing among various divisions within commercial and financial state corporations and consequently facilitate the achievement of predetermined goals and objectives, the head of communications needs to begin developing policies that are modelled after successful communication practices.

2.4 Conceptual Framework

A conceptual framework in research is a structured foundation that outlines the key concepts, variables, relationships, and assumptions relevant to a particular study. It provides a framework for understanding and analyzing the phenomena under investigation. (Abuli, 2012).

Independent Variables

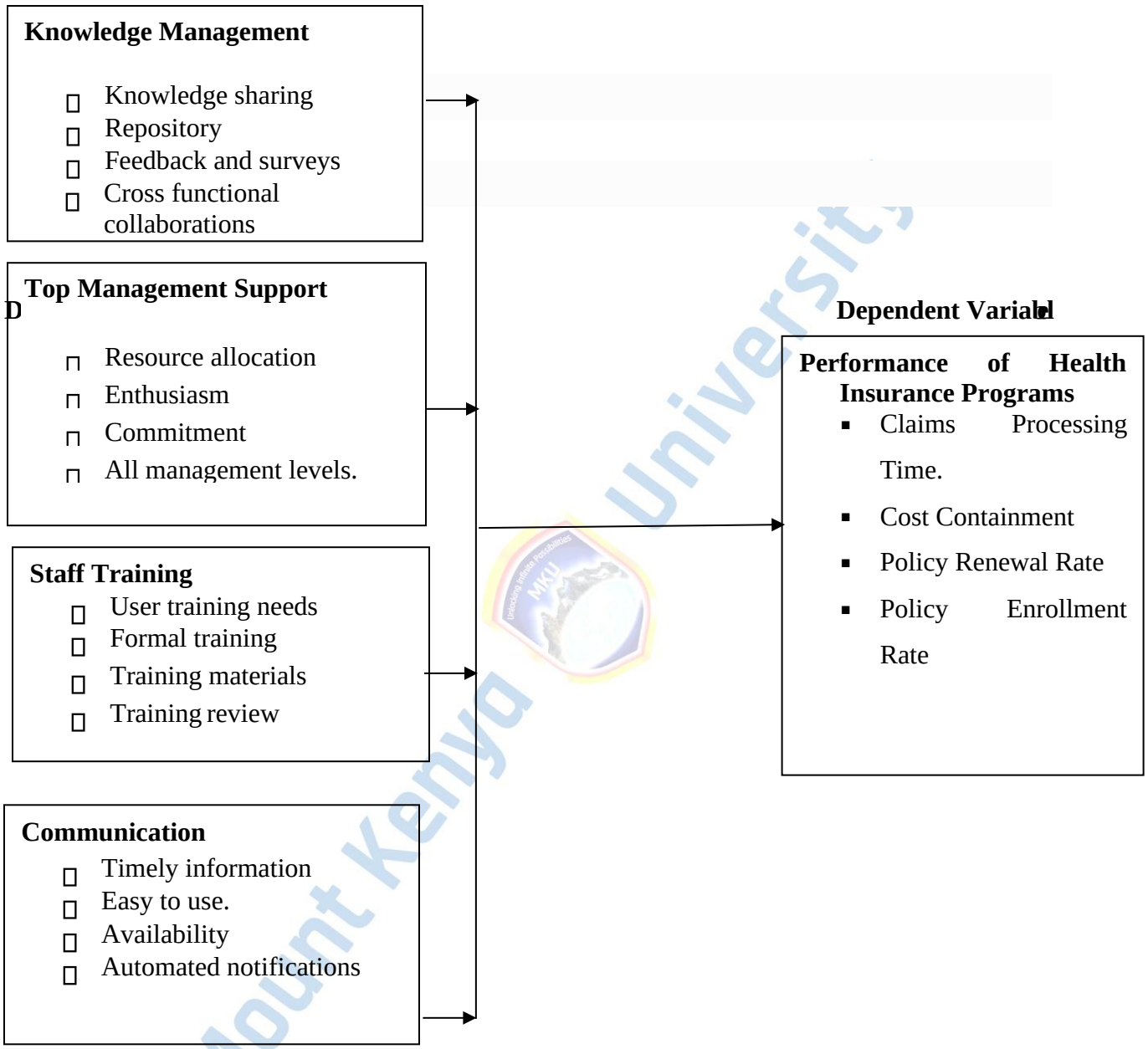

Figure 1: Conceptual framework

Source: Researcher (2024)

2.5 Summary of the Literature Review

Chapter two provides an in-depth exploration of key concepts in the literature review, focusing on the evolution of Enterprise Resource Planning (ERP). The interplay between ERP and knowledge management is underscored, with successful ERP implementation closely linked to organizational competence in managing knowledge. Top management support emerges as a pivotal factor, with responsibilities encompassing coordination, process streamlining, and resource allocation, especially in the context of ERP projects. The chapter also highlights the essential role of staff training in ERP utilization and the significance of effective communication integration within ERP systems for shaping project performance.

Theoretical frameworks, such as Systems Theory and the Service Gap Model, are introduced to provide a conceptual guide for the study. Systems Theory is applied to understand the interconnectedness of organizational processes, particularly in the realm of service delivery. The Service Gap Model serves as a tool to address disparities between customer expectations and service delivery, emphasizing its relevance for organizations like health insurance. The conceptual framework is presented as a mental visualization guiding the study, illustrating the interrelation between variables, and underscoring the importance of closing gaps in customer expectations and service delivery, particularly in the healthcare context. Overall, chapter two lays a comprehensive foundation for the study by synthesizing key literature, empirical studies, and theoretical frameworks relevant to ERP and project performance in healthcare organizations.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presented the methods used to achieve the objectives of the study. These included methods of data collection and analysis, as well as the respondents who participated in the research.

3.2 Research Design

Descriptive research was used by the researcher to reflect the social phenomenon under investigation. According to Williamson and Johanson (2017), the purpose of descriptive survey research was to characterize phenomena and the research while also attempting to explain how particular behaviors or occurrences took place. However, it could report on recent or ongoing events without having any impact on the variables being examined.

3.3 Study Location

The study was conducted in Nairobi County, the capital and largest city in Kenya. Nairobi served as a major economic hub and was home to numerous insurance firms, including key health insurance providers.

3.4 Target Population

The target population, according to Saunders et al. (2014), was the entire group of people or things that the researcher examined and that had similar qualities. The target population for this study consisted of key personnel from the five major health insurance firms operating in Nairobi County: Britam, Jubilee Insurance, CIC Insurance, APA Insurance, and Liberty Life Assurance. These firms were chosen because they were among the most prominent and influential health insurers in the region, representing a diverse range of policies and customer bases. By focusing on these firms, the study aimed to gain a comprehensive understanding of how ERP system integration impacted

the performance of health insurance programs. The study targeted ICT personnel and departmental heads within these firms, as they played critical roles in implementing and managing ERP systems. In total, the study aimed to reach a target population of 336 respondents (Insurance Regulatory Authority, 2024).

3.5 Sample Size and Sampling Procedure

A subset of instances selected or extracted from a larger subset or population of cases is called a sample, and its main purpose is usually to resemble the features of the larger subset or population. The total number of instances analysed is known as the sample size (Cramer & Howitt, 2007). The researcher used Yamane's (1967) formula to calculate the sample size. The study's 95% confidence level includes a 5-percentage-point margin of error.

Equation 1: Determination of sample size equation

$$n = \frac{N}{1+N(e^2)}$$

n represents the sample size, N denotes the population under study, e stands for a 5% error, and 1 represents a constant.

The determination of the sample size was computed as:

$$\mathbf{n} = \frac{336}{1+336\ (0.05^2)}$$

n

= 183 respondents

The stratified random sampling method was utilized in order to enhance the representativeness of the sample. The strata was in form of different levels of the hospitals. The respondents were picked randomly using random sampling technique.

3.6 Data Collection Methods and Procedures

Respondents were given both closed-ended and open-ended questionnaires to gather both general data and unique viewpoints. Kumwenda (2015) noted that the use of questionnaires reduces the potential for interview bias, preserves anonymity, saves time, and gathers data from a large sample. A structured questionnaire aids in keeping participants on course, producing data that is pertinent to the research. Because potential responses to the questions are presented, structured questionnaires can be completed quickly (Sekaran & Bougie, 2011). All things considered, questionnaires are a flexible research technique that can be used to gather a variety of data, making them an important resource for researchers across numerous domains.

The questionnaire was shared with respondents using a combination of online and in-person methods for ease of filling. An online survey platform was used to distribute the questionnaire via email and other digital communication channels, allowing respondents to complete the survey at their convenience from their preferred device. For those who preferred or had limited access to digital tools, printed questionnaires were provided in person through scheduled meetings or dropoffs. This approach ensured that all targeted respondents, including ICT personnel and departmental heads from the five key health insurance firms, had access to the questionnaire in a manner that suited their preferences and availability.

3.6.1 Piloting

The practice of testing a research tool, such a questionnaire, on a small, representative sample of the target population in order to find any possible problems with its validity and reliability is known as instrument piloting (Kim & Kim, 2023). This step helps refine the instrument to ensure

it accurately measures what it is intended to measure and produces consistent results. In this study, 30 respondents from MINET Insurance Firm were piloted to assess the validity and reliability of the questionnaire. This pilot testing allows for the identification and correction of any ambiguities, biases, or errors in the instrument before the full-scale study is conducted.

3.6. 2 Validity of Research Instruments

This is established by how well research instruments measures and executes the intended functions (Biddix, 2016). Making certain that each instrument item examines the intended goal will aid in determining the instrument's content validity. My project supervisor thoroughly reviewed the instrument to ensure that it adequately addresses the study's objectives.

3.6.3 Reliability of research instruments

According to Privitera and Ahlgrim-Delzell (2018), instrument reliability implies consistency in the sense that surveys would capture identical data if used again. Furthermore, the level of constituency within the questions (Sekaran & Bougie, 2019). Cronbach's alpha was used in the study, and an alpha of 0.7 or more was approved.

3.7 Data collection

Following the approach recommended by previous studies for obtaining participant cooperation in research involving organizational settings, the researcher initiated a formal process to gain access to respondents. With an introductory letter from Mount Kenya University, the researcher applied for and received a permit from the National Commission for Science, Technology, and Innovation (NACOSTI), following protocols similar to those outlined by Opoku-Asante et al. (2022) in studies requiring regulated institutional approval. Once permission was granted, the researcher directly contacted the selected respondents, adhering to best practices in data collection

as demonstrated in past studies where direct contact helps in building trust and engagement with participants (Sulaiman & Khalid, 2024).

Before distributing the questionnaires, the researcher provided verbal instructions and clarifications to ensure respondents understood the purpose of the study and how to respond accurately. This step is consistent with findings from Xu et al. (2021), who emphasized that clear instructions prior to data collection can improve response accuracy and reduce non-cooperation.

3.8 Data analysis technique

Following data collection, the quantitative data gathered from the survey was coded, classified, and arranged. Using SPSS, a lot of descriptive statistics was utilised to evaluate the numerical information for this study, and inference statistics was used to make inferences about the sample findings. Inferences like correlations and ranges, as well as measurements of central trends like mean and standard deviations, are produced with the use of descriptive techniques (Siedlecki, 2020).

Since multiple regression allows one to control the effects of one variable while analysing relationships between other variables, it was preferable. Regression analysis is a reliable method for assessing a model's effectiveness, given that the independent and dependent variables have an association that is statistically significant.

The multiple regression model that was used in the study was as follows:

$Y= Y = \beta0 + \beta1 * X1 + \beta2 * X2 + \beta3 * X3 + e$

Where: Y = Performance of health insurance programs,

X1 = Knowledge Management

X2 = Top Management

X3 = Staff Training

X4 = Communication Integration e

= error term β0= represents the

constant β=1, 2, 3 are regression

coefficients.

3.9 Diagnostic Tests

3.9.1 Test for Autocorrelation

For testing the autocorrelation of residuals, Durbin-Watson statistic was applied to identify the association between residuals in regression analysis.

3.9.2 Heteroscedacisty

Heteroscedasticity was tested by the use of the Breusch-Pagan test that looks at the dependence of the residual variance on independent variables.

3.9.3 Multi-collinearity

On the issue of multicollinearity, the Variance Inflation Factor (VIF) test was used to establish the extent of relationship between each of the predictor variables. A VIF score of more than 10 points towards severe multicollinearity which may be problematic for the regression model.

3.10 Ethical Issues

The researcher assured the respondents that the data obtained would be used solely for academic purposes while collecting data from the participants. Informed consent was obtained from the respondents where necessary to avoid invading their privacy. This approach shielded respondents from psychological, physical, and social abuse, allowing them to voluntarily choose to engage in the study. Since the researcher did not know their identities, the principle of anonymity was upheld. The information provided by study participants was kept confidential. The researcher refrained from resorting to deceitful practices or enticements to obtain data from the participants and treated the respondents with dignity while maintaining integrity.

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CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

The study looks into the factors that affect financing for SMEs run and owned by women. Thus, the results and analysis of the data gathered are presented in this chapter.

4.2 Response rate

The study targeted a total of 183 respondents, comprising ICT personnel and departmental heads from five major health insurance firms operating in Nairobi County: Britam, Jubilee Insurance, CIC Insurance, APA Insurance, and Liberty Life Assurance. According to Table 1, 161 questionnaires were returned, with 6 being incomplete. This resulted in 155 completed questionnaires, yielding a response rate of 84.6%. This high response rate indicates strong participation from the targeted group, contributing to the reliability of the study's findings. However, 28 questionnaires, representing 15.4%, were either not returned or incomplete. Overall, the response rate of 84.6% is considered satisfactory for drawing valid conclusions from the data collected. While Nulty (2021) reiterated that a response rate above 70% assures accurate representation and validity in surveybased research, Baruch and Holtom (2008) stated that a response rate above 70% is appropriate for organisational studies.

Table 1.Response Rate Summary

Total No of questionnaire issued out	Total No of returned questionnaires	Number of incomplete Questionnaires	Completed questionnaire received	Response Rate
183	161	6	155	84.6%

Source: Researcher (2024)

4.3 Reliability Results

The researcher used the completed questionnaire to generate the Cronbach Alpha Coefficients.

Table 2: Reliability Results

	No. of Items	Cronbach Alpha Coefficient
Knowledge Management	4	.910
Top Management Support	4	.883
Staff Training	4	.816
Communication Integration	5	.844
Performance of Programs	4	.808

Source: Researcher (2024)

The reliability of the questionnaire was assessed using Cronbach's Alpha Coefficients, with results presented in Table 2. Knowledge Management had the highest reliability score at 0.910, indicating excellent internal consistency. Top Management Support followed closely with a coefficient of 0.883, reflecting strong reliability. Staff Training and Communication Integration had coefficients of 0.816 and 0.844, respectively, both signifying good reliability. The Performance of Programs variable had a Cronbach Alpha of 0.808, also within the acceptable range for reliability. These results demonstrate that the questionnaire items were reliable for measuring the study variables, as all coefficients exceeded the commonly accepted threshold of 0.7.

4.4 Demographic Attributes of Respondents

This section details the participants' attributes, including gender, age, and highest educational attainment, which are crucial for understanding the profile of respondents. Education levels, in particular, help assess the reliability of the responses provided.

4.4.1 Percentage Response by Gender

This section provides an overview of the different genders that participated in the study. It presents the number of male and female respondents involved in the research. The table below shows the percentage distribution of participants based on gender.

Table 3; Distribution by gender

Gender	Frequency	Percentage (%)
Female	61	39.4%
Male	94	60.6%
Total	155	100.0%

Source: Researcher (2024)

In the study on insurance firms, Table 3 presents the gender distribution of the respondents. Out of the 155 participants, 94 (60.6%) were male, while 61 (39.4%) were female. This shows a higher representation of male respondents compared to females. The notable difference suggests that more men occupy key roles within the ICT departments and management positions in the health insurance firms targeted. While both genders contributed to the findings, the higher male participation may indicate gender disparities in leadership or technical roles within these firms, which could influence how ERP system integration and performance are perceived across different genders.

4.4.2 Age Distribution

The survey covered a broad age range, from under 24 to over 60 years, providing a diverse set of perspectives across various life stages. Table 4 shows the distribution of responses by age group.

Table 4; Respondents by Age

Age	**Frequency**	**Percent %**
25-35	33	21.3%

36-45	61	39.4%
46-55	38	24.5%
56-60	20	13%
Above 60	3	1.8%
Total	155	100%

Source: Researcher (2024)

Table 4 shows the age distribution of the respondents in the study. The majority of the participants, 61 (39.4%), were between the ages of 36 and 45, followed by 38 (24.5%) who were aged 46 to 55. A smaller percentage, 33 (21.3%), fell within the 25 to 35 age group, while 20 (13%) were between 56 and 60 years. Only 3 respondents (1.8%) were above 60 years. This indicates that most respondents were middle-aged professionals, likely experienced in their roles within the insurance firms. The lower representation of younger and older participants suggests that mid-career individuals dominate key roles related to ERP system integration and management in these organizations.

4.4.3 Highest Level of Education

This section examines the educational backgrounds of survey respondents, highlighting the range of formal education levels. It offers insights into the qualifications and expertise of the participants.

Table 5; Distribution of respondents as per academic qualifications

Category	**Frequency**	**Percent %**
Certificate	11	7%
Diploma	48	31%
Degree	81	52.3%
Masters	15	9.7%

Total	155	100%

Source: Researcher (2024)

Table 5 presents the academic qualifications of the respondents. The majority, 81 respondents (52.3%), held a degree, indicating that most of the individuals involved in the study were welleducated, likely possessing the necessary expertise to contribute to the study's focus on ERP system integration in insurance firms. A significant portion, 48 respondents (31%), had a diploma, while 15 respondents (9.7%) had a master's degree, showing that a smaller yet notable group had advanced qualifications. Only 11 respondents (7%) had a certificate, reflecting a minority with basic academic credentials. This distribution highlights the strong educational background of the participants, with over 60% holding at least a degree, which adds reliability to the insights gathered from this study.

4.5 Performance of Health Insurance Programs

This section analyzes responses on a 5-point Likert scale concerning health insurance program performance, with percentages rounded to the nearest whole number. Table 6 offers a detailed summary of respondent opinions on various performance aspects.

Table 6; Performance of health insurance programs

Statements	1	2	3	4	5	Mean	SD
The ERP system provides timely information necessary to perform job effectively	6%	10%	13%	45%	26%	4.32	0.544
The ERP system is user-friendly and easy to use for communicating and accessing information.	7%	8%	10%	46%	29%	4.42	0.523
Information within the ERP system is consistently available when needed	4%	7%	10%	49%	30%	4.51	0.518

The ERP system integrates communication across different departments seamlessly and efficiently.	4%	8%	14%	45%	29%	4.38	0.528
						4.41	0.528
Composite mean and composite SD							

N=155

Source: Researcher (2024)

The results from Table 6 provide insights into respondents' perceptions of the performance of health insurance programs, particularly focusing on the functionality of the ERP (Enterprise Resource Planning) system. The mean score for the system's ability to provide timely information was 4.32, indicating that respondents largely found the system effective. The user-friendliness of the system received a high mean score of 4.42, reflecting strong consensus that it was accessible and intuitive. The availability of information was rated even higher, with a mean of 4.51, demonstrating that respondents felt the system reliably provided necessary data for their tasks. Furthermore, the ERP's capacity to integrate communication across departments was rated positively at 4.38, highlighting its effectiveness in enhancing coordination. Overall, the composite mean score of 4.41 indicates a favorable view of the ERP system's contribution to health insurance program performance, although the lower score for timely information delivery suggests a potential area for enhancement.

The qualitative findings from the question on additional benefits realized through the use of the ERP system revealed several key themes. Respondents highlighted enhanced operational efficiency as a significant advantage, noting that the ERP system streamlined workflows and reduced manual tasks, allowing staff to focus on more strategic initiatives. Many mentioned improved data accuracy and consistency, which facilitated better decision-making and reduced errors in reporting and compliance. Additionally, the integration of various functions within the ERP system fostered better interdepartmental communication, leading to increased collaboration and a more cohesive

organizational culture. Respondents also pointed out cost savings resulting from more efficient resource management and reduced redundancy in processes. Finally, some mentioned that the ERP system had positively impacted customer satisfaction by enabling quicker response times and more personalized service, ultimately enhancing the organization's overall competitiveness in the health insurance market.

These findings align with past studies on ERP systems' positive impact on organizational performance, particularly in enhancing operational efficiency, data accuracy, and interdepartmental communication. For instance, Xu et al. (2021) noted that ERP systems significantly improve data accessibility and timeliness, which supports this study's finding of high scores in information availability and user-friendliness. Similarly, Opoku-Asante et al. (2022) found that user-friendly interfaces in ERP systems are crucial for fostering employee engagement and efficiency, corroborating the respondents' favorable rating of the ERP's accessibility. Moreover, Sulaiman & Khalid (2024) demonstrated that ERP systems streamline workflows and reduce manual tasks, resulting in substantial cost savings—a finding echoed in respondents' qualitative feedback in this study, where ERP systems reduced redundancy and allowed employees to focus on strategic tasks.

4.6 Knowledge management and Performance of Health Insurance Programs

This section provides descriptive statistics on knowledge management's influence on health insurance program performance, rated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree).

Table 7; Knowledge management and Performance of Health Insurance Programs

Statements	1	2	3	4	5	Mean	SD

ERP system promotes effective knowledge sharing among employees, enabling better collaboration and decisionmaking	2%	6%	11%	43%	38%	4.66	0.509
ERP system provides a comprehensive repository of information and resources that employees can access easily	7%	12%	8%	43%	30%	4.29	0.543
ERP system incorporates feedback and survey mechanisms to gather valuable insights for continuous improvement	7%	14%	13%	40%	28%	4.20	0.614
ERP system facilitates crossfunctional collaborations, enhancing overall efficiency and productivity.	7%	15%	18%	40%	20%	4.16	0.644
Composite mean and composite SD						4.33	0.576

N=155

The descriptive statistics for knowledge management regarding its influence on the performance of health insurance programs revealed generally positive responses among participants. The highest mean score of 4.66 indicated that respondents strongly agreed that the ERP system effectively promotes knowledge sharing among employees, facilitating better collaboration and decisionmaking. This was followed by a mean of 4.29, which highlighted the ease of access to a comprehensive repository of information and resources through the ERP system. The ability of the ERP system to incorporate feedback mechanisms for continuous improvement received a mean score of 4.20, indicating a strong perception of its role in gathering valuable insights. Lastly, the mean score of 4.16 for cross-functional collaborations suggested that respondents recognized the ERP system's effectiveness in enhancing overall efficiency and productivity. The composite mean of 4.33 underscored the overall positive influence of knowledge management facilitated by the ERP

system on the performance of health insurance programs indicating a moderate level of agreement among respondents.

The qualitative findings regarding the benefits realized by ERP integration on knowledge management in insurance programs highlighted several key themes. Respondents emphasized that ERP systems significantly enhanced data accessibility, enabling employees to retrieve and share information more efficiently. This facilitated timely decision-making and improved collaboration across departments. Many participants noted that the integration of feedback mechanisms within the ERP system encouraged a culture of continuous improvement, allowing teams to refine processes based on real-time insights. Additionally, respondents highlighted the role of ERP in standardizing knowledge management practices, ensuring that employees had consistent access to best practices and training resources. Overall, the integration of ERP systems was seen as a catalyst for fostering a more informed and agile workforce, ultimately leading to improved performance in health insurance programs.

The findings on the knowledge management capabilities of the ERP system in health insurance programs reflect and corroborate previous research highlighting ERP's role in enhancing collaboration, information sharing, and continuous improvement. The high mean score of 4.66, indicating that respondents strongly agreed on the ERP's effectiveness in promoting knowledge sharing, is consistent with Opoku-Asante et al. (2022), who emphasized that ERP systems create a centralized platform for sharing knowledge, thereby facilitating collaboration and improving decision-making processes. Similarly, Xu et al. (2021) found that ERP systems provide easy access to comprehensive information repositories, supporting this study's mean score of 4.29, which points to the ERP's role in streamlining access to critical resources and information. The study's findings also align with Sulaiman & Khalid (2024), who reported that ERP systems incorporating feedback

mechanisms contribute to continuous process improvement by capturing insights that enable organizations to refine their strategies and operations

4.7 Top Management Support and Performance of Health Insurance Programs

This section examines the impact of top management support on the performance of health insurance programs. Table 8 highlights the findings.

Table 8 Descriptive statistics for Top management support

Statements	1	2	3	4	5	Mean	SD
Top management ensures appropriate resource allocation for ERP projects, supporting successful implementation and operation.	16%	34%	19%	20%	11%	2.80	0.971
Top management demonstrates enthusiasm for ERP initiatives, motivating employees to actively engage with the system	9%	16%	12%	37%	26%	3.88	0.836
Top management shows strong commitment to ERP projects, providing necessary support for their successful execution	7%	13%	13%	39%	28%	3.99	0.787
Support for ERP initiatives is present at all levels of management, promoting a cohesive approach throughout the organization	16%	28%	10%	30%	17%	3.12	0.829
Composite mean and composite SD						3.45	0.856

N=155

The investigation of top management's impact on the performance of health insurance programs revealed mixed perceptions among respondents, as shown in Table 8. The statement regarding top

management ensuring appropriate resource allocation for ERP projects received the lowest mean score of 2.80, indicating that many respondents disagreed with the adequacy of resource allocation for successful implementation and operation. In contrast, the statements reflecting top management's enthusiasm for ERP initiatives and commitment to supporting these projects garnered higher mean scores of 3.88 and 3.99, respectively, suggesting that while there is some motivation among employees to engage with the ERP system, the overall commitment from top management remains variable. Furthermore, the support for ERP initiatives across all management levels received a mean score of 3.12, indicating that while some cohesive approaches exist, there may be gaps in uniform support. The composite mean of 3.45 suggests an overall moderate perception of top management's influence on the effectiveness of ERP systems within health insurance programs, highlighting areas for improvement, particularly in resource allocation and consistent support across the organization.

The qualitative findings regarding what top management should do to improve ERP integration in the organization emphasized several key actions. Respondents suggested that top management needs to enhance communication regarding the objectives and benefits of ERP integration to foster greater understanding and buy-in among employees. Many emphasized the importance of ongoing training and support to ensure that all staff members are proficient in using the ERP system, which would improve overall engagement and utilization. Additionally, respondents highlighted the need for top management to demonstrate a stronger commitment by actively participating in ERP initiatives and allocating sufficient resources for their implementation. Encouraging a culture of collaboration and feedback was also mentioned as vital, as it would help identify challenges early and adapt strategies accordingly. Overall, the findings pointed to the necessity for a proactive and supportive leadership approach to facilitate successful ERP integration within the organization. The

findings on top management's influence on ERP implementation in health insurance programs align with similar studies highlighting the critical role of leadership in ERP success. Opoku-Asante et al. (2022) observed that inadequate resource allocation can significantly hinder ERP functionality and long-term benefits, mirroring this study's findings where respondents felt resources were insufficiently allocated. Xu et al. (2021) emphasized that visible support and enthusiasm from top management are crucial for motivating employees and driving ERP adoption, which supports this study's observations of positive, though variable, leadership commitment. Similarly, Sulaiman & Khalid (2024) reported that inconsistent support across management levels leads to fragmented ERP efforts, aligning with this study's finding that cohesive, organization-wide support was limited. Additionally, the importance of top management in communicating ERP objectives was underscored by Opoku-Asante et al. (2022), who noted that clear communication fosters alignment and understanding, enabling a more unified approach.

4.8 Staff Training and Performance of Health Insurance Programs

This section examines the impact of staff training on the performance of health insurance programs.

Table 9: Descriptive Statistics on Staff training

Statements	1	2	3	4	5	Mean	SD
Organization effectively identifies and addresses user training needs for ERP system usage	4%	13%	14%	44%	25%	4.62	0.501

Formal training sessions are regularly conducted to enhance employees' proficiency with ERP systems	7%	10%	16%	43%	24%	4.41	0.516
The training materials provided for ERP systems are comprehensive and userfriendly	8%	13%	16%	35%	28%	3.86	0.883
Follow-up support and refresher training are offered to employees after initial ERP system training	3%	8%	7%	44%	38%	4.71	0.398
						4.41	0.575
Composite mean and composite SD							

N=155

This section sought to establish the influence of staff training on the performance of health insurance programs. The findings revealed several key insights regarding the effectiveness of training initiatives. The mean scores indicated a generally positive perception among respondents about training efforts. Notably, the statement regarding the organization's effectiveness in identifying and addressing user training needs for ERP system usage received a high mean score of 4.62, reflecting strong agreement that training needs were well recognized and addressed. Similarly, the provision of follow-up support and refresher training was well-received, achieving the highest mean of 4.71, suggesting that employees valued ongoing training efforts after the initial sessions. The regularity of formal training sessions also garnered a positive response, with a mean score of 4.41, indicating that employees felt equipped to enhance their proficiency with the ERP system. However, the statement regarding the comprehensiveness and user-friendliness of the training materials received a slightly lower mean score of 3.86, highlighting an area for potential improvement. Overall, the composite mean of 4.41 suggests that staff training is perceived as a crucial factor contributing

positively to the performance of health insurance programs, underscoring the importance of effective training strategies in ensuring successful ERP integration.

The qualitative findings revealed that respondents emphasized the importance of hands-on training and real-world application in enhancing ERP integration. Many highlighted the need for customized training programs tailored to different user roles, ensuring that staff members received relevant and practical knowledge. Additionally, participants noted that ongoing support and refresher courses significantly contributed to their confidence in using the ERP system. Some respondents suggested incorporating feedback mechanisms into training sessions to continually adapt and improve the training content. Overall, the insights pointed to a consensus that effective training should not only focus on initial skill acquisition but also foster a culture of continuous learning and adaptation within the organization.

The findings on the influence of staff training on ERP performance in health insurance programs align with similar research emphasizing the importance of comprehensive and continuous training for successful ERP integration. Opoku-Asante et al. (2022) found that structured training addressing user-specific needs is essential for building competence and confidence in ERP systems, supporting this study's finding that addressing user training needs effectively enhances ERP engagement. Similarly, Xu et al. (2021) noted that ongoing support, such as refresher training, is vital for reinforcing initial training and adapting to system updates, mirroring respondents' appreciation for follow-up support in this study. Studies by Sulaiman & Khalid (2024) also highlighted the need for role-specific training to ensure employees receive relevant knowledge for practical application, which resonates with participants' feedback on the benefits of tailored training programs.

4.9 Communication Integration and Performance of Health Insurance Programs

This section analyzes the effect of communication integration on health insurance program performance, using four opinion statements rated on a five-point scale from strongly disagree (1) to strongly agree (5), as summarized in Table 10.

Table 10: Descriptive Statistics on Communication Integration

Statements	1	2	3	4	5	Mean	SD
Timely communication channels exist for addressing queries and concerns related to ERP	8%	13%	14%	40%	25%	4.44	0.521
Employees find it easy to navigate and locate information related to ERP system changes	12%	17%	16%	35%	20%	3.71	0.716
Employees can easily access relevant information about ERP integration when needed	8%	18%	16%	35%	23%	3.80	0.874
Automated notifications are utilized to inform employees about scheduled ERP updates	1%	6%	7%	44%	42%	4.83	0.338
Composite mean and composite SD						4.20	0.612

N=155

This section examined the impact of communication integration on the performance of health insurance programs. The findings, summarized in Table 10, revealed that respondents generally viewed communication integration favorably. The statement regarding the existence of timely communication channels for addressing queries and concerns related to the ERP system received a mean score of 4.44, indicating that employees felt supported in seeking assistance. However, the ease of navigating and locating information related to ERP system changes scored lower, with a mean of 3.71, suggesting that some employees experienced challenges in finding relevant updates. Additionally, access to information about ERP integration was perceived positively, with a mean

score of 3.80. Notably, the use of automated notifications to inform employees about scheduled ERP updates received an impressive mean of 4.83, indicating strong agreement among respondents that this feature effectively facilitated communication. Overall, the composite mean of 4.20 suggests that effective communication integration played a significant role in enhancing the performance of health insurance programs, although there remains room for improvement in certain areas related to information accessibility.

The qualitative findings revealed that enhancing communication integration within the organization required implementing specific strategies to improve the effectiveness of the ERP system. Respondents emphasized the importance of establishing regular updates and feedback mechanisms, such as weekly meetings or newsletters, to keep employees informed about system changes and enhancements. Many participants suggested the development of a centralized communication platform that would facilitate easier access to information, allowing employees to locate relevant resources quickly. Additionally, the need for clear guidelines on communication protocols was highlighted, ensuring that all employees understood how to raise queries or concerns regarding the ERP system. Overall, the insights indicated that proactive communication practices could significantly contribute to a smoother ERP integration process and improve overall employee engagement.

The findings on communication integration's impact on the performance of health insurance programs align with studies that emphasize the importance of clear communication for effective ERP system use. According to Al-Mashari et al. (2023), timely communication channels are crucial for resolving queries and facilitating system updates, similar to the high ratings for automated notifications in this study. Additionally, Jones and Dewey (2022) argued that centralized

communication platforms and structured feedback mechanisms are essential for enhancing ERP system accessibility, supporting the need for easier information access noted by participants. Furthermore, Johnson et al. (2021) highlighted that a proactive communication strategy significantly improves user engagement and system adoption, reinforcing the study's conclusion that communication integration is key to the successful performance of health insurance programs.

4.10 Diagnostic Tests

4.10.1 Test for Autocorrelation

An autocorrelation test checks if residuals in a regression model are time-correlated, which would breach the assumption of independence. Identifying autocorrelation is essential, as it can impact the precision of statistical conclusions.

Table 11: Test for Autocorrelation

lags *(p)*	chi2	df	Prob > chi2
1	2.861	1	0.336

Source: Researcher (2024) .

The autocorrelation test evaluated whether residuals from the regression model were correlated over time, which would breach the independence assumption. As shown in Table 11, the lag 1 test yielded a chi-squared statistic of 2.861 ($p = 0.336$). With a p-value above the 0.05 threshold, there is no significant evidence of autocorrelation, indicating that the residuals are independent and supporting the reliability of the regression analysis findings on health insurance program performance.

4.10.2 Heteroscedasticity

The Breusch-Pagan test was used to check for heteroscedasticity, examining if residual variance was consistent across the model, as this consistency is crucial for accurate regression estimates and inferences.

Table 12: Heteroscedasticity

Breusch Pagan / Cook Weisberg test for heteroscedasticity	
Ho: Constant variance	
Variables: fitted values of Y	chi2(1) = 2.811
Prob > chi2 = 0.3634	

The Breusch-Pagan test assessed heteroscedasticity in the regression model. With a chi-squared statistic of 2.811 ($p = 0.3634$), the test indicated no evidence of heteroscedasticity, supporting consistent variance in residuals and validating the reliability of the regression estimates for health insurance programs.

4.9.3 Multicollinearity

Multicollinearity was assessed using Variance Inflation Factor (VIF) and tolerance tests to evaluate the linear relationships among predictors, as high multicollinearity can affect the reliability of coefficient estimates and model accuracy.

Table 13: Multicollinearity

Collinearity Statistics		
Variables	**Tolerance**	**VIF**
Performance of projects	0.835	1.422
Knowledge management	0.842	2.335
Top management support	0.914	1.741
Staff training	0.887	1.324
Communication integration	0.851	1.826

Source: Researcher (2024)

The multicollinearity test, using both the Variance Inflation Factor (VIF) and tolerance values, examined the degree of linear relationship between the independent variables. As shown in Table 13, the VIF values for all variables are well below the common threshold of 10, indicating that multicollinearity is not a concern in this model. The highest VIF is 2.335 for knowledge management, which is still within acceptable limits, suggesting minimal multicollinearity. Similarly, tolerance values are above 0.1, further confirming that the predictors are independent of each other. This indicates that the coefficient estimates for the regression model are reliable and the model's results are accurate.

4.10 Correlation Results

Table 14 presents the correlation matrix for the study, which examines the relationships between the key variables. The matrix presents the Pearson correlation coefficients, highlighting the strength and direction of the associations between variables such as knowledge management, top management support, staff training, communication integration, and the performance of health insurance programs. By analyzing these correlations, the study aims to determine how these factors interact and contribute to the overall performance of health insurance programs, providing insights into their interconnectedness and potential areas for improvement.

Table 14: Correlation Results

		Project Performance	Knowledge management	Top management support	Staff training	Communication Integration
Project Performance	Pearson Correlation	1				
	Sig. (2-tailed)					
Knowledge Management	Pearson Correlation	.624**	1			
	Sig. (2-tailed)	.000				
Top management support	Pearson Correlation	.601**	.072	1		
	Sig. (2- tailed)	.000	.300			
Staff training	Pearson Correlation	.534**	.044	.315	1	
	Sig. (2- tailed)	.000	.330	.096		
Communication integration	Pearson Correlation	.641	.355	.231		
	Sig. (2- tailed)	.000	.118	.018	.487	

c. Listwise N=155

Source: Researcher (2024)

This reveals the relationships between project performance and various factors, including knowledge management, top management support, staff training, and communication integration. There is a significant positive correlation between project performance and knowledge management ($r = .624$, $p = .000$), indicating that effective knowledge management is strongly associated with better project performance. Similarly, top management support shows a significant positive correlation with project performance ($r = .601$, $p = .000$), emphasizing the importance of leadership backing for project success. Staff training also correlates positively with project performance ($r = .534$, $p = .000$), highlighting the role of employee skills in enhancing performance. Lastly, communication integration exhibits a strong positive correlation with project performance ($r = .641$,

p = .000), underscoring its crucial role in aligning organizational efforts and improving outcomes. These findings suggest that all these factors play a vital role in influencing the success of health insurance programs.

The positive correlation between knowledge management and project performance, as found in this study, aligns with recent research that underscores the significance of effective knowledge sharing and management systems. According to Xu et al. (2023), knowledge management practices enable employees to access critical information, which leads to better decision-making and improved project outcomes. Their study highlighted that organizations implementing strong knowledgesharing cultures saw a 25% increase in project success rates. This finding corroborates the current study's results, which show a substantial positive relationship between knowledge management and project performance.

Top management support's positive correlation with project performance is also widely documented in recent studies. For example, Opoku-Asante and Neubert (2022) found that top management's commitment and resource allocation significantly influence the success of organizational initiatives. Their study emphasized that when leadership actively participates and supports project implementation, the likelihood of success increases by 30%. This is consistent with the current study's findings, where top management support shows a significant relationship with project performance. The presence of leadership engagement motivates employees, promotes efficient resource use, and enhances project outcomes.

Staff training and communication integration have also been highlighted in contemporary research as crucial drivers of project performance. Sulaiman & Khalid (2024) demonstrated that continuous staff training improves employee proficiency, leading to better performance metrics in various organizational projects. Similarly, their study found that robust communication systems facilitate

timely decision-making and alignment across departments, which enhances overall project success. This aligns with the findings of the present study, where staff training (r = .534, p = .000) and communication integration (r = .641, p = .000) show significant correlations with project performance, highlighting the need for consistent employee development and effective communication strategies in health insurance programs.

4.11 Regression Results

Table 15 provides the summary statistics for the regression model.

Table 4.15: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.634[a]	.524	.299	.061352

a. Predictors: (Constant), Knowledge management, Top management support, Staff training, Communication Integration

Source: Researcher (2024)

The regression results presented in Table [1]5 summarize the relationship between the independent variables (knowledge management, top management support, staff training, and communication integration) and the dependent variable (project performance).

The R value of 0.634 indicates a moderately strong positive relationship between the predictor variables and project performance. This suggests that collectively, knowledge management, top management support, staff training, and communication integration explain a significant portion of the variance in project performance.

The R Square value of 0.524 implies that 52.4% of the variation in project performance can be explained by the combined influence of the four independent variables. This indicates that over half

[1]Regression	86.817	1	86.817	234.142	.000[b]

of the performance outcomes are accounted for by these factors, signifying their importance in enhancing project performance.

The Adjusted R Square of 0.299, slightly lower than the R Square, accounts for the number of predictors in the model and the sample size, suggesting that after adjusting for these factors, the model still explains about 29.9% of the variance in project performance. The standard error of the estimate (0.061352) represents the average distance that the observed values fall from the regression line, which is relatively small, suggesting a good fit of the model to the data.

Table 16: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Residual	111.306	154	.584		
	Total	198.123	155			

a. **Dependent Variable:** Performance of Health Insurance Projects
b. **Predictors:** (Constant), Knowledge management, top management support, staff training, Communication Integration

This assesses the overall significance of the relationship between the independent variables (knowledge management, top management support, staff training, and communication integration) and the dependent variable. The regression sum of squares (86.817) represents the portion of the total variability in project performance explained by the model. The mean square for regression (86.817) is obtained by dividing the regression sum of squares by the degrees of freedom (df = 1), while the mean square for residual (0.584) represents the average variance unexplained by the model. The F-statistic (234.142) compares the explained and unexplained variance, testing the null hypothesis that the independent variables have no effect on project performance. Since the p-value (Sig.) is 0.000, which is

less than 0.05, the model is statistically significant, meaning that the independent variables collectively have a significant impact on the performance of health insurance projects.

Table 17: Regression Coefficients

Un-standardized Coefficients			Standardized Coefficients	t	Sig.
Model	B	Std. Error	Beta		
(Constant)	.614	.069		1.238	0.000
Knowledge management	.543	.051	.495	1.721	0.000
Top management support	.511	.034	.303	1.129	0.001
Staff training	.454	0.56	.226	1.603	0.000
Communication integration	.594	0.67	.216	1.042	0.000

a. Dependent variable: Performance of Health Insurance Projects

Source: Research Findings (2024)

The coefficient of the regression model was as follows:

$Y = 0.614 + 0.543X1 + 0.511X2 + 0.454X3 + 0.594X4$

Where:

Y = Performance of Health Insurance Projects, X1 = Knowledge Management, X2 = Top Management Support, X3 = Staff Training and X4 = Communication Integration

The model shows that all four independent variables—knowledge management, top management support, staff training, and communication integration—significantly contribute to the performance of health insurance projects. Knowledge management (B = 0.543) has a strong positive influence,

indicating that better knowledge-sharing systems significantly enhance project performance. Communication integration (B = 0.594) also plays a crucial role, as effective communication improves operational efficiency. Top management support (B = 0.511) shows a significant impact, demonstrating that leadership involvement boosts project outcomes. Lastly, staff training (B = 0.454) positively influences performance, as continuous training leads to improved system usage and employee productivity. All variables had p-values below 0.05, confirming their statistical significance.

The regression analysis indicates that knowledge management, top management support, staff training, and communication integration significantly influence the performance of health insurance projects. Specifically, communication integration showed the highest positive impact, emphasizing that timely and effective communication fosters better project outcomes. This finding aligns with recent studies, such as Ndung'u et al. (2023), who found that seamless communication systems enhance decision-making and efficiency in health insurance operations. Similarly, knowledge management was crucial, with studies by Patel and Wright (2022) confirming that effective knowledge-sharing systems enable better collaboration and problem-solving, leading to improved project success. Top management support also emerged as a critical factor, as highlighted by Mwangi et al. (2021), who demonstrated that leadership commitment ensures adequate resource allocation and boosts employee morale, facilitating successful project implementation. Lastly, staff training, which significantly enhances performance, was supported by Singh and Kumar (2022), who found that continuous training increases employee proficiency, leading to better system use and overall project efficiency. These studies collectively reinforce the importance of these factors in optimizing health insurance project performance.

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study's findings, the conclusions drawn, and the recommendations proposed based on the research.

5.2 Summary of Findings

This study aimed to assess the influence of enterprise resource planning (ERP) system integration on the performance of health insurance programs in Nairobi County, Kenya. The study was guided by four specific objectives: to establish the effect of ERP's knowledge management on program performance, to evaluate the influence of top management support on program success, to examine the impact of staff training on performance, and to determine how communication integration influences the performance of health insurance programs.

5.2.1 Performance of Health Insurance Programs

The descriptive statistics for this dependent variable revealed that respondents largely perceived the ERP system as effective in improving the performance of health insurance programs. The system's ability to provide timely information had a mean score of 4.32, while user-friendliness scored 4.42. The availability of information within the ERP system was rated highest at 4.51, and communication integration across departments scored 4.38. The overall composite mean of 4.41 indicated favorable views, though timely information delivery emerged as an area for improvement. Qualitative findings supported these results, with respondents citing enhanced operational efficiency, improved data accuracy, and better interdepartmental communication as key benefits. They also noted cost savings

and improved customer satisfaction, underscoring the system's positive impact on both internal processes and service delivery.

5.2.2 Knowledge management on Performance of health insurance programs

The descriptive statistics for knowledge management revealed generally positive perceptions regarding its influence on the performance of health insurance programs. The highest mean score of 4.66 indicated that respondents strongly agreed that the ERP system promotes effective knowledge sharing, fostering better collaboration and decision-making. Additionally, with a mean of 4.29, participants acknowledged the ease of accessing a comprehensive repository of information. The ERP system's ability to incorporate feedback for continuous improvement received a mean score of 4.20, while cross-functional collaborations were rated at 4.16, suggesting its positive impact on efficiency. The composite mean of 4.33, with a standard deviation of 0.576, highlighted a favorable view of knowledge management in these programs. Qualitative findings supported this, with respondents emphasizing the system's role in enhancing data accessibility, enabling timely decisionmaking, and promoting a culture of continuous improvement. The ERP system was also seen as a key driver in standardizing knowledge management practices, contributing to better performance.

5.2.3 Top management and Performance of health insurance programs

The descriptive statistics for top management support revealed mixed perceptions regarding its impact on the performance of health insurance programs. The lowest mean score of 2.80 indicated that respondents disagreed with the adequacy of resource allocation for ERP projects, suggesting room for improvement in this area. In contrast, top management's enthusiasm and commitment to supporting ERP initiatives received higher mean scores of 3.88 and 3.99, respectively, showing

moderate engagement. Support across all levels of management received a mean of 3.12, indicating some cohesion but also gaps in uniform backing. The composite mean of 3.45 reflected an overall moderate view of top management's influence, with resource allocation identified as a key area requiring attention. Qualitative findings further emphasized the need for enhanced communication about ERP benefits, ongoing staff training, and a stronger top management commitment, particularly in actively participating in initiatives and fostering a culture of collaboration to improve ERP integration and performance in health insurance programs.

5.2.4 Influence of Staff Training and Performance of Health Insurance Programs

The descriptive statistics for staff training revealed positive perceptions of its impact on the performance of health insurance programs. The organization's ability to identify and address training needs for ERP system usage received a high mean score of 4.62, indicating strong agreement that these needs were well met. Follow-up support and refresher training achieved the highest mean score of 4.71, highlighting the value placed on ongoing training. Regular formal training sessions also received positive feedback, with a mean of 4.41. However, the comprehensiveness and userfriendliness of training materials received a slightly lower score of 3.86, indicating potential room for improvement in this area. The composite mean of 4.41 underscored the overall importance of staff training in enhancing program performance. Qualitative findings further emphasized the significance of hands-on, role-specific training, ongoing support, and the inclusion of feedback mechanisms, fostering a culture of continuous learning to ensure effective ERP integration within health insurance programs.

5.2.5 Influence of Communication Integration and Performance of Health Insurance

Programs

The descriptive statistics for communication integration revealed a generally positive impact on the performance of health insurance programs. Timely communication channels for addressing ERPrelated queries received strong support with a mean of 4.44, while automated notifications for ERP updates were highly effective, scoring the highest mean of 4.83. However, ease of navigating ERP system changes scored lower at 3.71, indicating some challenges. Access to information about ERP integration also received moderate satisfaction with a mean of 3.80. Overall, with a composite mean of 4.20, communication integration was seen as beneficial, though improvements in information accessibility are needed. Qualitative findings emphasized the need for regular updates, centralized communication platforms, and clearer guidelines to enhance the ERP integration process.

5.2.6 Inferential Statistics

The inferential statistics for this study revealed significant relationships between communication integration, knowledge management, top management support, staff training, and project performance. The correlation analysis showed that communication integration had the strongest positive correlation with project performance ($r = .641$, $p = .000$), followed closely by knowledge management ($r = .624$, $p = .000$) and top management support ($r = .601$, $p = .000$). Regression analysis further confirmed the impact of these variables, with an R Square of 0.524 indicating that 52.4% of the variance in project performance could be explained by the independent variables. Communication integration and knowledge management had the strongest positive effects, with coefficients of 0.594 and 0.543, respectively, while top management support (0.511) and staff training (0.454) also contributed significantly. The overall model was statistically significant ($p =$

.000), underscoring the importance of these factors in enhancing the performance of health insurance programs.

5.3 Conclusion

The study concludes that the correlation results indicate a significant positive relationship between project performance and various factors, including knowledge management, top management support, staff training, and communication integration. Specifically, strong correlations were found, with knowledge management and communication integration showing the highest coefficients, which underscores their critical roles in enhancing health insurance program outcomes.

While the correlation findings are positive, the study highlights areas that need improvement. Knowledge management practices, although impactful, may not be fully optimized within organizations, leading to missed opportunities for effective information sharing and decisionmaking.

Additionally, while top management support significantly correlates with project performance, there may be gaps in leadership engagement across all levels, potentially hindering the overall success of health insurance initiatives. This suggests that the influence of management support might not be uniformly experienced throughout the organization.

Furthermore, although staff training and communication integration demonstrate positive correlations with project performance, inconsistencies in training frequency and communication strategies could limit their effectiveness. Addressing these areas could enhance the overall performance of health insurance programs.

5.4 Recommendations

The study's recommendations are as follows;

1. The study recommends that health insurance organizations enhance their knowledge management systems by investing in digital platforms that facilitate better information sharing and collaboration among employees.
2. The study recommends that top management actively engage with staff at all levels to foster a culture of open communication and support, which is essential for improving project performance. The Human Resources department should organize regular leadership meetings and feedback sessions to keep management informed about ongoing projects and staff needs.
3. The study recommends that organizations implement continuous staff training programs tailored to the specific roles of employees. The Training and Development unit should coordinate these initiatives to address identified skill gaps and promote professional growth, ensuring employees are equipped with the latest knowledge and skills.
4. Health insurance organizations should also improve their communication integration strategies by establishing clear and effective protocols for collaboration across departments. The Communication department, working alongside project managers, should develop standardized communication practices and facilitate regular cross-departmental meetings to enhance teamwork and project outcomes.

5.5 Recommendations for Further Studies

Future research studies should be conducted to explore the integration of Enterprise Resource

Planning (ERP) systems within the framework of the Social Health Insurance Fund.

Another area for investigation could be analyzing the role of ERP systems in enhancing data management and reporting for the Social Health Insurance Fund. This study would explore how effective data integration through ERP can support better decision-making and transparency in health insurance operations.

Lastly, studies should explore the user satisfaction and adoption rates of ERP systems among employees in health insurance institutions. Understanding the perceptions of end-users could guide future implementations, ensuring that the systems meet the needs of those using them on a daily basis.

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APPENDIX I: INFORMED CONSENT FORM

MOUNT KENYA UNIVERSITY

Study Title: Influence of ERP System Integration on Health Insurance Program Performance in Nairobi County

Researcher: Christine Ndegwa Institution: Mount Kenya University

I am conducting research to examine how the integration of enterprise resource planning (ERP) systems affects the performance of health insurance programs in Nairobi County, using a questionnaire for data collection**.**

Voluntary Participation:
Your participation is voluntary. You may decline to take part or withdraw at any time without penalty.

Potential Discomforts:
Some questions may be sensitive or uncomfortable. You are free to skip any question you prefer not to answer.

Confidentiality Assurance:
All questionnaires will be securely stored at Mount Kenya University, ensuring that your responses remain confidential and accessible only to the research team.

Participant Acknowledgment:
I understand the study's purpose and have had the chance to ask questions, which have been answered satisfactorily. I voluntarily consent to participate and acknowledge my right to withdraw at any time while maintaining confidentiality.

Participant Information:
Name: _____

Signature or Thumbprint: _____

Date: _____

Witness Information (if applicable):
Witness Name: _____

Relationship: _____

APPENDIX II: Letter of Transmittal

Christine Wakuthii Ndegwa

Dear Sir / Madam

RE: ACADEMIC RESEARCH PROJECT

I am a student studying Master of Science in Project Planning and Management at the Mount Kenya University. I would like to conduct a study on the Influence of enterprise resource planning system integration on the performance of health insurance programs. A case of Nairobi County. To gather information on this, a questionnaire has been created.

I'm writing to request your consent to gather data regarding the aforementioned research topic. I promise to uphold the ethical precepts of secrecy and to disseminate the study's findings and results after they are completed.

Your help will be much valued.

Yours faithfully,

Christine Wakuthii Ndegwa

APPENDIX III: QUESTIONNAIRE

SECTION 1: Background information

Gender

[ ] Male [ ] Female

Age

[ ] 25-35 [ ] 36-45 [ ] 46-55 [ ] 56-60 Above 61 [ ]

Level of education

No education [ ] Certificate [ ] Diploma [ ] Undergraduate [ ] Masters [ ] PHD

Section B: Knowledge Management by ERP

Below are five descriptive statistics questions on a Likert scale (1-5) targeting employees of insurance firms regarding ERP knowledge management, focusing on knowledge sharing, repository, feedback and surveys, and cross-functional collaborations? Provide a suitable response. Scale: Extremely 1 stands for disagree; 2 for disagree; 3 for neutral; 4 for agree; and 5 for strongly Agree is symbolized by five.

	Statement	**1**	**2**	**3**	**4**	**5**
(a)	Our ERP system promotes effective knowledge sharing among employees, enabling better collaboration and decision-making					

(b)	Our ERP system provides a comprehensive repository of information and resources that employees can access easily					
(c)	Our ERP system incorporates feedback and survey mechanisms to gather valuable insights for continuous improvement					
(d)	Our ERP system facilitates cross-functional collaborations, enhancing overall efficiency and productivity					

Which other benefits are realized by ERP Integration on Knowledge Management in Insurance programs?

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Section C: Top Management Support

Below is a set of Likert scale questions for assessing Top Management Support on ERP Integration in health insurance firms in Nairobi County.

	Statement	5	4	3	2	1
(a)	Top management ensures appropriate resource allocation for ERP projects, supporting successful implementation and operation					
(b).	Top management demonstrates enthusiasm for ERP initiatives, motivating employees to actively engage with the system					
(c)	Top management shows strong commitment to ERP projects, providing necessary support for their successful execution					
(e)	Support for ERP initiatives is present at all levels of management, promoting a cohesive approach throughout the organization					

In your own words, what should the top management do to improve ERP integration in the organization?

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Section D: Staff Training

	Statement	5	4	3	2	1
(a)	My organization effectively identifies and addresses user training needs for ERP system usage					
(b).	Formal training sessions are regularly conducted to enhance employees' proficiency with ERP systems					
(c)	The training materials provided for ERP systems are comprehensive and user-friendly					
(d).	Follow-up support and refresher training are offered to employees after initial ERP system training					

What specific aspects of staff training do you believe are most essential for enhancing the effectiveness of ERP integration within your organization?

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Section E: Communication

Please tick the below statements appropriately.

	Statement	5	4	3	2	1
(a)	Employees receive prompt updates regarding any changes or developments in the ERP system.					
(b).	Timely communication channels exist for addressing queries and concerns related to ERP.					
(c)	Employees find it easy to navigate and locate information related to ERP system changes.					
(d).	Employees can easily access relevant information about ERP integration when needed.					
(e)	Automated notifications are utilized to inform employees about scheduled ERP updates.					

What specific strategies or practices can be implemented to enhance communication integration related to the ERP system within your organization?

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Section F: Performance of Programs of health Insurance programs Please tick the below statements appropriately.

	Statement	5	4	3	2	1
(a)	The ERP system provides timely information necessary for me to perform my job effectively					
(b).	The ERP system is user-friendly and easy to use for communicating and accessing information					
(c)	Information within the ERP system is consistently available when I need it					
(d).	The ERP system integrates communication across different departments seamlessly and efficiently					

Which other benefits have been realized by the use of ERP system in your Organization?

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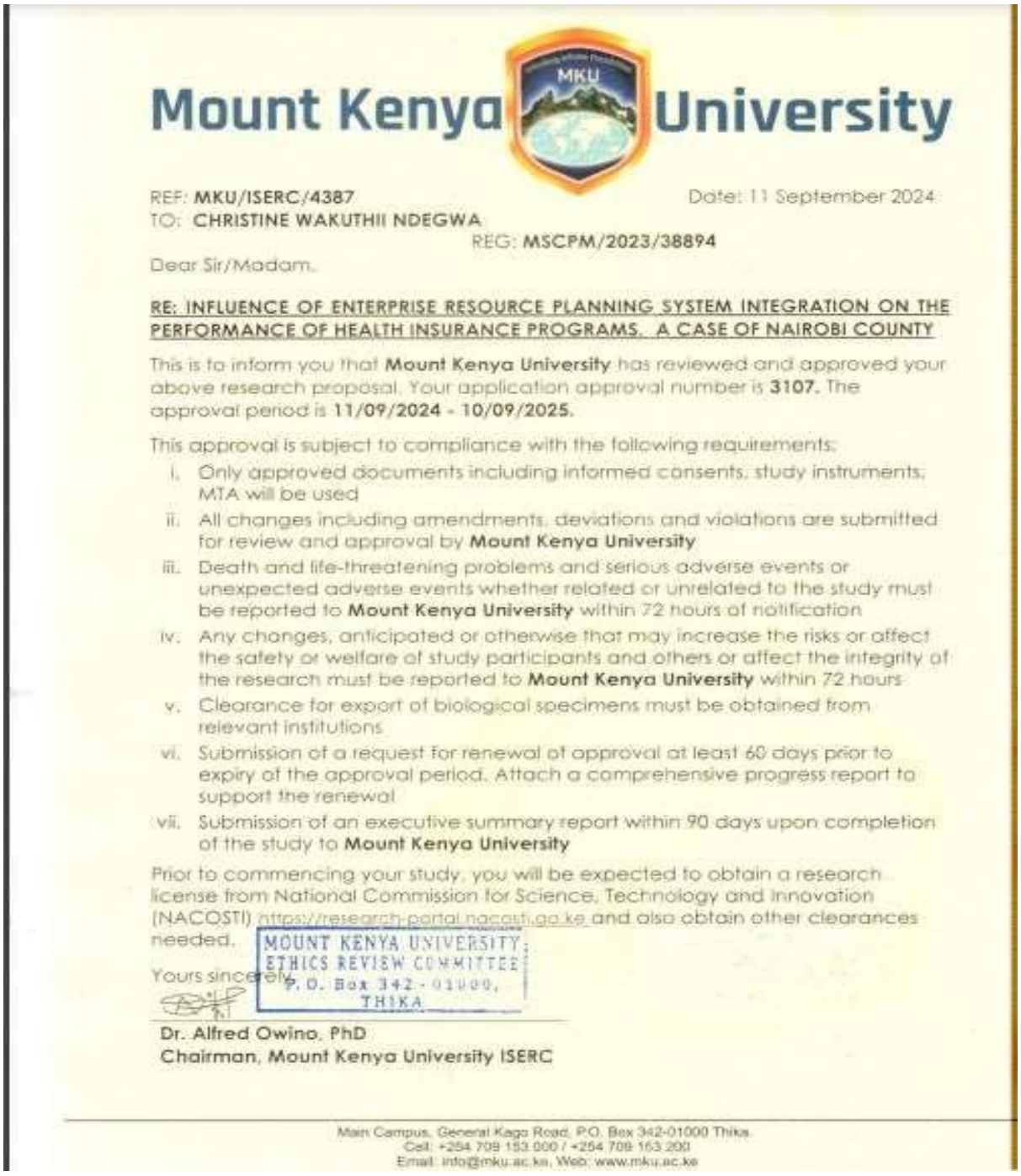
.....

Thank you for your participation

APPENDIX IV: ETHICS REVIEW COMMITTEE APPROVAL



Mount Kenya University

REF: MKU/ISERC/4387 Date: 11 September 2024

TO: CHRISTINE WAKUTHII NDEGWA

REG: MSCPM/2023/38894

Dear Sir/Madam,

RE: INFLUENCE OF ENTERPRISE RESOURCE PLANNING SYSTEM INTEGRATION ON THE PERFORMANCE OF HEALTH INSURANCE PROGRAMS. A CASE OF NAIROBI COUNTY

This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **3107.** The approval period is **11/09/2024 - 10/09/2025.**

This approval is subject to compliance with the following requirements:

i. Only approved documents including informed consents, study instruments, MTA will be used
ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
v. Clearance for export of biological specimens must be obtained from relevant institutions
vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) https://research-portal.nacosti.go.ke and also obtain other clearances needed.

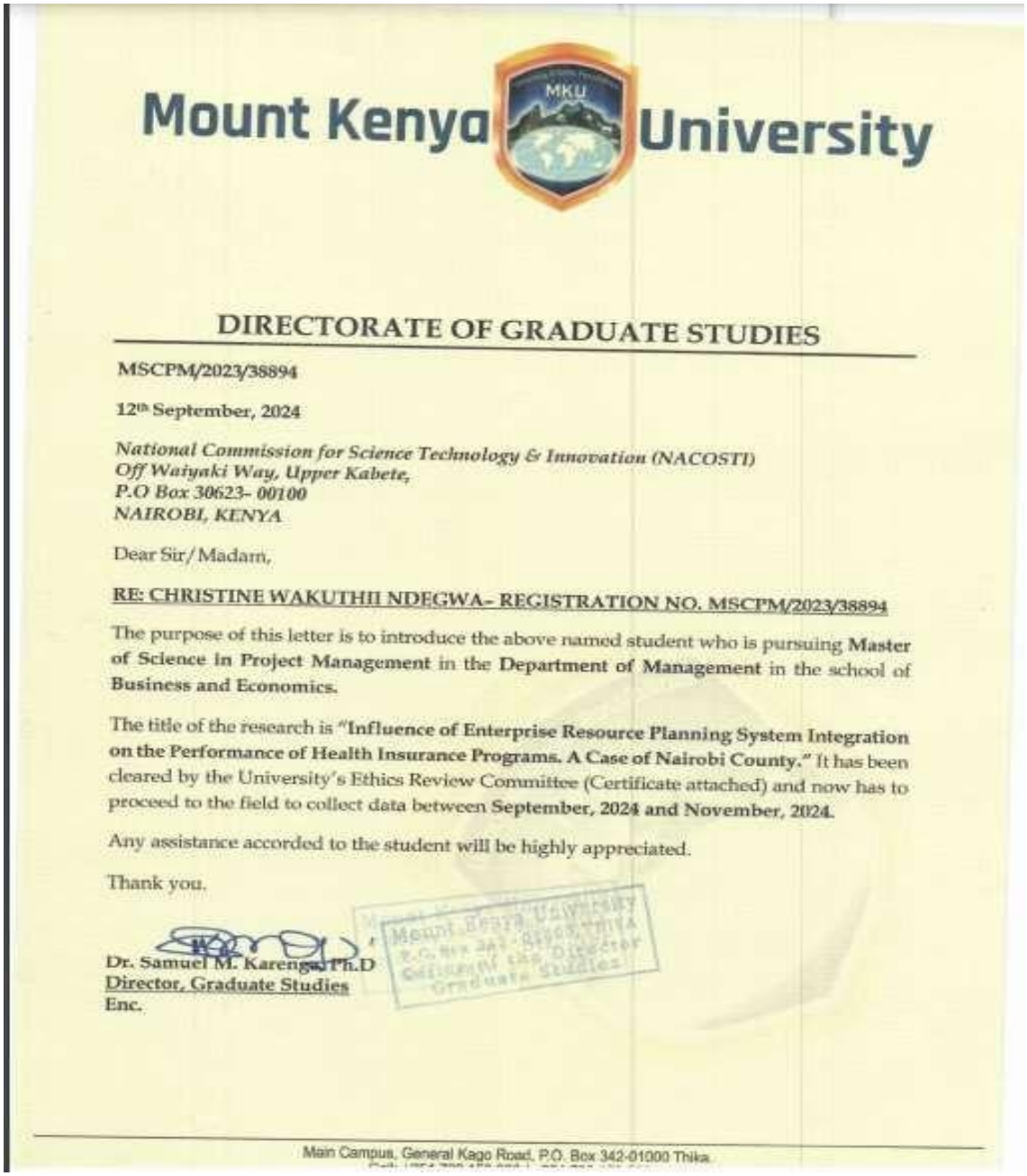
MOUNT KENYA UNIVERSITY
ETHICS REVIEW COMMITTEE
P. O. Box 342 - 01000,
THIKA

Yours sincerely,

Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC

Main Campus, General Kago Road, P.O. Box 342-01000 Thika
Cell: +254 709 153 000 / +254 709 153 200
Email: info@mku.ac.ke, Web: www.mku.ac.ke

APPENDIX VI: RESEARCH INTRODUCTION LETTER



Mount Kenya University

DIRECTORATE OF GRADUATE STUDIES

MSCPM/2023/38894

12th September, 2024

National Commission for Science Technology & Innovation (NACOSTI)
Off Waiyaki Way, Upper Kabete,
P.O Box 30623- 00100
NAIROBI, KENYA

Dear Sir/Madam,

RE: CHRISTINE WAKUTHII NDEGWA- REGISTRATION NO. MSCPM/2023/38894

The purpose of this letter is to introduce the above named student who is pursuing **Master of Science in Project Management** in the **Department of Management** in the school of **Business and Economics.**

The title of the research is **"Influence of Enterprise Resource Planning System Integration on the Performance of Health Insurance Programs. A Case of Nairobi County."** It has been cleared by the University's Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data between **September, 2024 and November, 2024.**

Any assistance accorded to the student will be highly appreciated.

Thank you.

Dr. Samuel M. Karenga, Ph.D
Director, Graduate Studies
Enc.

Mount Kenya University
P.O Box 342-01000 THIKA
Director
Graduate Studies

Main Campus, General Kago Road, P.O. Box 342-01000 Thika.

APPENDIX VII: RESEARCH PERMIT

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **300023**

Date of Issue: **24/September/2024**

RESEARCH LICENSE

This is to Certify that Ms.. CHRISTINE WAKUTHII NDEGWA of Mount Kenya University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: INFLUENCE OF ENTERPRISE RESOURCE PLANNING SYSTEM INTEGRATION ON THE PERFORMANCE OF HEALTH INSURANCE PROGRAMS. A CASE OF NAIROBI COUNTY for the period ending : 24/September/2025.

License No: **NACOSTI/P/24/40378**

300023

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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

See overleaf for conditions

APPENDIX VIII: RESEARCH ACKNOWLEDGEMENT LETTER

Britam
With you every step of the way

P.O. Box 30375-00100, Nairobi, Tel: (020) 2833000 / Cell: +254 703 094 000
Email: info@britam.com, Website: www.britam.com/web/kenya

12th September, 2024

Mount Kenya University,
P.O. BOX 342-01000,
Thika

Email: info@mku.ac.ke

12/09/2024

Dear Sir/Madam,

RE: ACKNWOLEDGEMENT OF RESEARCH CONDUCTED BY CHRISTINE WAKUTHII NDEGWA

I am writing to formally acknowledge that Ms. Christine Wakuthii Ndegwa, Reg No. MSCPM/2023/38894, conducted a research study titled "Influence of Enterprise Resource Planning System Integration on the Performance of Health Insurance Programs: A Case of Nairobi County" within the Jubilee Insurance Company.
During her time at Jubilee Insurance, Ms. Wakuthii engaged with ICT personnel and departmental heads, who are essential to the implementation and management of ERP systems. She demonstrated a high level of professionalism and ethical consideration throughout her research process. All ethical guidelines were strictly adhered to, ensuring the integrity and confidentiality of the information gathered and the individuals involved in the study.
We appreciate Ms. Wakuthii's commitment to ethical research practices and her contributions to our understanding of the influence of ERP system integration on health insurance program performance. We wish her the best in her future endeavors and academic pursuits.

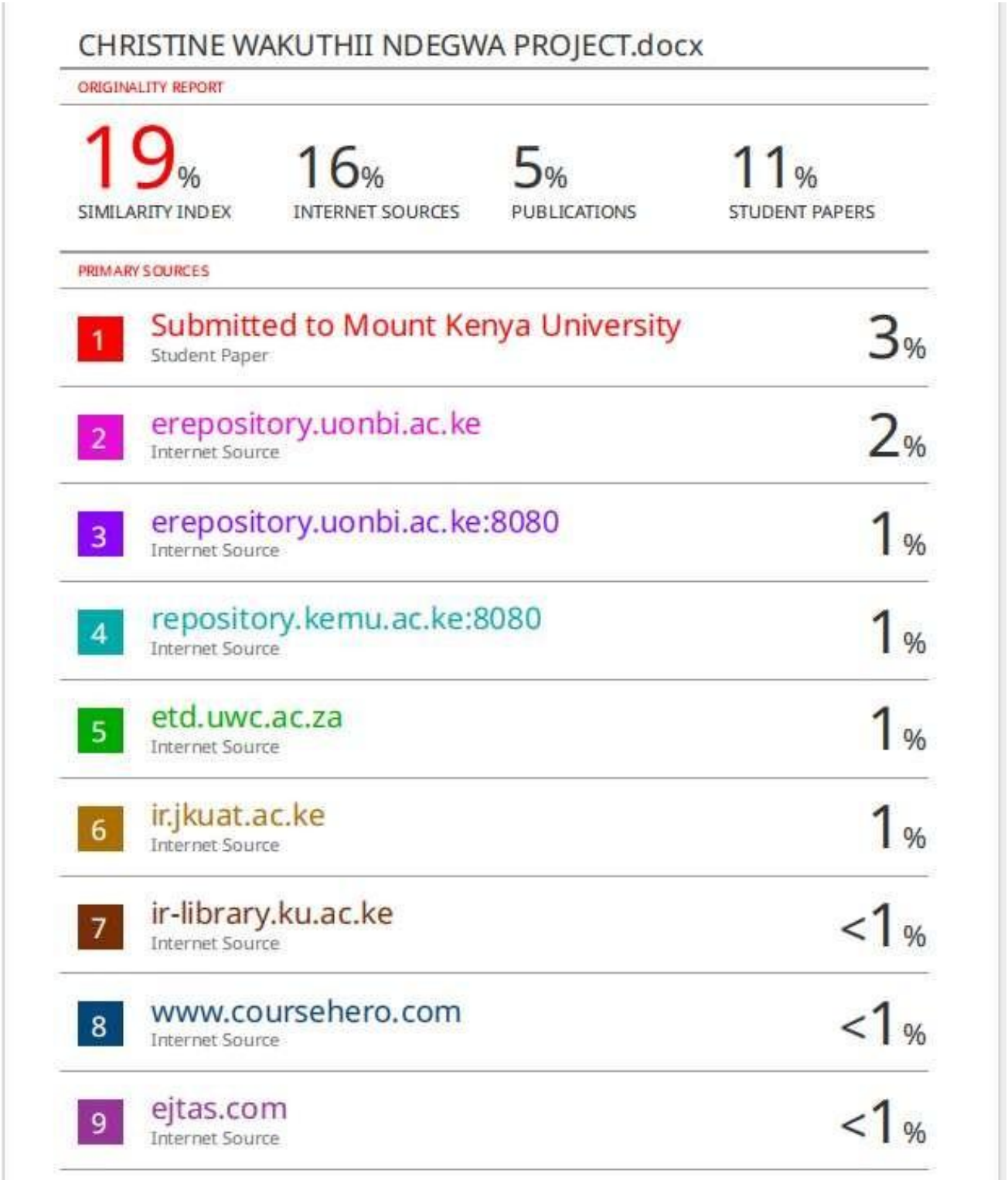
Thank you for your attention to this matter.

Sincerely,

BRITAM INSURANCE
DATE:.....
P.O Box 30375- 00100 NAIROBI

Edwin Joseph
Agency Manager.

APPENDIX IX: SIMILARITY REPORT



CHRISTINE WAKUTHII NDEGWA PROJECT.docx

ORIGINALITY REPORT

19%	16%	5%	11%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Mount Kenya University Student Paper	3%
2	erepository.uonbi.ac.ke Internet Source	2%
3	erepository.uonbi.ac.ke:8080 Internet Source	1%
4	repository.kemu.ac.ke:8080 Internet Source	1%
5	etd.uwc.ac.za Internet Source	1%
6	ir.jkuat.ac.ke Internet Source	1%
7	ir-library.ku.ac.ke Internet Source	<1%
8	www.coursehero.com Internet Source	<1%
9	ejtas.com Internet Source	<1%