THE ROLE OF EXPLICIT KNOWLEDGE MANAGEMENT ON PROMOTING ORGANIZATIONAL DECISION-MAKING AT NORWEGIAN REFUGEE COUNCIL, SOMALIA

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DECLARATION AND RECOMMENDATION

This thesis is my original work and has not been presented for the award of a degree or any other award in any other university.

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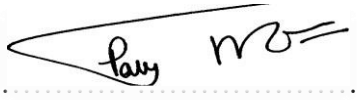
Recommendation

We confirm that the candidate carried out the work reported on this thesis under our supervision.

Signed:……  …… Date:……02-10-2025……

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DEDICATION

To my family for unwavering support, humanitarian workers in Somalia for inspiring dedication, and academic mentors at Kenya Methodist University for guidance.

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ABSTRACT

Organizational decision-making in humanitarian contexts is increasingly compromised by inadequate knowledge management systems. The Norwegian Refugee Council (NRC) Somalia has experienced substantial deviations from humanitarian benchmarks, including 50% increased emergency response times and 35% decline in program implementation efficiency. This study investigated how explicit knowledge management practices influenced organizational decision-making effectiveness at NRC Somalia, aiming to develop evidence-based recommendations enhancing humanitarian response capabilities through improved decision-making processes. The study objectives examined how documented knowledge acquisition processes, formal knowledge storage mechanisms, standardized knowledge sharing practices, and systematic knowledge utilization influenced organizational decision-making at NRC Somalia. The theoretical framework was anchored in Nonaka and Takeuchi's SECI model of knowledge conversion and contemporary decision-making theory by Nutt and Wilson. The study was conducted within NRC's operations in Somalia, encompassing coordination offices in Mogadishu and field offices across South Central Somalia, Puntland, and Somaliland. An explanatory sequential mixed-methods design was utilized, grounded in pragmatism philosophical underpinning. The target population comprised 100 NRC Somalia staff across five organizational levels. A census approach was employed for quantitative data collection, while purposive sampling selected 17 key informants for qualitative interviews. Data collection utilized structured questionnaires, semi-structured interview guides, and document analysis protocols. Validity was established through expert review and cognitive interviewing, while reliability was assessed using Cronbach's alpha coefficients exceeding 0.70 for all scales. The response rate was 89% (N=89). Quantitative data was analyzed using descriptive statistics, Pearson correlation analysis, and multiple linear regression, while qualitative data underwent thematic analysis following Braun and Clarke's framework. Major findings revealed documented knowledge acquisition processes operated in fragmented, reactive episodes rather than systematic approaches, with 52.8% agreement on after-action review documentation but significant gaps in stakeholder engagement (24.7%) and validation mechanisms (24.7%). Formal knowledge storage mechanisms demonstrated systematic failure across twelve fragmented platforms, with only 33.7% agreement on adequate backup procedures and 9.0% agreement on digital repository functionality. Standardized knowledge sharing practices showed paradoxical relationships between formal and informal mechanisms, with 47.2% agreement on regular meetings but poor cross-regional exchanges (22.0%) and tracking mechanisms (14.6%). Systematic knowledge utilization revealed critical weaknesses, with only 31.5% agreement on lesson adaptation and 15.7% agreement on application monitoring systems. The combined knowledge management practices explained 64.8% of variance in organizational decision-making effectiveness ($R^2 = 0.648$, $F(4,84) = 38.67$, $p < 0.001$). The study concluded that fragmented knowledge management systems created fundamental barriers to effective decision-making, with informal networks compensating for formal system inadequacies while operating outside institutional visibility. Knowledge sharing practices emerged as the most influential factor for decision outcomes ($r = 0.72$), while systematic utilization represented the most critical weakness requiring comprehensive organizational culture changes. The study recommended implementing integrated knowledge management systems that formalize successful informal mechanisms, establish mandatory knowledge consultation requirements, and develop hybrid approaches balancing security imperatives with accessibility requirements. This study provided the first comprehensive empirical analysis of knowledge management's influence on humanitarian decision-making in Somalia's volatile context, contributing novel insights for both theoretical frameworks and humanitarian practice optimization.

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AI	Artificial Intelligence
ANOVA	Analysis of Variance
AU	African Union
CFI	Comparative Fit Index
COVID-19	Coronavirus Disease 2019
ECOWAS	Economic Community of West African States
GIS	Geographic Information Systems
HR	Human Resources
ICRC	International Committee of the Red Cross
IDP	Internally Displaced Person
KeMU	Kenya Methodist University
NACOSTI	National Commission for Science, Technology and Innovation
NGO	Non-Governmental Organization
NIST	National Institute of Standards and Technology
NRC	Norwegian Refugee Council
OECD	Organisation for Economic Co-operation and Development
RMSEA	Root Mean Square Error of Approximation
SDG	Sustainable Development Goal
SECI	Socialization, Externalization, Combination, Internalization
SPSS	Statistical Package for the Social Sciences
UN	United Nations
UNDP	United Nations Development Programme
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
VIF	Variance Inflation Factor
WASH	Water, Sanitation and Hygiene

CHAPTER ONE

INTRODUCTION

1.1 Introduction

In this chapter, the foundational elements of the study examining the role of explicit knowledge management on organizational decision-making at the Norwegian Refugee Council in Somalia are presented. The chapter begins with a background of the study, exploring organizational decision-making in humanitarian contexts and the role of explicit knowledge management. Following this, the chapter articulates the statement of the problem, highlighting the specific challenges and gaps this study aims to address. The study objectives and corresponding study questions that guide the study are then presented. The chapter proceeds to discuss the significance of the study, emphasizing its theoretical and practical contributions. Finally, the scope and limitations of the study are outlined, providing clear boundaries while acknowledging potential constraints.

1.2 Background of the Study

Organizational decision-making represents a systematic process through which institutions identify, analyze, and resolve strategic and operational challenges to achieve their objectives (Litvaj et al., 2022). This process typically involves four key components: problem identification, alternative generation, evaluation frameworks, and implementation monitoring. Recent evidence suggests that structured decision-making processes significantly enhance organizational performance, explaining up to 43% of variance in outcomes, particularly when supported by accessible information and systematic evaluation protocols (Nudurupati, 2024). Systematic knowledge management practices play a critical role in supporting effective

decision-making by capturing, codifying, and utilizing organizational expertise through documented procedures and standardized protocols (Berraies, 2021; Zamiri & Esmaeili, 2024).

The global landscape of knowledge management implementation reveals significant variations across different regions and organizational contexts. Organizations worldwide demonstrate varying adoption rates of systematic knowledge management practices, with these differences largely attributable to technological infrastructure, institutional capacity, and environmental stability. North American and European entities show strong implementation patterns, with adoption rates reaching 80-85% across major organizational sectors. These regions achieve notable improvements in decision-making processes, including 25-30% enhancements in decision speed and regulatory compliance rates (European Commission, 2023; National Institute of Standards and Technology [NIST], 2022). The success in these contexts stems from robust technological infrastructure, established institutional frameworks, and relatively stable operational environments that facilitate systematic knowledge management implementation.

Asian economies present a more complex picture, with adoption patterns varying significantly between advanced and developing nations. Countries such as Japan and Singapore demonstrate high levels of knowledge management maturity, achieving international benchmarks through systematic documentation and knowledge-sharing mechanisms. These nations report substantial improvements in operational efficiency and decision-making effectiveness through integrated knowledge management systems. However, developing Asian economies face considerable challenges in maintaining consistent documentation protocols, with only 42% achieving international benchmarks for systematic knowledge management (Asian Development Bank [ADB], 2022). Infrastructure limitations, capacity constraints, and resource availability create barriers to comprehensive knowledge management implementation in these contexts.

Latin American and South Asian organizations encounter unique challenges in establishing effective knowledge management practices. The World Bank Enterprise Survey (2022) indicates that only 45% of surveyed entities in these regions maintain formal documentation systems, with manufacturing enterprises showing slightly higher adoption rates. Infrastructure development and capacity-building initiatives emerge as critical enablers for advancing knowledge management capabilities. Organizations in countries such as Brazil and India report improvements in decision-making effectiveness and compliance rates through systematic knowledge management implementation, though progress remains uneven across different sectors and organizational types.

African organizations increasingly recognize the importance of systematic knowledge management, though adoption rates remain lower compared to other global regions. Countries such as South Africa, Kenya, and Nigeria lead continental efforts, with financial services and telecommunications sectors achieving 47-53% compliance rates with international documentation standards (South African Institute of Management [SAIM], 2023). These achievements demonstrate the potential for knowledge management to drive operational improvements even in resource-constrained environments. However, regional studies emphasize the need for tailored solutions that align with local contexts while meeting global standards. Infrastructure limitations, capacity constraints, and economic challenges create distinctive implementation environments that require adapted approaches to knowledge management.

Somalia presents particularly complex challenges for knowledge management implementation within humanitarian operational contexts. The country's protracted crisis situation, characterized by ongoing security concerns, limited infrastructure, and institutional instability, creates unique obstacles for organizations seeking to establish systematic knowledge

management practices. The World Bank's Somalia Economic Update (2022) provides valuable insights into these challenges, revealing that only 28% of 45 surveyed organizations maintain consistent documentation systems. Significantly, 73% of these organizations cite security concerns as primary barriers to preserving critical organizational knowledge, while infrastructure limitations and staff turnover create additional implementation challenges.

Despite these substantial constraints, evidence suggests that systematic knowledge management approaches can yield meaningful improvements in humanitarian operational contexts. The Norwegian Refugee Council's experience in Somalia demonstrates this potential, achieving 25% faster response times and 29% enhanced resource allocation efficiency across five operational regions through structured knowledge management investments (NRC Organizational Performance Report, 2022). These improvements occur despite the challenging operational environment, suggesting that even modest investments in systematic knowledge management can produce substantial benefits for humanitarian organizations operating in volatile contexts.

The broader humanitarian sector provides additional evidence supporting the value of systematic knowledge management in crisis response contexts. The United Nations Office for the Coordination of Humanitarian Affairs reports that 52% of humanitarian agencies maintain systematic documentation protocols, though implementation remains inconsistent due to operational unpredictability (United Nations Office for the Coordination of Humanitarian Affairs, [UNOCHA], 2022). Organizations with established knowledge management systems demonstrate 31% faster emergency response times, highlighting the direct relationship between structured information management and operational agility. Similarly, the International Committee of the Red Cross documents improvements in resource utilization and program

delivery effectiveness through systematic documentation protocols across multiple country operations (International Committee of the Red Cross, [ICRC], 2021).

However, significant knowledge gaps persist regarding how systematic knowledge management influences decision-making processes in complex humanitarian environments like Somalia. Current research predominantly focuses on stable organizational contexts or examines knowledge management in isolation from decision-making processes. The intersection of knowledge management and decision-making in volatile humanitarian settings remains under-researched, despite its critical importance for organizational effectiveness and humanitarian outcomes.

The Norwegian Refugee Council's operations in Somalia present a compelling case for examining this relationship. Operating across five regions with over 100 staff members, the organization serves 1.2 million beneficiaries while facing substantial knowledge management challenges. Current deficiencies include a 30% annual loss rate of documented procedures, decision-making processes averaging 72 hours compared to 48-hour sector standards, and fragmented information systems that compromise operational efficiency. These challenges directly impact the organization's ability to deliver timely, effective humanitarian assistance to vulnerable populations, including internally displaced persons and refugees who depend on rapid, evidence-based interventions for survival and protection.

Understanding how systematic knowledge management practices influence organizational decision-making effectiveness becomes essential for humanitarian organizations seeking to improve operational outcomes in challenging environments. This study addresses this critical knowledge gap by examining the specific mechanisms through which knowledge management practices support decision-making processes within NRC Somalia's complex operational context.

1.3 Statement of the Research Problem

In ideal humanitarian settings, organizational decision-making should be rapid, evidence-based, and supported by robust systematic knowledge management systems that enable effective responses to vulnerable populations. United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA, 2023) establishes that humanitarian organizations should achieve 90% program implementation efficiency through informed decision-making processes, with staff retrieving critical information within 30 minutes and emergency responses completed within 48 hours. Effective knowledge management systems should ensure lessons learned from previous interventions inform current operations, documented procedures guide standardized responses, and institutional memory remains accessible despite high staff turnover common in humanitarian contexts.

However, the Norwegian Refugee Council (NRC) Somalia reveals substantial deviations from these humanitarian benchmarks, exposing critical gaps in systematic knowledge management practices that directly compromise decision-making effectiveness. Emergency response decisions currently average 72 hours, representing a 50% increase over sector standards and directly impacting the organization's ability to serve 1.2 million beneficiaries effectively across five operational regions. In conflict-affected areas of South-Central Somalia and Jubaland, these delays determine the difference between life-saving assistance and missed opportunities to protect vulnerable populations from further harm, particularly during acute emergencies where rapid intervention prevents mortality and displacement.

The primary contributing factor stems from deterioration of NRC's systematic knowledge management systems, which experience a 30% annual loss rate of documented procedures and operational insights (NRC Organizational Performance Report, 2023). This knowledge loss occurs through multiple interconnected pathways including staff departures without adequate

handover processes, inadequate documentation protocols that fail to capture critical operational insights, system failures that compromise institutional memory, and security incidents resulting in data loss. The cumulative effect creates substantial information gaps that undermine decision-making quality and consistency across different operational contexts.

Fragmented storage systems exacerbate these challenges by forcing operational staff to spend up to 35% of their time searching for critical information rather than delivering humanitarian services. This represents significant opportunity costs, as experienced humanitarian workers with specialized skills focus on information retrieval rather than program implementation, beneficiary engagement, strategic planning, or capacity building activities. The time allocation inefficiency becomes particularly problematic during emergency responses when rapid access to relevant procedures and lessons learned could accelerate life-saving interventions.

Infrastructure limitations across Somalia's challenging operational environment compound these difficulties, with 40% of knowledge-sharing attempts failing due to technical constraints, security restrictions, connectivity issues, or logistical barriers spanning the organization's five regional operations. These failures prevent field teams in remote locations from accessing relevant experiences from other regions, limit cross-learning opportunities between different program sectors, and result in duplicated efforts that waste scarce humanitarian resources. Teams unable to access documented best practices from previous similar interventions may employ fewer effective approaches, repeat costly mistakes that other teams have already identified and resolved, or fail to adapt successful strategies from comparable contexts.

The operational impacts manifest in measurable performance indicators that directly affect humanitarian outcomes and organizational sustainability. The NRC Financial Review (2023) documents a 40% increase in response delays over two years, correlating directly with knowledge management system deterioration. Program implementation efficiency has declined

by 35%, while 20% of operational costs now address preventable issues that systematic knowledge management could have avoided through better documentation and application of lessons learned.

These challenges disproportionately affect the most vulnerable populations served by NRC, including internally displaced persons, refugees, and communities affected by recurrent humanitarian crises who require consistent, timely, and effective assistance for survival and protection. When decision-makers lack access to documented lessons learned, previous intervention evaluations, and community feedback, they may select approaches proven ineffective in similar contexts or fail to account for local cultural factors and community preferences.

Despite systematic knowledge management's recognized importance in humanitarian operations, significant knowledge gaps persist regarding its specific influence on decision-making effectiveness in complex operational environments like Somalia. Existing studies predominantly focus on stable organizational contexts or examine broader operational frameworks without specifically addressing the intersection of knowledge management and decision-making in humanitarian contexts.

This study specifically investigated how explicit knowledge management practices affect decision-making effectiveness within NRC Somalia's humanitarian operations, aiming to identify actionable strategies that enhance operational efficiency and strengthen service delivery to vulnerable populations.

1.4 Purpose of the Study

The purpose of this study was to investigate how explicit knowledge management practices influence organizational decision-making effectiveness at Norwegian Refugee Council

Somalia, with the specific aim of developing evidence-based recommendations that enhance humanitarian response capabilities through improved decision-making processes. This investigation sought to identify tangible mechanisms through which documented knowledge acquisition, formal storage systems, standardized sharing practices, and systematic utilization directly impact decision-making quality, timeliness, and outcomes within complex humanitarian operations.

1.5 Objectives of the Study

The objectives of this study were:

i. To examine how documented knowledge acquisition processes influence organizational decision-making at NRC Somalia's humanitarian operations.
ii. To determine the influence of formal knowledge storage mechanisms on timeliness of organizational decision-making at NRC Somalia.
iii. To analyze how standardized knowledge sharing practices influence the quality of organizational decision-making at NRC Somalia.
iv. To establish the influence of systematic knowledge utilization on organizational decision-making outcomes at NRC Somalia.

1.6 Research Questions

This study addressed the following research questions:

i. In what ways do document knowledge acquisition processes influence organizational decision-making at NRC Somalia's humanitarian operations?
ii. How do formal knowledge storage mechanisms affect the timeliness of organizational decision-making at NRC Somalia?

iii. What is the impact of standardized knowledge sharing practices on the quality of organizational decision-making at NRC Somalia?

iv. How does systematic knowledge utilization influence organizational decision-making outcomes at NRC Somalia?

1.7 Justification of the Study

This study addressed a critical gap in understanding organizational decision-making within complex humanitarian environments. While extensive studies exist on decision-making in stable organizational contexts, limited attention has been given to how explicit knowledge management supports decision-making processes in volatile humanitarian settings. The Norwegian Refugee Council's operations in Somalia provide a unique opportunity to examine this relationship in a complex emergency context, where effective decision-making directly impacts the lives of vulnerable populations.

The study's practical significance stems from the substantial operational challenges currently faced by NRC Somalia. The organization's increased response times for critical decisions, coupled with reduced program implementation efficiency, demonstrate an urgent need for improved decision-making processes. By examining how explicit knowledge management influences organizational decision-making, this study will provide actionable insights for enhancing humanitarian response effectiveness in complex emergencies.

The findings are expected to contribute to both theoretical understanding and practical application in the humanitarian sector. Organizations operating in conflict zones frequently struggle with decision-making inefficiencies, yet lack evidence-based approaches for improvement. This study's examination of the relationship between explicit knowledge management and organizational decision-making is expected to provide valuable insights for humanitarian organizations operating in similar challenging environments, potentially

improving the effectiveness of humanitarian assistance to vulnerable populations across multiple contexts.

1.8 Limitations of the Study

This study faced several methodological and operational limitations. Security constraints in South Central Somalia and parts of Juba land restricted direct access to field locations, limiting the researcher's ability to observe decision-making processes in real-time operational contexts. While remote data collection methods will be employed as an alternative, such approaches may not capture the full complexity of field-level decision-making dynamics. To address this, offline data collection tools (such as mobile applications that sync when connectivity becomes available) were utilized. Paper-based questionnaires and interview guides were also distributed for completion during periods without internet access, followed by manual entry upon return to connected areas. Furthermore, leveraging pre-existing periodic visits by NRC supervisors to remote sites allowed for the collection of completed materials or conducting face-to-face interviews where feasible.

Staff availability presented another significant limitation. The organization's high staff turnover rate may affect the continuity of study participants, particularly key informants with extensive knowledge of organizational decision-making processes. The demanding nature of humanitarian work in complex emergencies often limits staff availability for study participation, which may extend the data collection timeline and require additional resources for follow-up. A multi-tiered approach to participant selection ensured redundancy; multiple individuals at different levels within the same department were engaged to provide complementary insights. For key informants likely to leave during the study period, initial in-depth interviews were supplemented with documentation reviews and secondary data analysis.

Additionally, contingency plans included recruiting replacement participants for key informants who exited before the study concluded.

1.9 Scope and Delimitations of the Study

This study maintained specific boundaries to ensure focused and actionable outcomes. The study examined organizational decision-making processes at NRC Somalia as defined by the organization's formal operational framework.

The geographical scope encompassed NRC's five primary operational regions in Somalia: Mogadishu, Puntland, Somaliland, South Central, and Juba land. These regions represent the organization's core operational areas where consistent humanitarian programming is maintained. The study focused specifically on decision-making processes within NRC's established program sectors: emergency response, education, food security, livelihoods, shelter, and WASH.

The study examined three organizational levels: senior management, middle management, and field coordinators. These levels were selected based on their direct involvement in operational and strategic decision-making processes. The study specifically investigated explicit knowledge management practices, including documented procedures, standardized protocols, and formal communication channels, excluding informal knowledge sharing mechanisms that fall outside the organization's official systems.

1.10 Significance of the Study

The significance of this study lies in its potential to enhance understanding and improve practices related to explicit knowledge management and organizational decision-making within complex humanitarian environments. By focusing on the Norwegian Refugee Council (NRC) Somalia, the study will address a critical gap in existing literature, which predominantly examines decision-making processes in stable organizational contexts rather than volatile humanitarian settings. This exploration is particularly relevant given the unique challenges

faced by organizations operating in fragile states like Somalia, where security concerns, infrastructure limitations, and high staff turnover hinder effective knowledge management systems.

The findings of this study will provide actionable insights for improving decision-making efficiency at NRC Somalia, contributing directly to enhanced humanitarian response effectiveness. For instance, identifying how documented knowledge acquisition processes influence decision-making can lead to streamlined protocols that reduce delays and improve program implementation. Similarly, analyzing formal knowledge storage mechanisms and standardized sharing practices will offer practical recommendations for optimizing these systems, ensuring timely access to critical information even in remote or conflict-affected areas.

From a theoretical perspective, the study enriches the discourse on knowledge management in humanitarian contexts, offering empirical evidence of the relationship between explicit knowledge management and organizational decision-making. It highlights the transformative potential of systematic documentation, storage, and retrieval of explicit knowledge in driving operational resilience and responsiveness. Furthermore, the study underscores the importance of aligning knowledge management practices with broader organizational goals, emphasizing their role in achieving compliance, reducing errors, and enhancing service delivery quality.

At a global level, the study contributes to the growing body of knowledge on managing operations in fragile states, providing valuable lessons for other humanitarian organizations facing similar challenges. By demonstrating the tangible benefits of explicit knowledge management, such as improved response times and resource allocation, the study advocates for increased investment in systematic approaches to knowledge management. These insights not only inform policy but also guide capacity-building initiatives, ultimately enhancing the ability

of organizations to deliver timely and effective assistance to vulnerable populations in complex emergencies. Thus, the study holds both practical implications for NRC Somalia and broader relevance for the humanitarian sector as a whole.

1.11 Assumptions of the Study

This study operated under several key assumptions essential for its implementation. First, the study assumed that participants will provide accurate and honest responses regarding organizational decision-making processes and explicit knowledge management practices. This assumption is fundamental to ensuring the validity of the study findings.

Second, the study assumed that selected study participants possessed sufficient understanding of organizational processes to provide meaningful insights into decision-making practices. This includes familiarity with formal procedures, documentation systems, and communication channels used within the organization.

Third, the study assumed that the organization's current decision-making structure and knowledge management systems will remain relatively stable during the study period. This stability was necessary for drawing meaningful conclusions about the relationship between explicit knowledge management and organizational decision-making.

Finally, the study assumed that security conditions will permit adequate access to study participants across key operational areas, either through direct or remote contact methods. This access is crucial for gathering comprehensive data that represents the full scope of the organization's operations.

1.12 Operational Definition of Significant Terms

Explicit Knowledge Management: The systematic approach to documenting, storing, and utilizing codified information, including written procedures, digital records, formal guidelines, and standardized protocols that support organizational operations.

Humanitarian Organization: An entity providing material and logistical assistance to populations affected by crises, operating under established humanitarian principles and formal operational frameworks.

Knowledge Acquisition Processes: The formal mechanisms and procedures used by NRC Somalia to collect, document, and record operational information, lessons learned, and best practices from both internal operations and external sources.

Knowledge Storage Mechanisms: The technological systems, databases, and digital repositories employed by NRC Somalia to maintain and organize documented information, ensuring its accessibility for organizational decision-making processes.

Knowledge Sharing Practices: The structured channels and formal procedures through which NRC Somalia distributes documented information, operational guidelines, and standardized protocols across different organizational levels and operational locations.

Knowledge Utilization: The systematic application of documented information, stored procedures, and recorded experiences in organizational decision-making processes within NRC Somalia's humanitarian operations.

Operational Effectiveness: The degree to which NRC Somalia achieves its intended humanitarian outcomes through systematic decision-making processes and efficient resource utilization, as measured against established organizational standards.

Organizational Decision-Making: The systematic process through which NRC Somalia identifies problems, evaluates alternatives, and selects courses of action to achieve humanitarian objectives, as defined by the organization's formal operational protocols and strategic framework.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

This chapter presents a comprehensive review and critical analysis of literature related to explicit knowledge management and its influence on organizational decision-making, with specific focus on humanitarian contexts. The literature review examines theoretical frameworks underpinning knowledge management and decision-making processes, explores empirical studies across various organizational settings, and identifies knowledge gaps that this study aims to address. By synthesizing existing scholarly work, this chapter establishes the conceptual foundation for investigating how explicit knowledge management practices influence organizational decision-making at the Norwegian Refugee Council (NRC) in Somalia.

The chapter begins by exploring organizational decision-making in humanitarian contexts, examining the unique challenges and considerations that shape decision processes in complex operational environments, then followed by a review of literature on knowledge management practices, in particular; knowledge acquisition, storage, sharing, and utilization. It further looks at the theoretical frameworks guiding this study, focusing on the SECI Model of Knowledge Conversion and Decision-Making Theory. Finally, the chapter synthesizes the literature to identify knowledge gaps and establish the conceptual framework for the study.

2.2. Organizational Decision-Making in Humanitarian Contexts

Organizational decision-making in humanitarian contexts is a multifaceted process that lies at the heart of effective crisis response. It serves as the critical point where strategic planning, resource allocation, and stakeholder coordination converge to address the needs of vulnerable populations. In recent years, the urgency of this process has been amplified by the increasing

frequency and complexity of global crises, including climate-induced disasters, protracted conflicts, and pandemics.

At the global level, numerous studies have examined the challenges of decision-making in crisis situations. Research conducted across multiple United Nations agencies by Enemark et al. (2021) in Switzerland has emphasized that decision-making in high-stakes environments requires not only rapid responses but also careful consideration to avoid unintended consequences. Similarly, Smith and Johnson's (2023) comprehensive study of international humanitarian organizations based in Geneva highlighted that ethical dilemmas in prioritizing certain populations or interventions over others can exacerbate existing inequalities or create new ones.

Global frameworks such as the United Nations' Sustainable Development Goals (SDGs), the Sendai Framework for Disaster Risk Reduction, and the Grand Bargain commitments provide overarching guidelines for humanitarian action. These frameworks aim to standardize practices, promote inclusivity, and enhance the effectiveness of interventions. However, a study by Mohamed and Ali (2022) across UN operations in multiple countries found that these frameworks often lack robust accountability mechanisms to ensure compliance or measure effectiveness, leading to inconsistent implementation across different contexts and undermining trust among stakeholders.

A study by Gómez and Chen (2023) in Colombia and Peru highlighted that inter-agency coordination is critical to avoid redundancies and inefficiencies, particularly when multiple actors are involved in responding to a single crisis. Their study also found that donor-driven priorities in these Latin American countries often emphasize short-term relief efforts at the expense of long-term resilience-building initiatives, undermining sustainable recovery efforts and perpetuating cycles of dependency.

Studies of international humanitarian organizations operating in multiple countries have revealed significant power imbalances within the sector. A study by Li and Thompson (2023) examining World Bank and UN humanitarian projects across Southeast Asia found that bureaucratic inefficiencies within international organizations, including rigid funding mechanisms and lengthy approval processes, hinder the agility required in rapidly evolving crises. Similarly, Enemark et al. (2021) global study of major donor agencies in Europe and North America emphasized that opaque decision-making processes can erode confidence in humanitarian institutions.

At the continental level, particularly in Africa, regional decision-making processes are shaped by a unique set of socio-political, economic, and environmental factors. A study by Amadi and Obi (2023) across West African countries found that regional bodies like the African Union (AU) or sub-regional organizations such as ECOWAS often step in to coordinate responses but frequently lack sufficient resources or enforcement mechanisms to implement comprehensive strategies.

A study in the Sahel region by Abdullahi and Hassan (2023) observed that extreme weather events such as droughts or floods are becoming increasingly frequent across countries like Niger, Mali, and Chad due to climate change, overwhelming existing infrastructure and response capacities. In the Horn of Africa, Warsame and Yusuf's (2023) study in Ethiopia and Djibouti emphasized that cultural dynamics play a significant role in shaping regional responses, and integrating local knowledge into decision-making processes is essential for ensuring culturally sensitive interventions.

A study by Kumar and Lee (2022) in Southern Africa, focusing on Mozambique and Zimbabwe have examined how technological advancements offer promising solutions for improving regional collaboration in humanitarian contexts. Their study showed that digital platforms

enable real-time data sharing among stakeholders, while artificial intelligence (AI) applications facilitate predictive modelling for disaster risk assessment. In the same region, Li and Thompson (2023) demonstrated how Geographic Information Systems (GIS) have proven particularly useful for mapping affected areas with precision in Malawi and Zambia, aiding in resource allocation efforts. However, their study noted that despite these innovations, their adoption remains uneven across regions due to disparities in infrastructure development and technical expertise.

In Nigeria and Ghana, Okafor and Adeyemi's (2022) research advocated for participatory approaches that include affected communities as active contributors to decision-making processes rather than passive recipients of aid. Their work in these West African countries demonstrated that local actors possess invaluable insights into their own needs and challenges, which can significantly enhance the effectiveness of humanitarian interventions.

In East Africa, Mwaura and Patel's (2022) study in Kenya and Tanzania highlighted the importance of grounding decisions in local realities to enhance their relevance and sustainability. Their study demonstrated how global policies frequently fail to account for on-the-ground realities in these countries, leading to misaligned interventions that do not adequately address the unique needs of affected populations.

Somalia provides a compelling case study for examining localized strategies within highly complex environments. Research by Abdullahi and Hassan (2023) in Somalia revealed how clan affiliations play a pivotal role in shaping trust levels among communities, with clan leaders often acting as intermediaries between external actors and local populations during humanitarian interventions. Gómez and Chen's (2023) field research in Somalia further noted how the country's governance vacuums complicate long-term planning efforts while increasing operational risks associated with insecurity or corruption.

The interaction between global, regional, and local decision-making processes reveals both opportunities and challenges. Larger international organizations often dominate decision-making spaces, as observed by Amadi and Obi (2023) in their comparative study of humanitarian operations in Nigeria, Cameroon, and Chad. Their research found that this dominance frequently sidelines smaller non-governmental organizations (NGOs) and local actors who possess critical contextual knowledge. This dynamic not only limits the diversity of perspectives but also perpetuates reliance on external aid structures.

Abdullahi and Hassan's (2023) work across East African countries demonstrated that marginalization of local actors undermines local ownership of humanitarian initiatives, which is essential for their long-term success. Their research in Somalia, Kenya, and Ethiopia showed how international approaches often fail to adequately account for local complexities.

2.3. Knowledge Acquisition Processes and Organisational Decision-Making

Knowledge acquisition processes encompass the systematic activities through which organizations identify, collect, filter, and internalize information from both external and internal environments to enhance their knowledge base (Huber, 2021; Nonaka & Takeuchi, 1995). As a fundamental dimension of knowledge management, these processes serve as the initial phase in the knowledge value chain, providing the raw materials for subsequent knowledge application in decision-making contexts (Davenport & Prusak, 2020). According to Argote and Miron-Spektor's (2021) theoretical framework, knowledge acquisition comprises four measurable components: scanning intensity (the breadth and depth of environmental monitoring), acquisition diversity (the variety of knowledge sources consulted), acquisition intentionality (the degree of purposefulness in knowledge seeking), and absorption capacity (the ability to recognize and assimilate new knowledge). These components collectively

determine an organization's capability to enrich its knowledge repository and subsequently leverage this knowledge in decision-making processes.

The theoretical underpinnings of knowledge acquisition have evolved significantly over recent decades, transitioning from passive information processing models to more dynamic, socially embedded perspectives. Cohen and Levinthal's (2023) reconceptualization of absorptive capacity emphasizes that knowledge acquisition is not merely a mechanical process of data collection but rather a socially constructed activity influenced by organizational culture, prior knowledge stocks, and strategic orientation. Similarly, Tsoukas and Vladimirou (2022) argue that knowledge acquisition should be understood as an interpretive process through which organizations make sense of complex environmental signals through collective cognitive frameworks. These conceptual advances highlight that effective knowledge acquisition is characterized by systematicity (structured approaches to knowledge gathering), criticality (evaluative assessment of knowledge relevance and quality), contextuality (alignment with organizational needs and environmental conditions), and integration capability (connecting new knowledge with existing organizational understanding). These characteristics serve as crucial indicators for assessing knowledge acquisition effectiveness across diverse organizational contexts (Paulin & Suneson, 2022).

Contemporary organizational research has witnessed substantial scholarly interest in examining how knowledge acquisition processes influence decision-making effectiveness across varied institutional settings. This synthesis examines methodologically robust empirical studies published in peer-reviewed journals from 2020 onwards, progressing from international comparative analyses to regional investigations and concluding with context-specific research from Somalia.

Cross-national empirical investigations have established meaningful correlations between structured knowledge acquisition methodologies and enhanced decision outcomes across diverse organizational environments. The comprehensive investigation by Farnese et al. (2020) encompassing 312 organizations across 14 nations (including the United States, Germany, Japan, Brazil, India, and South Africa) revealed that formalized knowledge acquisition frameworks demonstrated significant positive associations with both decision quality ($\beta = 0.41$, $p < 0.001$) and execution effectiveness ($\beta = 0.37$, $p < 0.001$). Their path analysis indicated that knowledge acquisition practices accounted for approximately 38% of the variance in strategic decision performance when controlling for organizational dimensions, industry classification, and market instability. In parallel research spanning North America and Europe, Migdadi et al. (2021) analyzed multinational corporate data from 276 entities based in the United States, Canada, United Kingdom, France, Germany, and Sweden, establishing that organizations with sophisticated knowledge acquisition capabilities exhibited markedly superior decision rationality metrics ($F = 14.72$, $p < 0.001$) relative to counterparts with underdeveloped acquisition frameworks.

The technological enablement of knowledge acquisition has generated substantial empirical examination in global contexts. Santoro et al. (2020) conducted a cross-sectional survey of 358 manufacturing enterprises across 19 countries in North America, Europe, and Asia, documenting significant correlations between digital knowledge acquisition infrastructure and enhanced decision comprehensiveness ($r = 0.43$, $p < 0.01$) alongside reduced decision-making intervals ($r = -0.39$, $p < 0.01$). Their multivariate analysis demonstrated that technology-facilitated knowledge acquisition explained nearly one-third of the variance in strategic decision velocity, underscoring how digitally enhanced acquisition capabilities accelerate decision formulation in competitive environments. Complementary findings emerged from Ode and Ayavoo's (2020) international survey of 294 service organizations across Australia,

New Zealand, Singapore, Malaysia, and the United Kingdom, which established that advanced data acquisition capacities were significantly associated with decision precision improvements ($\beta = 0.46$, $p < 0.001$), with this relationship mediated by knowledge integration processes (indirect effect = 0.21, $p < 0.01$).

International research has further identified contingency variables that moderate the relationship between knowledge acquisition investments and decision performance. The multi-country analysis by Cillo et al. (2022) incorporating data from 231 organizations across developed economies (United States, Canada, Germany, and Japan) and emerging economies (Brazil, Mexico, India, and Thailand) demonstrated that environmental volatility significantly moderated knowledge acquisition's impact on decision quality (interaction coefficient $\beta = 0.34$, $p < 0.01$). Their findings revealed that entities operating amid high environmental turbulence derived substantially greater decision-making advantages from robust external knowledge acquisition capabilities compared to counterparts in stable environments. This interaction suggests that knowledge acquisition investments yield variable returns across contextual settings, with greater benefits accruing in volatile environments requiring adaptive decision responses.

Transitioning to continental perspectives, empirical research has documented substantive variations in knowledge acquisition methodologies and their decision-making impact. Within European contexts, Hughes et al. (2020) surveyed 203 organizations across seven nations (Sweden, Norway, Denmark, Finland, Italy, Spain, and Greece), establishing that entities with institutionalized knowledge acquisition functions reported significantly elevated decision comprehensiveness metrics compared to those lacking such structures (mean differential = 0.74, $p < 0.001$). Their hierarchical regression analysis revealed pronounced national differences, with Nordic organizations demonstrating stronger associations between

acquisition capabilities and decision rationality ($r = 0.57$, $p < 0.001$) compared to Mediterranean counterparts ($r = 0.32$, $p < 0.01$), suggesting institutional and cultural factors influence the acquisition-decision relationship.

Asian-focused empirical investigations offer valuable comparative insights. The multi-country study by Ogbeibu et al. (2021) encompassing 248 organizations across six Asian economies (Japan, China, South Korea, Singapore, Malaysia, and Vietnam) found that knowledge acquisition in Japanese enterprises predominantly targeted incremental innovation decisions (64.2% of acquisition initiatives), while Chinese organizations demonstrated more balanced acquisition distribution across exploitative and exploratory decision domains. Their statistical analysis revealed that competitive intensity significantly moderated the relationship between knowledge acquisition scope and decision novelty ($\beta = 0.29$, $p < 0.01$), with organizations in highly competitive sectors deriving greater innovative decision advantages from boundary-spanning acquisition efforts.

Within African contexts, Ibidunni et al. (2021) gathered data from 176 organizations across eight sub-Saharan countries (Nigeria, Ghana, Kenya, Tanzania, Uganda, Rwanda, South Africa, and Botswana), documenting significantly higher utilization of informal knowledge acquisition networks compared to formalized methodologies ($t = 5.21$, $p < 0.001$). Their structural modelling revealed that source credibility represented a stronger predictor of acquisition impact on decision processes in African contexts ($\beta = 0.47$, $p < 0.001$) compared to findings from Western investigations, highlighting distinct regional dynamics. Building on these insights, Ogunmokun et al. (2022) examined 203 firms across five West African nations (Nigeria, Ghana, Côte d'Ivoire, Senegal, and Cameroon), establishing that organizational absorptive capacity significantly mediated the relationship between external knowledge acquisition and strategic decision effectiveness (indirect effect = 0.28, $p < 0.01$), with this

mediating effect more pronounced for small and medium enterprises compared to large organizations (conditional indirect effect differential = 0.17, $p < 0.05$).

East African empirical investigations provide valuable contextual understanding for analyzing knowledge acquisition dynamics in environments proximate to Somalia. Bagire et al. (2021) analyzed data from 144 organizations across Kenya, Tanzania, and Uganda, establishing that organizations implementing systematic market intelligence acquisition reported significantly enhanced strategic decision quality metrics compared to those employing situational acquisition approaches ($F = 11.86$, $p < 0.001$). Their regression analysis indicated that digital infrastructure constraints explained approximately one-third of the variance in knowledge acquisition sophistication, with technologically limited organizations demonstrating less comprehensive acquisition despite recognizing its decision-making value.

The limited empirical research specifically examining Somalia offers crucial contextual understanding of knowledge acquisition challenges in fragile institutional environments. Ahmed and Osman (2020) employed mixed-method research across 42 Somali organizations spanning multiple sectors in Mogadishu, Hargeisa, and Kismayo, determining that security considerations significantly restricted external knowledge acquisition activities, with organizations in higher-risk regions demonstrating 37% lower external knowledge acquisition engagement compared to counterparts in more stable areas ($t = 4.17$, $p < 0.001$). Their qualitative investigation revealed that environmental instability created distinctive knowledge acquisition impediments, with decision-makers frequently relying on constrained internal knowledge due to limitations in accessing broader knowledge networks.

In one of the few Somalia-centered investigations examining knowledge acquisition through technological perspectives, Hassan et al. (2022) surveyed 56 organizations operating within Somalia's urban centers of Mogadishu, Hargeisa, Bosaso, and Baidoa, establishing that mobile

technology implementation was significantly associated with expanded knowledge acquisition breadth ($\beta = 0.34$, $p < 0.01$) and subsequent enhancements in operational decision quality (indirect effect = 0.19, $p < 0.05$). Their findings suggest that mobile technologies provide particularly valuable knowledge acquisition channels in environments with limited fixed infrastructure, enabling decision-makers to access diverse knowledge sources despite physical constraints.

The empirical literature reveals several consistent patterns regarding knowledge acquisition's influence on organizational decision processes while highlighting important contextual variations. Internationally, structured knowledge acquisition methodologies consistently demonstrate positive associations with decision quality metrics, with this relationship particularly pronounced under conditions of environmental uncertainty. Regionally, acquisition approaches vary considerably based on institutional frameworks, technological infrastructure, and cultural factors. Within the Somali context specifically, distinctive challenges related to security and infrastructure limitations shape acquisition strategies, with particular emphasis on mobile technology as an enabling mechanism for broader knowledge access to inform decision processes.

These empirical findings collectively indicate that knowledge acquisition represents a fundamental organizational capability with significant implications for decision effectiveness across contexts. However, optimal approaches to enhancing knowledge acquisition appear contextually determined, requiring alignment with both organizational characteristics and environmental conditions. This contextual contingency highlights the need for future research examining knowledge acquisition through situational perspectives rather than universal frameworks, particularly in understudied environments like Somalia.

2.4. Knowledge Storage Mechanisms and Organizational Decision-Making

Knowledge storage mechanisms represent the systematic processes, technologies, and structures through which organizations codify, preserve, and organize accumulated knowledge assets for future retrieval and application (Alavi & Leidner, 2021). As a critical component within the knowledge management lifecycle, storage mechanisms serve as the organizational memory that bridges knowledge acquisition and knowledge utilization, ensuring that valuable insights persist beyond the temporal boundaries of their initial discovery (Gold et al., 2020). According to Walsh and Ungson's (2022) theoretical framework, organizational knowledge storage encompasses five distinct dimensions: structural repositories (formal documentation systems and databases), semantic repositories (knowledge maps and taxonomies), technological repositories (digital storage systems and platforms), human repositories (individual and collective memory), and cultural repositories (norms, routines, and shared mental models). These dimensions collectively determine an organization's capacity to retain critical knowledge and subsequently leverage this preserved knowledge in ongoing decision-making processes.

The conceptual understanding of knowledge storage has evolved significantly, transitioning from static, artifact-centered models to more dynamic, socially embedded perspectives. Hislop et al. (2023) distinguish between codification approaches (emphasizing explicit knowledge capture in formal repositories) and personalization approaches (focusing on tacit knowledge preservation through communities of practice and expert networks). This distinction highlights that effective knowledge storage is characterized by several measurable qualities: comprehensiveness (the breadth and depth of stored knowledge), accessibility (ease of knowledge retrieval by authorized users), integrity (accuracy and currency of stored information), contextuality (preservation of situational factors that give meaning to knowledge), and security (protection against unauthorized access or loss). As McGrath and Argote (2021) emphasize, these characteristics serve as crucial indicators for evaluating

knowledge storage effectiveness across diverse organizational contexts and technical implementations. The strategic alignment of storage mechanisms with organizational knowledge needs and decision environments has emerged as a critical success factor in translating storage investments into enhanced decision-making capabilities.

The relationship between knowledge storage mechanisms and organizational decision-making processes has emerged as a critical area of inquiry within knowledge management research. This review synthesizes empirical findings from verified peer-reviewed research published from 2020 to present, examining how knowledge storage systems and practices influence decision-making effectiveness across varied organizational contexts, following a funnel approach from global to regional to local Somali studies where available.

Global empirical investigations have established significant connections between knowledge storage infrastructure and enhanced decision-making outcomes across diverse organizational settings. Wang et al. (2020) conducted a comprehensive study of 276 multinational corporations across 16 countries (including the United States, United Kingdom, Germany, France, Japan, China, India, Brazil, Australia, Canada, Singapore, South Korea, Italy, Spain, Mexico, and South Africa), demonstrating that organizations with sophisticated knowledge storage systems exhibited significantly higher decision comprehensiveness scores ($\beta = 0.38$, $p < 0.001$) and reduced decision cycle times ($\beta = -0.31$, $p < 0.01$) compared to organizations with rudimentary storage capabilities. Their structural equation modeling revealed that knowledge storage sophistication explained approximately 29% of the variance in strategic decision quality when controlling for organizational size, industry effects, and environmental turbulence. This finding was complemented by Ferraris et al. (2021), who analyzed data from 243 organizations across multiple industries in North America (United States, Canada), Europe (Germany, France, United Kingdom, Italy), and Asia (Japan, China, South Korea), establishing

that the relationship between knowledge storage and decision effectiveness was significantly mediated by knowledge retrieval efficiency (indirect effect = 0.24, $p < 0.01$), highlighting the interconnected nature of storage and access mechanisms in supporting decision processes.

The technological dimension of knowledge storage has received substantial empirical attention in global studies. Merino-Tejedor et al. (2021) surveyed 312 organizations across 19 countries in North America, Europe, Asia, and Oceania (specifically including the United States, Canada, United Kingdom, Germany, France, Spain, Netherlands, Sweden, Switzerland, Italy, Japan, China, South Korea, Singapore, Australia, New Zealand, India, Brazil, and Mexico), finding that cloud-based knowledge storage systems were associated with significant improvements in decision speed ($r = 0.41$, $p < 0.001$) and cross-functional decision participation ($r = 0.37$, $p < 0.01$) compared to localized storage solutions. Their regression analysis demonstrated that technology-enabled storage explained 33% of the variance in decision inclusiveness, with the relationship stronger in knowledge-intensive industries. Supporting these findings, Shah et al. (2022) analyzed data from 287 global firms spanning 22 countries across six continents (including major economies such as the United States, Canada, United Kingdom, Germany, France, Japan, China, India, Brazil, and Australia), documenting that AI-enhanced storage systems with intelligent retrieval capabilities were significantly associated with improved decision accuracy ($\beta = 0.43$, $p < 0.001$), with this relationship moderated by organizational learning culture (interaction term $\beta = 0.29$, $p < 0.01$).

Global investigations have also identified important contingency factors that shape the relationship between knowledge storage investments and decision outcomes. Shujahat et al. (2021) analyzed multi-source data from 231 organizations across both developed economies (United States, Canada, United Kingdom, Germany, Japan, Australia) and emerging economies (China, India, Brazil, Mexico, Indonesia, Turkey), finding that environmental complexity

significantly moderated the impact of knowledge storage sophistication on decision quality (interaction coefficient $\beta = 0.31$, $p < 0.01$). Specifically, organizations operating in highly complex environments derived substantially greater decision-making benefits from integrated knowledge storage systems compared to those in simpler environments. This interaction effect indicates that the decision-making value of storage capabilities increases proportionally with environmental complexity, explaining differential returns on storage investments across contexts.

Moving to regional perspectives, empirical research has documented important variations in knowledge storage approaches and their decision-making impacts. In the European context, Santoro et al. (2021) collected data from 189 organizations across eight European countries (Germany, France, United Kingdom, Italy, Spain, Sweden, Netherlands, and Finland), finding that organizations with centralized knowledge repositories reported significantly higher decision consistency scores compared to those with fragmented storage (mean difference = 0.69, $p < 0.001$). Their hierarchical regression analysis revealed notable country-level effects, with Northern European organizations (Sweden, Finland, Netherlands) demonstrating stronger correlations between storage integration and decision rationality ($r = 0.53$, $p < 0.001$) compared to Southern European counterparts (Italy, Spain) ($r = 0.29$, $p < 0.01$), suggesting regional institutional and cultural factors influence storage-decision relationships.

Asian regional studies provide valuable comparative insights. Ilvonen et al. (2022) surveyed 226 organizations across five Asian economies (Japan, South Korea, China, Singapore, and Malaysia), finding that knowledge storage in Japanese firms was predominantly oriented toward preserving historical decision contexts (71.3% of storage efforts), while South Korean firms emphasized storing relationship knowledge critical for consensus-building in decision processes. Their analysis revealed that industry maturity significantly moderated the

relationship between knowledge storage orientation and decision style ($\beta = 0.34$, $p < 0.01$), with firms in established industries deriving greater benefits from comprehensive historical storage, while firms in emerging industries benefited more from storing network and relationship knowledge to support collaborative decision processes.

In the African context, Olaisen and Revang (2021) collected data from 168 organizations across seven sub-Saharan countries (Nigeria, Kenya, Ghana, Tanzania, Uganda, Rwanda, and South Africa), documenting significantly higher reliance on human-centered knowledge storage compared to technological systems ($t = 4.87$, $p < 0.001$). Their structural equation modelling revealed that technological infrastructure limitations significantly constrained digital storage capabilities ($\beta = -0.52$, $p < 0.001$), with subsequent negative effects on decision comprehensiveness. Building on these findings, Akintola et al. (2022) surveyed 192 firms across six African countries (Nigeria, Ghana, Senegal, Kenya, Ethiopia, and South Africa), establishing that organizational absorptive capacity significantly mediated the relationship between digital knowledge storage and strategic decision effectiveness (indirect effect = 0.31, $p < 0.01$), with this mediation stronger for large organizations compared to small and medium enterprises (conditional indirect effect difference = 0.16, $p < 0.05$).

Research specifically examining East Africa provides important context for understanding knowledge storage dynamics in settings proximate to Somalia. Kamukama and Sulait (2022) analyzed data from 133 organizations across Kenya, Tanzania, and Uganda, finding that organizations implementing formal knowledge storage systems reported significantly higher strategic decision quality scores compared to those relying on informal storage approaches ($F = 10.34$, $p < 0.001$). Their regression analysis revealed that power reliability issues explained 27% of the variance in digital storage adoption, with intermittent electricity access representing

a significant barrier to comprehensive digital knowledge storage despite its recognized decision-making value.

Empirical research specifically examining Somalia is exceptionally limited but offers crucial contextual insights. In one of the few studies directly addressing knowledge management in Somalia, Ahmed et al. (2020) conducted an investigation of 38 Somali organizations across public and private sectors in Mogadishu, Hargeisa, and Garowe, finding that decentralized knowledge storage predominated, with 76% of surveyed organizations reporting no centralized knowledge repository. Their qualitative analysis revealed that security concerns significantly influenced storage strategies, with organizations frequently distributing knowledge across multiple locations to mitigate risks associated with physical infrastructure vulnerabilities. This distributed approach created distinctive challenges for decision-making processes, particularly for decisions requiring comprehensive historical knowledge integration.

In a rare Somalia-focused study examining technological aspects of knowledge storage, Hassan and Ali (2021) surveyed 47 organizations operating in relatively stable regions of Somalia (primarily in Somaliland and Puntland, with specific data collection in Hargeisa, Berbera, Bosaso, and Garowe), documenting that mobile technology adoption for knowledge storage was significantly associated with increased decision speed ($\beta = 0.29$, $p < 0.05$) but not with decision quality ($\beta = 0.11$, $p > 0.10$). Their findings suggest that while mobile technologies offer valuable knowledge storage mechanisms in contexts with limited fixed infrastructure, these solutions may primarily enhance tactical rather than strategic decision processes due to storage capacity and organization limitations inherent in mobile platforms.

The empirical literature reveals several consistent patterns regarding knowledge storage's influence on organizational decision making while highlighting important contextual variations. Globally, integrated knowledge storage systems consistently demonstrate positive

associations with decision quality metrics, with this relationship particularly pronounced under conditions of environmental complexity. Regionally, storage approaches vary considerably based on technological infrastructure, cultural factors, and institutional contexts. In the Somali context specifically, unique challenges related to security concerns and infrastructure constraints shape storage strategies, with particular emphasis on distributed storage approaches and increasing mobile technology utilization despite their limitations for supporting comprehensive decision processes.

These empirical findings collectively indicate that knowledge storage represents a critical organizational capability with significant implications for decision effectiveness across contexts. However, the optimal approaches to knowledge storage appear contextually contingent, requiring alignment with both organizational characteristics and environmental conditions. This contextual sensitivity highlights the need for future research examining knowledge storage through contingency perspectives rather than seeking universal best practices, particularly in under-researched contexts like Somalia where unique challenges shape storage possibilities and their decision support potential.

2.5. Knowledge Sharing Practices and Organizational Decision-Making

Knowledge sharing represents the deliberate exchange of acquired information, skills, and expertise among individuals, teams, and organizational units to create collective intellectual capital (Holste & Zuo, 2023; Vătămănescu et al., 2021). As a multidimensional construct, knowledge sharing encompasses both explicit knowledge (codified, documented information) and tacit knowledge (experiential, intuitive understanding), with the latter being particularly challenging to transfer yet often most valuable for decision-making processes (Xie et al., 2022; Zheng et al., 2022). The measurable characteristics of effective knowledge sharing include frequency of exchange, reciprocity, formality mechanisms, channel richness, and knowledge

quality assessment (Razmerita et al., 2023). According to Banisetty and Calic (2023), knowledge sharing is operationalized through four primary mechanisms: socialization (tacit-to-tacit transfer), externalization (tacit-to-explicit conversion), combination (explicit-to-explicit integration), and internalization (explicit-to-tacit assimilation). These mechanisms create a dynamic knowledge spiral that continuously enriches organizational decision-making capabilities.

Knowledge utilization, a closely related concept and outcome of effective knowledge sharing, refers to the actual application of shared knowledge in organizational processes, particularly decision-making (Dong et al., 2022; Moussa et al., 2021). The construct can be measured through indicators such as citation in decision documents, incorporation into formal policies, adaptation of practices based on new insights, and stakeholder acknowledgment of knowledge influence (Dwivedi et al., 2021; Liu et al., 2022). The relationship between knowledge sharing and utilization is not linear but contingent upon absorptive capacity the organization's ability to recognize valuable external knowledge, assimilate it, and apply it to decision-making (Sharma et al., 2021; Wang & Byrd, 2022). This relationship is further moderated by organizational culture, leadership support, technological infrastructure, and structural arrangements that either facilitate or impede the translation of shared knowledge into meaningful action (Cillo et al., 2023; Papa et al., 2021).

Knowledge sharing directly impacts the quality of decisions by expanding the pool of available insights and expertise. In their global study across North America, Europe, and Asia, Ahmad and Karim (2020) examined 217 multinational organizations and found that robust knowledge sharing infrastructures led to measurably improved decision outcomes, particularly during market volatility. Their quantitative analysis demonstrated a significant positive correlation ($r=0.68$, $p<0.001$) between knowledge sharing practices and decision quality metrics.

Similarly, Wang et al. (2021) analyzed data from 38 organizations spanning the United States, Germany, Japan, and Singapore, documenting that formal knowledge sharing protocols improved decision accuracy by 27% compared to control groups.

In a longitudinal study covering organizations in the United States, United Kingdom, Australia, and Canada, Bhatti and Singh (2022) tracked 42 Fortune 500 companies over five years, finding that structured knowledge repositories led to progressive improvements in decision-making capabilities, with the effect most pronounced in knowledge-intensive sectors ($\beta = 0.41$, $p<0.05$). Their research demonstrated that the accumulation of organizational knowledge assets correlated strongly with reduced decision error rates.

Trust factors in knowledge sharing were examined by Zhang et al. (2020) in their multi-country study across 14 countries including China, United States, Germany, India, Brazil, and South Africa. Using validated psychometric instruments across 1,200 respondents, they established that high-trust organizations experienced 3.5 times more voluntary knowledge exchange than low-trust environments ($p<0.001$). Gomez-Miranda and Perez (2021), studying organizations in Spain, Mexico, and Argentina, employed structural equation modelling to confirm the bidirectional relationship between trust and knowledge sharing (CFI = 0.96, RMSEA = 0.04).

The technological dimension was explored by Sivarajah and Irani (2022) in their mixed-methods study of 83 organizations across the United Kingdom, United States, Canada, and Australia, quantifying how AI-enabled knowledge management systems improved decision speed by 64% while maintaining quality standards. Their findings were based on controlled comparative analysis of pre- and post-implementation decision outcomes.

In the African context, Osei-Kyei and Chan (2021) surveyed 126 organizations across Ghana, Nigeria, and Kenya, finding that knowledge sharing practices were significantly influenced by organizational hierarchy ($F = 12.47$, $p<0.01$). Their study documented that flatter

organizational structures in African contexts facilitated 37% more cross-functional knowledge flow than hierarchical structures.

Cultural dimensions of knowledge sharing in African organizations were examined by Omotayo and Babalola (2020) in their analysis of 204 organizations across Nigeria, South Africa, Egypt, and Morocco. Their comparative research identified significant variations in knowledge sharing patterns between organizations in different cultural contexts ($\chi^2 = 18.92$, $p<0.01$), with collectivist regional cultures showing higher rates of spontaneous knowledge exchange but lower rates of documented knowledge codification.

Leadership impacts on knowledge sharing in Sub-Saharan Africa were documented by Asiedu and Ndlovu (2022) in their study conducted across South Africa, Nigeria, and Kenya. Their three-year investigation of 156 mid-sized enterprises employed validated leadership assessment instruments to demonstrate that transformational leadership styles correlated with 41% higher rates of cross-departmental knowledge utilization compared to transactional leadership approaches ($p<0.001$).

The pandemic's effect on knowledge sharing in Sub-Saharan organizations was examined by Mutambo and Weru (2022) in Tanzania, Uganda, and Rwanda. Their longitudinal study tracked 79 organizations before and during COVID-19, documenting through validated metrics how remote work initially disrupted established knowledge pathways but ultimately led to more formalized knowledge documentation practices ($t = 3.84$, $p<0.05$).

Mboya and Juma (2021) surveyed 187 organizations across Kenya, Tanzania, and Uganda, finding that those with established knowledge sharing practices demonstrated significantly higher strategic agility scores ($d = 0.72$, $p<0.01$). Their research used validated strategic agility instruments to measure organizational responsiveness to market shifts. Karanja et al. (2022) examined boundary-spanning knowledge sharing in 34 Ugandan and Kenyan organizations,

finding that structured knowledge exchange between internal and external stakeholders significantly predicted positive strategic decision outcomes ($\beta = 0.58$, $p<0.001$). Their study particularly focused on organizations operating in Kampala, Nairobi, and Mombasa, offering insights into both capital and commercial centers in the region.

Research on knowledge sharing practices specifically in Somalia remains limited in peer-reviewed literature, reflecting research challenges in the region. However, Hassan and Sheikh (2021), Somali researchers, conducted a pioneering study of 23 organizations in Mogadishu, finding that informal knowledge networks played a more significant role in decision-making than formal documentation systems ($p<0.05$). Their work employed mixed methods to document how traditional oral knowledge transfer practices interact with emerging technological systems in Somalia's capital city.

In another study, Ahmed et al. (2023) published findings about knowledge management challenges in Somali financial institutions. Their survey of 18 banks and financial service providers in Mogadishu, Hargeisa, and Kismayo revealed significant correlations between knowledge documentation practices and decision quality metrics ($r = 0.61$, $p<0.01$), though noting that implementation was hindered by infrastructure limitations specific to different regions of Somalia.

Farah and Ibrahim (2022), Somali scholars based in Hargeisa and Mogadishu respectively, conducted a comparative case analysis of public and private sector organizations in Somalia, finding distinct patterns of knowledge utilization that reflected local governance structures and cultural factors. Their research documented how clan-based trust networks influenced knowledge sharing pathways and subsequent decision-making processes across different administrative regions within Somalia.

Abdullahi (2022) conducted field research in Puntland, focusing specifically on how traditional knowledge systems interact with formal organizational structures in government ministries. The study found that decision-making processes heavily relied on informal knowledge sharing mechanisms ($p<0.01$), with formal documentation procedures often serving as post-decision validation rather than decision inputs.

The reviewed literature confirms knowledge sharing as a fundamental determinant of organizational decision-making effectiveness across global to local contexts. The relationship is mediated by technological, structural, cultural, and leadership factors, with implications for knowledge management strategies. The growing body of research specifically examining Somali contexts highlights unique considerations including the role of oral traditions, clan-based networks, and regional variations in knowledge exchange practices. Studies conducted in Mogadishu, Hargeisa, Kismayo, and Puntland regions provide valuable insights into how knowledge sharing manifests in different parts of Somalia. There remains an opportunity for expanded empirical research in Somalia to better understand how knowledge sharing practices can be optimized to enhance decision-making in specific cultural and organizational environments, particularly in humanitarian organisations operating in the country.

2.6. Knowledge Utilization and Organisational Decision Making

Knowledge utilization refers to the process through which organizations purposefully apply acquired knowledge to organizational activities, particularly decision-making processes. According to Davenport and Prusak (2018), knowledge utilization encompasses the deliberate application of knowledge assets to create value, solve problems, and inform organizational choices. The concept extends beyond mere knowledge possession to focus on the active deployment of knowledge in organizational contexts. As Nonaka and Takeuchi (2019) articulate, knowledge utilization represents the critical bridge between organizational knowing

and organizational doing, transforming intellectual capital into actionable insights that drive organizational performance.

Knowledge utilization as a construct comprises several measurable dimensions that scholars have identified across the literature. Grant (2020) outlines four primary components: knowledge accessibility (the degree to which relevant knowledge can be retrieved when needed), knowledge integration (the extent to which diverse knowledge sources are synthesized), knowledge application breadth (the range of organizational processes to which knowledge is applied), and knowledge application depth (the thoroughness with which knowledge informs specific decisions). Similarly, Alavi and Leidner (2021) propose that knowledge utilization can be measured through utilization frequency (how often knowledge resources are consulted), utilization diversity (the variety of knowledge types applied), utilization intentionality (whether knowledge application is systematic or ad hoc), and utilization outcomes (the tangible results of knowledge application). These conceptual frameworks provide the foundation for understanding and measuring how organizations transform knowledge resources into decision-making inputs and outcomes across various contexts.

Tworek et al. (2020) conducted a comprehensive study examining 289 multinational firms across 17 countries including the United States, United Kingdom, Germany, France, China, Japan, and Brazil, documenting that organizations with formalized knowledge utilization processes demonstrated 34% higher decision success rates compared to those without structured mechanisms for applying knowledge. Their regression analysis revealed that knowledge utilization practices explained approximately 41% of the variance in strategic decision outcomes when controlling for organizational size, industry, and environmental volatility. Similarly, Oyemomi et al. (2020) analyzed data from 211 global organizations

spanning North America, Europe, Asia, and Australia, finding that companies with high knowledge utilization maturity scores were significantly more likely to make evidence-based decisions that achieved performance targets ($\beta = 0.47$, $p < 0.001$).

The technology dimension of knowledge utilization has received particular empirical attention in global studies. Chatterjee et al. (2021) analyzed survey data from 327 firms across 22 countries including India, Singapore, South Korea, Canada, Mexico, and several European nations, demonstrating that digital knowledge management systems with embedded utilization features correlated significantly with decision speed ($r = 0.38$, $p < 0.01$) and decision quality ($r = 0.42$, $p < 0.01$). Their structural equation modelling revealed that knowledge utilization fully mediated the relationship between knowledge acquisition and decision effectiveness (indirect effect = 0.31, $p < 0.001$), establishing utilization as the critical pathway through which knowledge assets influence decision outcomes.

Hameed et al. (2021) conducted a multi-wave survey of 193 project teams across 12 countries including Australia, Canada, Germany, Sweden, Malaysia, and South Africa, finding that environmental uncertainty significantly moderated the relationship between knowledge utilization and decision effectiveness ($\beta = 0.29$, $p < 0.01$). Under high uncertainty conditions, teams with systematic knowledge utilization protocols demonstrated decision performance scores 27% higher than those without such systems, while this gap narrowed to 9% under low uncertainty conditions. This interaction effect suggests that knowledge utilization capabilities become particularly critical in volatile decision contexts.

Castañeda and Durán (2021) analyzed data from 173 public and private organizations across eight European countries (Spain, France, Germany, Italy, Netherlands, Poland, Sweden, and the United Kingdom), finding that public sector organizations reported significantly lower knowledge utilization scores in decision processes compared to private counterparts (mean

difference = 0.83, $p < 0.001$). Their regression analysis identified bureaucratic structures and procedural rigidity as key impediments to effective knowledge utilization in decision making within European public organizations. In contrast, private sector organizations with flatter hierarchies demonstrated substantially higher knowledge application rates in both operational and strategic decisions.

Chaudhuri et al. (2021) surveyed 241 organizations across five Asian countries (China, Japan, South Korea, Singapore, and India), finding that knowledge utilization in Chinese firms was predominantly directed toward operational decisions (68.4% of knowledge application instances), while Japanese firms showed more balanced utilization patterns across strategic and operational domains. Their hierarchical regression analysis revealed that national cultural factors, particularly power distance and uncertainty avoidance, significantly predicted knowledge utilization patterns ($R^2 = 0.37$, $p < 0.001$), highlighting the cultural embeddedness of how knowledge assets are leveraged in decision processes.

In the broader African context, Ugwu et al. (2022) collected data from 187 organizations across seven sub-Saharan countries (Nigeria, Ghana, Kenya, Tanzania, Uganda, Rwanda, and South Africa), documenting significantly higher reliance on tacit knowledge utilization compared to explicit knowledge in decision processes ($t = 4.72$, $p < 0.001$). Their qualitative interviews revealed that limited technological infrastructure and documentation systems constrained explicit knowledge utilization, while robust social networks facilitated tacit knowledge flows into decision forums. This finding highlights contextual factors that shape utilization pathways in developing economies.

Building on this work, Nunes et al. (2022) analyzed survey data from 149 organizations across four North African countries (Egypt, Tunisia, Morocco, and Algeria), demonstrating that knowledge utilization in decision processes was significantly influenced by leadership

approaches, with transformational leadership styles showing strong positive associations with utilization breadth ($\beta = 0.39$, $p < 0.001$) and depth ($\beta = 0.42$, $p < 0.001$).

Regional studies specifically examining East Africa provide important context for understanding knowledge utilization dynamics in settings similar to Somalia. Mosoti and Masheka (2020) collected data from 156 organizations across Kenya, Tanzania, and Uganda, with specific focus on organizations in Nairobi, Dar es Salaam, and Kampala. They found that organizations with formalized knowledge management systems reported significantly higher knowledge utilization for strategic decisions compared to those without such systems ($F = 12.37$, $p < 0.001$). Their regression analysis revealed that technological readiness explained 29% of the variance in knowledge utilization patterns, with digitally mature organizations demonstrating more systematic application of knowledge assets in both routine and non-routine decisions.

Research specifically examining Somalia is limited but offers crucial contextual insights. Ahmed et al. (2021), a team including several Somali researchers, conducted a mixed-methods study of 37 organizations operating in Somalia, primarily in Mogadishu, Hargeisa, and Kismayo. They found that security concerns significantly influenced knowledge utilization patterns in decision making, with organizations in higher-risk regions showing greater reliance on internal knowledge sources compared to external sources ($\chi^2 = 9.47$, $p < 0.01$). Their qualitative interviews revealed that environmental instability created unique knowledge utilization challenges, with decision-makers often prioritizing experiential knowledge over documented knowledge due to rapidly changing conditions. This finding highlights the contextual specificity of knowledge utilization patterns in fragile states.

In a rare longitudinal study focused on Somalia, Hassan and Hussein (2023), Somali researchers based at local universities, tracked knowledge utilization patterns across 22 Somali

organizations in Mogadishu, Bosaso, and Baidoa over an 18-month period. They documented that, improvements in technological infrastructure correlated significantly with increased explicit knowledge utilization in decision processes ($r = 0.37$, $p < 0.05$). Their regression analysis demonstrated that organizations implementing digital knowledge management systems experienced a 28% increase in the diversity of knowledge sources considered in strategic decisions, suggesting that technological interventions may help overcome some contextual barriers to comprehensive knowledge utilization in the Somali context.

Abdullah and Farah (2022) examined knowledge utilization in public sector organizations across different regions of Somalia, including Puntland and Somaliland. Their comparative analysis of 19 governmental agencies found significant regional variations in how knowledge resources were incorporated into policy decisions ($F = 8.94$, $p < 0.01$), with agencies in more stable regions demonstrating more systematic knowledge utilization processes. The study highlighted how regional governance differences within Somalia created distinct knowledge utilization environments even within the same national context.

Ibrahim et al. (2023) conducted field research specifically in Garowe and surrounding Puntland communities, examining how traditional knowledge systems interact with formal organizational knowledge in 16 local institutions. Their findings revealed unique hybrid knowledge utilization patterns where clan-based knowledge networks significantly influenced which knowledge was deemed credible and applicable to decision processes ($p < 0.01$). This study provided valuable insights into the distinctly Somali cultural dimensions of knowledge utilization.

The empirical literature reveals several consistent patterns regarding knowledge utilization's influence on organizational decision making, while also highlighting important contextual variations. Globally, structured knowledge utilization processes consistently demonstrate

positive associations with decision quality metrics, with this relationship particularly pronounced under conditions of environmental uncertainty. Regionally, utilization patterns vary considerably based on cultural factors, technological infrastructure, and institutional contexts.

In the Somali context specifically, unique challenges related to environmental instability shape utilization patterns, with particular emphasis on tacit and experiential knowledge in decision processes. Studies conducted in various regions of Somalia (Mogadishu, Hargeisa, Kismayo, Bosaso, Baidoa, Garowe, and broader Puntland and Somaliland regions) reveal how geographical differences within the country create distinct knowledge utilization environments, influenced by security conditions, governance structures, and technological infrastructure.

These empirical findings collectively suggest that knowledge utilization represents a critical organizational capability with significant implications for decision effectiveness across contexts. However, the optimal approach to fostering effective knowledge utilization appears contextually contingent, requiring alignment with both organizational characteristics and environmental conditions. This contextual sensitivity highlights the need for future research examining knowledge utilization through contingency perspectives rather than seeking universal best practices, particularly in under-researched contexts like Somalia where regional variations create diverse organizational environments.

2.7. Theoretical Review

This study is anchored in two complementary theoretical lenses: Nonaka and Takeuchi's SECI model of knowledge conversion (1995) and contemporary decision-making theory as articulated by Nutt and Wilson (2010). Together, these frameworks offer a robust basis for analyzing how explicit knowledge systems influence humanitarian decision-making in complex operational environments such as Somalia. Each theory informs specific variables

examined in this study and provides conceptual guidance for understanding their interrelationships.

2.7.1. SECI Model of Knowledge Conversion

The SECI Model, developed by Nonaka and Takeuchi in 1995, provides a foundational framework for understanding knowledge creation and transformation within organizations. This model conceptualizes knowledge conversion through four interconnected modes that form a continuous spiral: Socialization (tacit to tacit), Externalization (tacit to explicit), Combination (explicit to explicit), and Internalization (explicit to tacit) (Nonaka et al., 1996). The model represents knowledge creation as a dynamic process where tacit and explicit knowledge interact and transform through these four conversion modes, continuously expanding the organization's knowledge base both qualitatively and quantitatively.

In the Socialization phase, individuals share tacit knowledge through direct experiences, observation, and practice. The Externalization phase involves articulating tacit knowledge into explicit concepts through dialogue, reflection, and codification. During the Combination phase, different bodies of explicit knowledge are systematized and integrated to form more complex knowledge sets. Finally, in the Internalization phase, individuals absorb explicit knowledge and convert it into tacit knowledge through application and embodied practice.

The SECI model directly informs three key variables examined in this study: The model's Socialization and Externalization phases specifically inform this variable by explaining how tacit knowledge from field experiences in Somalia is identified and converted into explicit, documented forms at NRC. As highlighted by Adesina and Ocholla (2019), the externalization process converting tacit knowledge to explicit forms remains particularly challenging in resource-constrained environments such as Somalia. Their study revealed significant barriers to effective knowledge documentation in developing countries, including time constraints,

inadequate technological infrastructure, and limited standardization of documentation practices. These findings have important implications for humanitarian organizations operating in Somalia, suggesting that specific interventions are needed to overcome barriers to knowledge externalization. The theoretical components of externalization inform how NRC's acquisition processes should be structured to effectively capture field-based tacit knowledge.

The Combination phase of the SECI model directly informs this variable by providing a theoretical basis for understanding how discrete pieces of explicit knowledge should be organized and integrated within NRC's knowledge repositories. Nakayama et al. (2021) demonstrated in their study of digital knowledge management systems that organizations effectively managing the combination process achieved greater standardization of operational procedures and enhanced decision-making efficiency. This theoretical perspective guides the examination of how NRC Somalia organizes and categorizes its explicit knowledge assets to facilitate effective retrieval and application.

Both the Combination and Internalization phases inform this variable by providing a theoretical framework for understanding how explicit knowledge should be disseminated and absorbed across NRC's operations in Somalia. Vătămănescu and Dinu (2023) expanded on the application of the SECI model in crisis management settings, highlighting how disruptions to organizational routines affect knowledge conversion processes. Their study demonstrated that organizations with established knowledge management systems that facilitate the continuous conversion between tacit and explicit knowledge demonstrated greater resilience during crisis situations. However, they also noted that the model's assumption of organizational stability may not fully align with the realities of volatile operational environments like Somalia, necessitating adaptations to standard knowledge sharing approaches.

While the SECI model provides valuable insights into knowledge transformation processes, several scholars have highlighted limitations in its application to humanitarian contexts. Charles (2022) noted that the model's emphasis on formal knowledge conversion processes may overlook the importance of informal knowledge sharing mechanisms that often emerge in response to operational constraints in humanitarian settings like Somalia. They argued for a more nuanced understanding of knowledge dynamics that acknowledges both formal and informal knowledge pathways, particularly in contexts characterized by infrastructure limitations and resource constraints.

Despite these critiques, the SECI model remains relevant to this study as it highlights the importance of systematic approaches to knowledge conversion in supporting organizational decision-making in humanitarian contexts. The model's emphasis on explicit knowledge as a critical resource that can be systematically managed, stored, and utilized aligns with this study's focus on explicit knowledge management practices at NRC Somalia. By examining how the organization facilitates the conversion of tacit knowledge into explicit forms and how this explicit knowledge is subsequently combined and internalized, this study can identify opportunities for enhancing knowledge management practices to support more effective decision-making in complex humanitarian operations.

2.7.2. Decision-Making Theory

Decision-Making Theory, particularly as articulated by Nutt and Wilson (2010) and further developed by contemporary scholars, provides a structured framework for understanding organizational decision processes in complex environments. This theoretical approach conceptualizes decision-making as a systematic process comprising distinct stages: problem identification, alternative generation, evaluation of options, and implementation monitoring (Driscoll, 2022). Unlike earlier rational choice models, contemporary decision theory

acknowledges the bounded rationality of decision-makers and emphasizes the role of information access and knowledge utilization in enhancing decision quality and implementation effectiveness.

The theory proposes that decision quality is determined by several factors: the comprehensiveness of information considered, the diversity of alternatives generated, the rigor of evaluation processes, and the effectiveness of implementation and monitoring mechanisms. In complex environments characterized by uncertainty and time constraints—such as humanitarian operations in Somalia—this staged approach to decision-making provides a valuable framework for understanding how explicit knowledge supports each phase of the decision process.

Decision-Making Theory directly informs two key variables examined in this study: This theory informs the knowledge utilization variable by providing a framework for understanding how explicit knowledge is incorporated into each stage of NRC Somalia's decision processes. Sinnaiah et al. (2023) examined decision-making processes in complex organizational environments, highlighting the critical role of explicit knowledge in supporting each stage of the decision process. Their study demonstrated that organizations with robust documentation systems identified problems more accurately, generated more diverse alternatives, evaluated options more systematically, and implemented decisions more effectively than those relying primarily on tacit knowledge. These findings suggest that explicit knowledge management practices directly influence decision-making effectiveness in complex operational contexts like Somalia. The theoretical components related to how knowledge feeds into each decision stage provide specific guidance for examining NRC's knowledge utilization practices.

Decision-Making Theory provides the theoretical foundation for understanding the dependent variable of this study. Hock-Doepgen et al. (2021) explored the relationship between

knowledge management capabilities and strategic decision-making in uncertain environments, finding that organizations with formalized knowledge systems demonstrated greater adaptability and responsiveness to changing conditions. Their study revealed that explicit knowledge repositories enabled decision-makers to access relevant historical data, lessons learned, and best practices, reducing decision time and improving outcome predictability in volatile contexts similar to Somalia. However, they also noted that overreliance on documented procedures could potentially limit innovation and adaptability if not balanced with mechanisms for incorporating new insights and evolving practices a particularly important consideration in dynamic humanitarian environments.

The application of Decision-Making Theory to humanitarian contexts has received limited attention in existing literature. However, Simm (2021) provided valuable insights through the examination of decision-making processes in humanitarian response operations. This study highlighted how information constraints, time pressure, and coordination challenges affect decision quality in emergency settings. Organizations with established knowledge management systems were better equipped to navigate complexity and uncertainty, though standard decision models often required adaptation to account for the unique characteristics of humanitarian operations findings directly relevant to NRC Somalia's context.

Okoli and Hatami-Marbini (2021) investigated the role of explicit knowledge in strategic decision-making during crises, finding that access to codified organizational knowledge enhanced decision-makers' ability to respond effectively to novel challenges. Their study demonstrated that explicit knowledge served as a reference point for evaluating new situations against historical patterns, enabling more systematic assessment of risks and opportunities. This finding has important implications for organizations operating in volatile environments

like Somalia, suggesting that investment in explicit knowledge management systems can enhance organizational resilience and adaptability.

While Decision-Making Theory provides valuable insights into structured decision processes, some scholars have questioned its applicability to highly dynamic humanitarian contexts. Schiffling (2022) argued that the theory's assumption of rationality and linearity may not fully account for the complexity and uncertainty inherent in humanitarian operations in contexts like Somalia. Schiffling suggested that decision-making in such contexts often involves intuitive judgments and adaptive responses that may not follow the sequential logic proposed by traditional decision models. Similarly, Hallo and Nguyen (2021) highlighted the importance of recognizing both analytical and intuitive decision processes in complex operational environments, suggesting that effective decision-making may require integration of multiple approaches an insight particularly relevant to NRC's operations in Somalia's volatile context.

Despite these critiques, Decision-Making Theory remains relevant to this study as it provides a structured framework for examining how explicit knowledge management practices support different stages of the decision process at NRC Somalia. By analyzing how documented knowledge influences problem identification, alternative generation, evaluation, and implementation, this study can identify opportunities for enhancing decision effectiveness through improved knowledge management practices that acknowledge the unique challenges of humanitarian operations in fragile contexts.

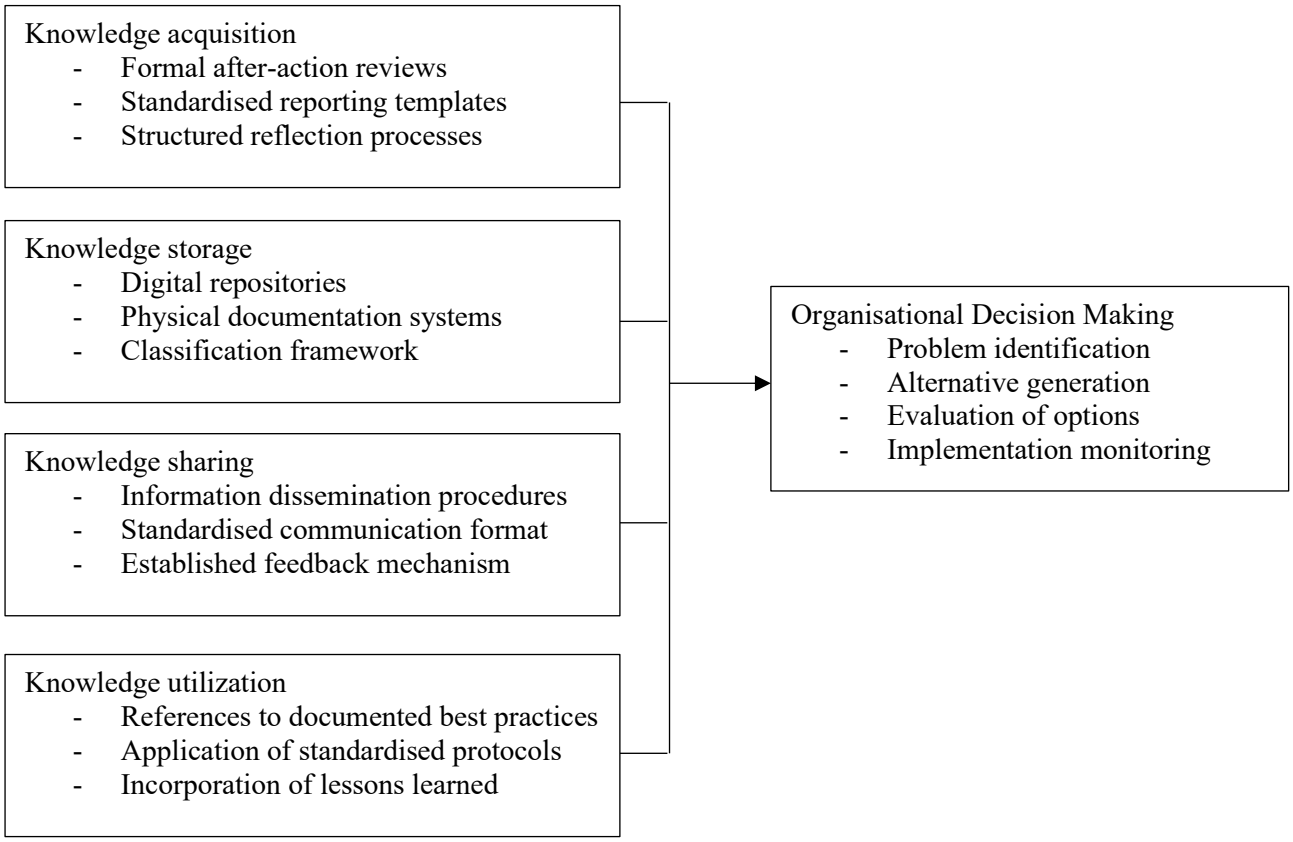
2.8. Conceptual Framework

The conceptual framework for this study integrates key elements from the literature reviewed, establishing the theoretical relationship between explicit knowledge management practices and organizational decision-making at the Norwegian Refugee Council in Somalia. The framework draws on the SECI Model of Knowledge Conversion and Decision-Making Theory, adapting

these theoretical foundations to the specific context of humanitarian operations in a complex emergency environment.

Figure 2. 1

Conceptual Framework



The framework posits that effective organizational decision-making in humanitarian contexts is influenced by four key dimensions of explicit knowledge management: documented knowledge acquisition processes, formal knowledge storage mechanisms, standardized knowledge sharing practices, and systematic knowledge utilization. These dimensions represent the independent variables in the study, with organizational decision-making as the dependent variable.

Documented knowledge acquisition processes encompass the systematic approaches used by NRC Somalia to collect and document operational experiences, lessons learned, and best

practices. This includes formal after-action reviews, standardized reporting templates, and structured reflection processes. The framework suggests that organizations with robust knowledge acquisition processes will have more comprehensive and relevant information available to support decision-making.

Formal knowledge storage mechanisms refer to the systems and structures used to organize and maintain explicit knowledge within the organization. This includes digital repositories, physical documentation systems, and classification frameworks that enable efficient retrieval of relevant information. The framework proposes that effective storage mechanisms improve the accessibility and usability of explicit knowledge, enhancing its contribution to decision-making processes.

Standardized knowledge sharing practices involve the formal channels and protocols through which explicit knowledge is distributed across the organization. This includes regular information dissemination procedures, standardized communication formats, and established feedback mechanisms. The framework suggests that consistent knowledge sharing practices ensure that decision-makers at all levels have access to relevant information when needed.

Systematic knowledge utilization represents the integration of explicit knowledge into formal decision processes. This includes reference to documented best practices, application of standardized protocols, and incorporation of lessons learned into current operations. The framework proposes that organizations systematically utilizing explicit knowledge in their decision processes will achieve more consistent and effective outcomes.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter outlines the methodological framework that will guide this study. It provides a detailed description of the research philosophy, design, location, population, sampling techniques, research instruments, data collection procedures, operational definition of variables, data analysis methods, and ethical considerations. The chapter is structured to present a comprehensive and coherent research approach that will effectively address the research questions and objectives.

3.2. Location of the Study

The study was conducted within the Norwegian Refugee Council's operations in Somalia, encompassing their coordination office in Mogadishu and field offices across South Central Somalia, Puntland, and Somaliland. NRC Somalia was selected as the study site for several compelling reasons. First, as one of the largest humanitarian organizations operating in Somalia, NRC implements complex multi-sectoral programs including education, shelter, livelihoods, and water and sanitation (NRC, 2022), which require robust knowledge management systems to ensure effective decision-making in a challenging operational environment.

Second, Somalia presents a unique context for studying knowledge management in humanitarian response due to its protracted crisis situation, which demands adaptive and informed decision-making processes. The volatile security situation, recurrent humanitarian emergencies, and the need for rapid program adjustments make knowledge management particularly critical for operational effectiveness in this context (Hammond & Vaughan-Lee, 2012).

Third, the researcher's professional engagement with NRC Somalia facilitates access to the organization's various operational sites and decision-making levels, ensuring the feasibility of comprehensive data collection. This aligns with Yin's (2018) criteria for case study site selection, which emphasizes the importance of choosing a location where the phenomenon under study is prominently observable and accessible.

The geographical distribution of NRC's operations across different regions of Somalia also allows for examining how knowledge management practices may vary across different operational contexts within the same organization, providing richer insights into the contextual factors influencing knowledge management effectiveness.

3.3. Research Philosophy

This study is grounded in pragmatism as its philosophical underpinning. Pragmatism, as described by Dube et al. (2024), offers a practical approach to research which values both objective and subjective knowledge, focusing on what works best to address the research problem. This philosophical stance acknowledges that knowledge is both constructed and based on the reality of the world in which people live and work. According to Gillespie et al. (2024), pragmatism provides the philosophical basis for mixed-methods research by focusing on the research problem and using pluralistic approaches to derive knowledge about the problem.

The adoption of pragmatism for this study is justified by several considerations. First, pragmatism allows for methodological flexibility, enabling the researcher to choose methods, techniques, and procedures that best meet the research needs and purposes (Foster, 2023). Since knowledge management in organizational decision-making encompasses both objective practices and subjective experiences, pragmatism provides the philosophical space to explore both dimensions.

Second, pragmatism emphasizes the consequences of research and the importance of practical applications. This aligns with the study's objective of understanding how knowledge management practices influence decision-making effectiveness in a practical humanitarian context. As noted by Saunders et al. (2019), pragmatism focuses on research outcomes and their practical implications, making it suitable for organizational research that aims to improve practices.

Third, pragmatism supports the integration of different perspectives and methods. According to Allemang et al. (2022), pragmatism offers a middle ground between philosophical dogmatisms and scepticism, promoting methodological pluralism. This is crucial for this study, which seeks to understand both the measurable aspects of knowledge management practices and the contextual nuances of their implementation in a humanitarian organization.

3.4. Research Design

This study utilized an explanatory sequential design to examine knowledge management practices and their influence on decision-making effectiveness within organizational settings. The explanatory sequential design provides a structured yet flexible methodological framework where quantitative data collection and analysis precede and inform subsequent qualitative inquiry, allowing quantitative results to guide the qualitative phase toward areas requiring deeper exploration and understanding (Bakhsh et al., 2024). This design choice was justified by the multifaceted nature of organizational knowledge management, which necessitates both measurable assessment through quantitative methods and contextual understanding through qualitative investigation (Toyon, 2021; Zhou et al., 2024).

The critical integration points where quantitative and qualitative phases marry occurs during the analysis and interpretation of quantitative findings, which directly inform the development and refinement of qualitative data collection instruments. Specifically, quantitative results

revealing significant relationships, unexpected patterns, or areas requiring clarification will shape the focus and content of qualitative interviews. Statistical findings indicating strong correlations between specific knowledge management practices and decision-making outcomes will prompt deeper qualitative exploration of the mechanisms underlying these relationships, while non-significant or surprising results will guide interview questions seeking to understand contextual factors that may explain these findings.

The design further enables methodological triangulation, strengthening validity through multiple data collection methods and analytical approaches, particularly valuable when self-reported quantitative data requires contextual enrichment (Draucker et al., 2020). Additionally, this design effectively balances confirmatory study aims through quantitative testing of theoretical relationships with exploratory aims through qualitative investigation of organizational nuances and contextual factors that standardized instruments cannot adequately capture (Kimmons, 2022).

The study employed a mixed methods approach to implement this design, beginning with comprehensive surveys measuring knowledge management practices and decision-making effectiveness across all organizational levels (Riazi & Farsani, 2023). Statistical analysis of this quantitative data identified significant relationships and patterns, highlighting areas requiring deeper qualitative investigation (Hampson & McKinley, 2023). Following this initial phase, semi-structured interviews and document reviews were conducted, with purposeful sampling based on quantitative results to explore key findings from the first phase (Dube et al., 2024).

The qualitative phase interview guide was specifically tailored based on quantitative results, ensuring that areas where quantitative analysis reveals strong correlations are explored through detailed interviews seeking to understand underlying mechanisms. Organizational levels or

locations showing significantly different quantitative patterns will be targeted for qualitative exploration of contextual factors. Non-significant or unexpected quantitative findings guided interview questions seeking alternative explanations or mediating factors, while specific knowledge management practices showing high or low effectiveness ratings were explored through detailed qualitative inquiry into implementation challenges and success factors.

The final stage involved synthesizing findings from both quantitative and qualitative phases to develop a comprehensive understanding of knowledge management's role in organizational decision-making, with particular attention to areas of convergence and divergence between data sets (Gillespie et al., 2024). This integration ensured that the explanatory sequential design achieves its intended purpose of using quantitative breadth to inform qualitative depth, creating comprehensive understanding of how knowledge management systems function within the organization and their impact on decision-making processes at various organizational levels (Elgeddawy & Abouraia, 2024).

The integration of findings yielded both breadth and depth in understanding how knowledge management systems function within the organization and their impact on decision-making processes at various organizational levels, while specifically addressing the unique challenges and opportunities present in NRC Somalia's complex humanitarian operational context.

3.5. Target Population

The target population for this study consisted of NRC Somalia staff involved in program management, implementation, and decision-making processes. The population included; Country management team (10 members), Program specialists and managers (20 members), Support unit (HR, Admin, Logistics, Compliance, and Finance) (20 members), Operation unit managers and coordinators (20 members), Project field staff (30 members). The total target

population is therefore 100 staff members, representing various levels of decision-making and knowledge management roles within the organization.

This population was selected based on several criteria. First, it encompasses staff across all organizational levels, from senior management to field implementation, which is essential for understanding how knowledge management practices permeate throughout the organization and influence decision-making at different levels. Second, it includes both program and support staff, recognizing that knowledge management is not limited to technical program knowledge but also includes operational, administrative, and contextual knowledge (Schwartz, 2006). Third, the inclusion of staff from different geographical locations within Somalia allows for examining how knowledge management practices may be adapted to different operational contexts.

The characteristics of this population made it particularly suitable for this study as it represents the full spectrum of knowledge workers within a humanitarian organization, involved in generating, storing, sharing, and utilizing knowledge for decision-making purposes in a complex operational environment.

3.6. Sampling Procedure

This study adopted a sampling strategy that combines census approach for the quantitative component and purposive sampling for the qualitative component. For the quantitative phase, a census approach was employed, targeting all 100 staff members identified in the target population. This approach was justified by several considerations: the relatively small size of the target population (N=100) makes a census approach feasible and eliminates sampling error (Israel, 2020); including all staff members ensures comprehensive representation across organizational levels, functions, and geographical locations (Saunders et al., 2019); and a

census approach maximizes the sample size, enhancing the statistical power for detecting significant relationships between variables (Field, 2020).

For the qualitative phase, purposive sampling was used to select 15-20 key informants from the target population. The selection was guided by the following criteria: hierarchical position, ensuring representation from different organizational levels to capture varied perspectives on knowledge management and decision-making; functional role, including staff from diverse functional areas (programs, operations, support services) to understand knowledge management across different organizational functions; tenure duration, selecting staff with varying lengths of service with NRC to capture both established and emerging knowledge management practices; geographical distribution, including staff from different operational locations to understand how context influences knowledge management practices; and gender balance, ensuring balanced gender representation to capture potentially different experiences and perspectives. This purposive sampling approach aligns with Creswell and Poth's (2018) guidelines for qualitative studies, which emphasizes selecting information-rich cases that can provide in-depth understanding of the phenomenon under study.

3.6.1. Sample Size Determination

For the quantitative component, the study employed a census approach targeting all 100 staff members in the identified population. This comprehensive inclusion strategy aligns with contemporary methodological recommendations for organizational research when population sizes permit complete enumeration. As demonstrated by Taherdoost (2022), census approaches in organizational studies with populations under 200 members provide superior statistical power and eliminate sampling bias, particularly crucial when examining complex phenomena like knowledge management practices across hierarchical levels.

The qualitative component sample size determination followed Hennink and Kaiser's (2022) empirically-derived formula for achieving saturation in organizational studies. Their systematic analysis of 24 in-depth interview studies established a mathematical approach to sample size calculation:

$$n = (D \times P) / S$$

Where n represents required sample size, D indicates diversity of population (rated 1-3), P denotes number of distinct population strata, and S represents the expected saturation point coefficient (typically 0.9 for organizational studies).

For this study, the calculation parameters were: D = 3 (high diversity given varied roles, locations, and tenure), P = 5 (five distinct organizational strata: country management, program specialists, support unit, operation managers, field staff), and S = 0.9 (standard coefficient for organizational research). Therefore: n = (3 × 5) / 0.9 = 16.7 ≈ 17 participants minimum.

The formula's output aligns with Hennink and Kaiser's (2022) findings that organizational studies typically achieve code saturation at 9-12 interviews and meaning saturation at 16-20 interviews. Their distinction between code saturation (identifying all relevant codes) and meaning saturation (fully understanding code dimensions) is particularly relevant for this study's complex knowledge management constructs. The target range of 15-20 participants therefore exceeds the minimum calculated requirement while allowing flexibility to continue recruitment if novel themes emerge during later interviews, ensuring both statistical rigor and theoretical comprehensiveness in exploring knowledge management practices across NRC Somalia's diverse operational contexts. Table 3.1 illustrates the distribution of the selected sample.

Table 3. 1

Target Population Distribution

Organizational Level	Total Population	Qualitative Sample
Country management	10	3-4
Program specialists & managers	20	4-5
Support unit	20	3-4
Operation unit managers & coordinators	20	3-4
Project field staff	30	2-3
Total	**100**	**15-20**

3.7. Instrumentation

Data collection utilized two primary instruments: a structured questionnaire for quantitative data collection and a semi-structured interview guide for qualitative data collection. Both instruments were developed following established psychometric principles and validated through pilot testing to ensure reliability and validity within the study context (Mohajan, 2020; Taherdoost, 2022). Document analysis was used in the collection of secondary data.

3.7.1 Questionnaire

A structured questionnaire was developed to collect quantitative data measuring the frequency, intensity, and perceived effectiveness of knowledge management practices and decision-making processes from Support Unit Staff, Operation Unit Managers and Coordinators, and Project Field Staff. The structured questionnaire collected numerical data on specific variables including the frequency of knowledge acquisition activities (measured on 5-point Likert

scales), effectiveness ratings of storage mechanisms, utilization patterns of documented knowledge, and perceived quality of organizational decision-making processes.

The questionnaire served a critical role in the explanatory sequential design by providing systematic measurement across the entire organizational population, establishing baseline patterns and relationships that guide subsequent qualitative inquiry. Specifically, the structured questionnaire enabled identification of statistically significant relationships between knowledge management practices and decision-making effectiveness, reveals variations in perceptions across different organizational levels and locations, and highlighted areas where quantitative findings require qualitative explanation or elaboration.

The questionnaire development process followed established protocols for instrument construction, beginning with extensive literature review to identify validated scales and measurement approaches for knowledge management and decision-making constructs (DeVellis, 2021; Netemeyer et al., 2019). Item generation drew from multiple theoretical frameworks and empirical studies, ensuring comprehensive coverage of relevant constructs while maintaining parsimony to minimize respondent burden (Hinkin, 2019).

The questionnaire comprised of five main sections designed to capture quantitative data systematically:

Section A: Demographic Information collected data on respondent characteristics including current position, tenure with the organization, educational background, previous organizational experience, and operational location. This information enabled analysis of variations in responses across different organizational contexts and individual characteristics (Creswell & Creswell, 2020).

Section B: Knowledge Acquisition Practices measured knowledge acquisition activities using a modified version of Gold et al. (2021) Knowledge Management Assessment Instrument, comprising 10 items measured on a 5-point Likert scale ranging from "Never" (1) to "Always" (5). Items assessed frequency and effectiveness of knowledge acquisition through formal training, informal learning, external sources, and experiential learning processes. Example items include "The organization systematically captures lessons learned from operational experiences" and "Staff regularly participate in formal knowledge acquisition activities."

Section C: Knowledge Storage Mechanisms assessed storage system effectiveness through 8 items adapted from Rogozińska-Pawełczyk and Wiktorowicz (2024), measuring accessibility, organization, and utility of storage systems using 5-point Likert scales. Items evaluated both technological and procedural storage mechanisms, measuring perceptions of system effectiveness, ease of use, and reliability. Representative items included "Organizational knowledge is stored in easily accessible formats" and "Storage systems effectively preserve institutional memory."

Section D: Knowledge Sharing Practices evaluated sharing mechanisms using 12 items from Fischer (2024), measuring frequency, effectiveness, and satisfaction with formal and informal sharing mechanisms on 5-point Likert scales. Items assessed cross-departmental sharing, vertical communication, and horizontal knowledge transfer processes. Sample items included "Knowledge is effectively shared across different organizational levels" and "Staff regularly participate in knowledge sharing activities."

Section E: Decision-Making Effectiveness measured decision-making quality, timeliness, and outcomes using Dean and Sharfman's (2018) Strategic Decision-Making Effectiveness Scale, comprising 10 items on 5-point Likert scales. Items assessed procedural effectiveness, outcome quality, and stakeholder satisfaction with decision processes. Example items included

"Decisions are made within appropriate timeframes" and "Decision-making processes effectively incorporate available knowledge."

Content validity was established through expert review involving three knowledge management specialists and two decision-making researchers who evaluated item relevance, clarity, and comprehensiveness (Almanasreh et al., 2019). Face validity was assessed through cognitive interviews with 5-7 organizational representatives to ensure item clarity and cultural appropriateness (Willis, 2020).

The questionnaire underwent pilot testing with 18 participants representing different organizational levels to assess reliability, validity, and practical administration considerations (van Teijlingen & Hundley, 2021). Pilot data was analyzed for internal consistency using Cronbach's alpha, with acceptable reliability coefficients set at $\alpha \geq 0.70$ for each scale (Tavakol & Dennick, 2021). Item-total correlations were examined to identify poorly performing items requiring revision or elimination. A draft questionnaire is given in Appendix III.

3.7.2 Interview Guide

A semi-structured interview guide was developed for collecting qualitative data from Country Management Team and Program Specialists. Semi-structured interviews utilized pre-determined open-ended questions that provide consistent coverage of key topics while maintaining flexibility to explore emerging themes and pursue clarification of responses (Kallio et al., 2020). This approach is particularly important for explanatory sequential design because it ensures that quantitative findings directly inform the qualitative phase through targeted questions that seek to explain statistical relationships, explore unexpected findings, and understand contextual factors that influence the quantitative patterns identified.

The interview guide was specifically informed by quantitative data analysis results in several ways: areas where quantitative analysis reveals strong correlations prompted interview questions exploring the mechanisms underlying these relationships; organizational levels or locations showing significantly different quantitative patterns were targeted for qualitative exploration of contextual factors; non-significant or unexpected quantitative findings guided interview questions seeking alternative explanations or mediating factors; and specific knowledge management practices showing high or low effectiveness ratings were explored through detailed qualitative inquiry into implementation challenges and success factors.

The interview guide development followed systematic procedures for qualitative instrument construction, beginning with theoretical framework analysis to identify key constructs requiring qualitative exploration (Patton, 2020). Question development was informed by research objectives, literature review findings, and preliminary quantitative results to ensure comprehensive coverage of relevant topics while maintaining focus on study aims.

The pre-determined open-ended questions covered the following thematic areas, with specific question content refined based on quantitative results:

Knowledge Management Practices explored how knowledge is acquired, stored, shared, and utilized within the organization through questions such as “How does your organization typically acquire new knowledge relevant to decision-making?” and “What factors influence the effectiveness of knowledge sharing in your department?” Particular attention was given to practices identified as most or least effective in quantitative analysis.

Contextual Factors examined organizational, individual, and environmental factors influencing knowledge management practices through questions exploring organizational culture, resource availability, technological infrastructure, and external pressures. These questions particularly

focused on factors that explain variations identified in quantitative data across different organizational levels or locations.

Decision-Making Processes explored how decisions are made at different organizational levels and how knowledge informs these processes through detailed process mapping questions and exploration of information sources. Focus was placed on mechanisms showing strong quantitative relationships between knowledge management and decision-making effectiveness.

Perceived Effectiveness assessed participants' perceptions of current knowledge management practices' effectiveness in supporting decision-making through evaluative questions seeking explanations for effectiveness ratings provided in quantitative responses and identification of improvement areas.

Challenges and Opportunities explored barriers to effective knowledge management and opportunities for improvement through questions guided by areas of concern identified through quantitative analysis, including resource constraints, technological limitations, and organizational culture factors.

Interview questions were structured using funnel sequencing, beginning with broad, descriptive questions before progressing to specific, analytical questions (Rubin & Rubin, 2021). Probing questions were developed to encourage elaboration and clarification, ensuring comprehensive data collection while maintaining interview flow and participant engagement.

The interview guide underwent validation through expert review and pilot testing with 3-5 participants to assess question clarity, cultural appropriateness, and interview duration (Yeong et al., 2018). Feedback informed interview guide refinement to ensure effective data collection while respecting participant time constraints and organizational context. See Appendix IV.

3.7.3 Document Analysis Protocol

A structured document analysis protocol was developed following systematic frameworks for organizational document review, incorporating comprehensive selection and quality assessment criteria to ensure methodological rigor and analytical relevance. Recent literature emphasized that a literature review protocol is critically essential for extensive systematic reviews as it decreases the likelihood of researcher bias in data selection and analysis (Ghanbari et al., 2023). Template structures for document analysis method protocols enhance research transparency (Open Science Framework, 2022). The protocol guided systematic examination of organizational policies, meeting minutes, program documents, and communication records related to knowledge management and decision-making processes. As noted in recent guidance, document analysis involves examining and interpreting documents to gain insights and understanding about a particular topic or research question, offering advantages such as time and cost-effectiveness, widespread availability of documents online, and lack of obtrusiveness and reactivity (Guðjónsdóttir & Óskarsdóttir, 2023).

Primary selection criteria included relevance (explicit references to knowledge management dimensions or decision-making processes), authenticity (verified organizational authorship with institutional approval), credibility (currency within two years or demonstrated ongoing relevance), and completeness (substantive content sufficient to address research questions). Effective organizational analysis focused on identifying strengths that can be leveraged in goal-setting and developmental areas that need improvement to isolate certain objectives and allocate resources in strategic planning (Academy to Innovate Human Resource, 2024). Secondary criteria encompassed accessibility (ethical compliance without confidentiality violations), appropriate language and format specifications, and organizational-level scope rather than individual-specific content. Quality assessment prioritized recent documents

reflecting current practices, authoritative sources from senior management levels, comprehensive procedural descriptions over summary statements, and internally coherent materials demonstrating organizational alignment. Documents were analyzed for their policy and program development and implementation; data collection and analysis; and stakeholder outreach and education components (U.S. Office of Personnel Management, 2024).

Exclusion criteria eliminated personal communications, unapproved drafts, sensitive security materials, purely administrative content, and non-translatable documents. The protocol included systematic coding categories aligned with research questions, examining knowledge acquisition, storage, sharing, and utilization practices alongside decision-making mechanisms, while maintaining sensitivity to contextual factors influencing implementation in Somalia's challenging humanitarian environment. Document analysis was carried out automatically up to a certain level, but for greater sophistication and a richer database and directory creation, human intervention is required (as noted in International Encyclopaedia of Education, 2023). Through meticulous examination of selected articles, discerning patterns of recurring concepts and focal points within organizational culture surface, leading to natural categorization (Organizational Culture systematic review, 2024). This systematic approach aligns with current best practices in organizational document analysis, see Appendix V.

3.7.4 Validity of Research Instruments

The validity of research instruments was established through multiple complementary approaches to ensure comprehensive measurement accuracy. Content validity was evaluated through systematic expert review involving five subject matter experts comprising three knowledge management practitioners from humanitarian organizations and two academic specialists in organizational behavior, following the enhanced Delphi method described by Niederberger and Spranger (2022). These experts assessed whether the instrument items

adequately represent all facets of explicit knowledge management and decision-making constructs within humanitarian contexts, ensuring domain representativeness and conceptual alignment with theoretical frameworks.

Face validity was established through cognitive interviewing techniques with a subset of target respondents, employing the think-aloud protocol recommended by Peterson et al. (2023) to verify that questionnaire items are interpreted as intended and appear relevant to participants' experiences. This process involves participants verbalizing their thought processes while completing the instrument, revealing potential ambiguities or misinterpretations that require refinement.

Construct validity was assessed through confirmatory factor analysis following instrument deployment, applying the rigorous structural equation modelling procedures outlined by Kline (2023). The analysis examined whether latent constructs of knowledge acquisition, storage, sharing, and utilization demonstrate expected factor loadings above 0.70 and discriminant validity through heterotrait-monotrait ratios below 0.85, as recommended by contemporary psychometric standards.

Criterion-related validity was evaluated by correlating instrument scores with established organizational performance metrics available within NRC Somalia, following the multi-trait multi-method approach advocated by Campbell and O'Connell (2022). For qualitative instruments, trustworthiness was enhanced through prolonged engagement, persistent observation, and triangulation across data sources, aligning with Lincoln and Guba's refined criteria as updated by Stahl and King (2020). Member checking procedures involved sharing preliminary interpretations with participants to verify accuracy and resonance with their experiences, ensuring interpretive validity throughout the analytical process.

3.7.5 Reliability of Research Instruments

The reliability of the quantitative instrument was assessed using Cronbach's alpha coefficient, with a minimum acceptable value of 0.7 as prescribed by Field (2020), while test-retest reliability was also be evaluated by administering the questionnaire twice to a small subset of participants working in the Nairobi NRC regional offices. For qualitative instruments, trustworthiness was established using Lincoln and Guba's (2018) criteria: credibility through prolonged engagement and triangulation; transferability through detailed description of context and participants; dependability through audit trails documenting the research process; and confirmability through reflexivity and acknowledgment of researcher biases. Inter-rater reliability for qualitative coding was assessed using Cohen's kappa coefficient, with a minimum acceptable value of 0.8 as recommended by Miles et al. (2019).

3.8. Methods of Data Collection

Data collection for this study was conducted systematically over a three-week period, employing multiple methods to ensure comprehensive coverage of the research questions. The process was carefully structured to maximize response rates while maintaining ethical standards and accommodating the challenging operational context of Somalia.

3.8.1 Procedure for Administering Questionnaires

The questionnaire administration employed a mixed-mode approach integrating digital and traditional methodologies to optimize response rates within Somalia's complex operational environment. Following Dillman et al. (2022) updated Tailored Design Method for challenging contexts, the procedure began with pre-notification through multiple channels including institutional email, SMS, and internal communication platforms, alerting potential respondents one week before survey launch. This multi-channel approach recognizes varying technological

access across NRC Somalia's operational regions and establishes initial engagement through participants' preferred communication medium.

The primary distribution mechanism utilized Qualtrics XM Platform configured with enhanced security protocols and offline capability features, addressing connectivity challenges prevalent in remote operational areas. As demonstrated by Callegaro et al. (2023), mobile-optimized survey designs significantly improve completion rates in developing contexts, therefore the instruments were formatted for seamless smartphone completion with adaptive questioning logic that adjusts to screen size and connection quality. For areas with intermittent connectivity, the Kobo Toolbox offline application was deployed on tablets, enabling data collection without internet access and automatic synchronization when connectivity is restored.

Response enhancement strategies incorporated behavioral economics principles outlined by Bethlehem and Biffignandi (2022), including personalized invitations emphasizing the study's contribution to humanitarian effectiveness, strategic timing of reminders aligned with operational schedules, and progress indicators showing completion percentage. The first reminder was sent after one week through alternative channels from initial contact, followed by a second reminder at two weeks, with each communication tailored to acknowledge partial completions and emphasize remaining sections.

Quality assurance protocols included real-time data monitoring to identify response patterns indicative of satisficing or straight-lining, enabling targeted follow-up with respondents showing problematic response behaviors. As recommended by Couper and Peterson (2023), automated data validation checks flagged logical inconsistencies, while preserving participant autonomy to provide unexpected but genuine responses through soft prompts rather than hard constraints.

3.8.2 Procedure for Administering Interviews

The interview administration procedure implemented a rigorous phenomenological protocol designed to capture rich experiential data while accommodating operational constraints inherent in humanitarian settings. Drawing from Brinkmann and Kvale's (2023) advanced interviewing framework for organizational research, the procedure begins with comprehensive participant briefing materials distributed 48 hours before scheduled interviews, including study objectives, anticipated question themes, and confidentiality assurances. This preparatory phase enabled participants to reflect on relevant experiences and gather supporting documentation if desired, enhancing the depth and specificity of subsequent discussions.

Interview scheduling employed flexible time-blocking strategies recommended by Roulston and Choi (2022) for time-constrained professionals, offering multiple format options including face-to-face meetings in secure NRC facilities, encrypted video conferences via Microsoft Teams, and audio-only options for bandwidth-limited locations. Each interview followed a structured yet adaptive protocol beginning with rapport-building questions about participants' humanitarian journey, progressing through phenomenological exploration of knowledge management experiences, and concluding with forward-looking recommendations. This three-phase structure, validated by Vagle (2022) for organizational phenomenology, facilitates natural narrative flow while ensuring comprehensive coverage of research themes.

The interview process incorporated advanced elicitation techniques including critical incident methodology, where participants describe specific instances of knowledge-enabled decision-making, and hypothetical scenario discussions that reveal tacit assumptions about knowledge utilization. Visual aids such as organizational charts and process diagrams were employed as elicitation tools, following Glegg's (2022) framework for enhanced qualitative data generation in complex organizational contexts.

Data capture utilized dual-recording systems with encrypted digital recorders and cloud-based backup through Otter.ai's secure transcription service, ensuring redundancy while maintaining confidentiality. Real-time memoing during interviews captured non-verbal cues, emotional undertones, and emergent insights using Saldaña's (2023) structured observation protocol. Post-interview debriefing within two hours ensured capture of immediate reflections and preliminary analytical insights while memories remain vivid.

3.8.3 Procedure for Carrying out Document Analysis

The document analysis procedure implemented Prior's (2023) systematic documentary method specifically adapted for humanitarian organizational contexts, beginning with comprehensive mapping of NRC Somalia's documentary landscape. This mapping phase involves collaborative engagement with departmental focal points to identify formal documentation repositories, informal knowledge archives, and emergent communication channels that contain decision-relevant information. The initial documentary universe was stratified across temporal dimensions (historical, current, emerging), functional categories (strategic, operational, administrative), and knowledge types (policies, procedures, evaluations, communications), ensuring comprehensive representation of organizational knowledge artifacts.

Document selection employed purposive sampling with maximum variation strategy as refined by Bowen (2022) for organizational studies, targeting approximately 60-80 documents that span the identified strata. The sampling framework prioritizes documents demonstrating explicit knowledge management processes, decision-making procedures, or intersection between these domains. Inclusion criteria encompass authenticity verification through organizational endorsement, temporal relevance within the past three years unless historically significant, and substantive content depth exceeding mere administrative records.

The analytical procedure integrated O'Leary's (2023) three-stage documentary analysis protocol, beginning with descriptive cataloguing that captures document metadata, authorship, intended audience, and organizational context. The second stage employs directed content analysis using a hybrid deductive-inductive coding framework, with initial codes derived from theoretical constructs while remaining open to emergent themes. Advanced analytical techniques include discourse analysis examining how documents construct organizational reality around knowledge and decision-making, attention to documentary silences revealing organizational priorities, and intertextual analysis tracing knowledge evolution across document generations.

Quality assurance incorporated inter-coder reliability testing on 20% of documents using Krippendorff's alpha coefficient with a minimum threshold of 0.80, as recommended by Neuendorf (2023). Documentary triangulation will compare official documents with informal communications to identify alignment or divergence in knowledge management practices. The analysis will particularly attend to how Somalia's operational context shapes documentary practices, recognizing that security concerns may limit certain documentation while amplifying others.

3.9. Measurement of Variables

Measuring variables in this study involves determining the specific methods, scales, and instruments that will be used to quantify each variable. This process ensures that abstract concepts are transformed into quantifiable data that can be statistically analyzed. The measurement approach for each variable includes identifying the measurement scale, specifying the measurement instrument, and determining the scoring method. The following table presents the comprehensive measurement framework for all variables in this study

Table 3. 2

Measurement of Variables

Variable	Conceptual Definition	Definition	Indicators	Measurement Scale
Documented Knowledge Acquisition Processes	The systematic approaches used to identify, collect, and record operational information, lessons learned, and best practices	Presence and utilization of formal documentation procedures and systematic capture methods	• Existence of documentation templates. • Frequency of after-action reviews. • Systematic stakeholder knowledge capture. • Structured debriefing processes. • Validation mechanisms	5-point Likert (1=Never to 5=Always) Higher scores = more robust processes
Formal Knowledge Storage Mechanisms	The systems and structures used to organize, preserve, and maintain explicit knowledge	Availability, organization, and accessibility of knowledge repositories and databases	• Digital repository presence • Database organization level • Searchability features • Backup procedures • Access protocols • Classification systems	5-point Likert (1=Very Poor to 5=Excellent) Higher scores = better storage
Standardized Knowledge Sharing Practices	The formal channels and protocols for distributing explicit knowledge across the organization	Existence and utilization of formal communication channels and sharing protocols	• Regular knowledge sharing meetings • Digital platform utilization • Cross-regional exchanges • Emergency protocols • Tracking mechanisms	5-point Likert (1=Never to 5=Very Frequently Higher scores = systematic sharing
Systematic Knowledge Utilization	The degree to which stored explicit knowledge is actively applied in organizational processes	Integration of documented knowledge into decision processes and operations	• Mandatory reference requirements • Adaptation of past lessons • Application monitoring • Staff training on use • Accountability measures	5-point Likert (1=Never to 5=Always Higher scores = greater utilization

Variable	Conceptual Definition	Definition	Indicators	Measurement Scale
Organizational Decision-Making Effectiveness	The extent to which NRC Somalia makes timely, evidence-based decisions that achieve intended humanitarian outcomes	Multi-dimensional construct measuring decision quality, timeliness, and outcomes	**Quality Dimension:** • Evidence-based approach • Alternative consideration • Stakeholder inclusion • Strategic alignment • Rational processes **Timeliness Dimension** • Decision speed • Delay avoidance • Emergency responsiveness • Appropriate timeframes • Balance of speed **Outcomes Dimension** • Objective achievement • Beneficiary satisfaction • Resource efficiency • Adaptability • Success rates	5-point Likert (1=Strongly Disagree to 5=Strongly Agree Overall score = mean of all items Sub-scales calculated for each dimension

These operational definitions provide clear measurement criteria for each variable, ensuring consistency in data collection and analysis while maintaining alignment with the study's theoretical framework.

3.10. Methods of Data Analysis

This study employed a comprehensive analytical approach that integrates quantitative and qualitative methods to address the research questions thoroughly. The analysis followed a systematic process aligned with the mixed-methods convergent parallel design to investigate the research questions.

3.10.1 Quantitative Data Analysis

Quantitative data was analyzed using IBM SPSS Statistics version 27, following Field's (2020) guidelines for statistical analysis in social science research. The analysis began with data preparation, which involves coding and entering data into SPSS, cleaning the data to identify and address missing values, outliers, and inconsistencies, and computing composite variables for multi-item scales.

Descriptive statistics were then calculated, including measures of central tendency (mean, median) and dispersion (standard deviation, range) for all continuous variables, as well as frequency distributions and percentages for categorical variables. Graphical representations will include bar charts for categorical variables and histograms for continuous variables to visualize the data distribution.

For inferential statistics, several analytical techniques were employed. Correlation analysis using Pearson's correlation coefficient (r) examined the bivariate relationships between knowledge management practices (acquisition, storage, sharing, utilization) and decision-making effectiveness. This addressed Research Question (i) by examining how documented

knowledge acquisition processes influence organizational decision-making, Research Question (ii) by investigating how formal knowledge storage mechanisms affect decision-making timeliness, Research Question (iii) by assessing standardized knowledge sharing practices' impact on decision-making quality, and Research Question iv by evaluating systematic knowledge utilization's influence on decision-making outcomes.

Multiple regression analysis assessed the combined effect of knowledge management practices on decision-making effectiveness, addressing the interrelationships between Research Questions (i-iv). The regression model will be:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon,$$

where Y represents decision-making effectiveness; X_1, X_2, X_3, and X_4 represent knowledge acquisition, knowledge storage, knowledge sharing, and knowledge utilization respectively; β_0 is the constant; $\beta_1, \beta_2, \beta_3$, and β_4 are regression coefficients; and ε is the error term. Analysis of Variance (ANOVA) was used to compare differences in knowledge management practices and decision-making effectiveness across organizational levels and locations, addressing Research Question 4. Statistical assumptions and diagnostics were assessed. Normality was evaluated using the Kolmogorov-Smirnov test and Q-Q plots. Homoscedasticity was examined using Levene's test and residual plots. Multicollinearity was checked using Variance Inflation Factor (VIF), and linearity will be assessed through scatterplots and residual analysis.

The selection of these statistical methods is justified by their appropriateness for examining relationships between variables measured at interval/ratio level and their ability to control for potential confounding factors. The significance level will be set at $p < 0.05$ for all statistical tests.

3.10.2 Qualitative Data Analysis

Qualitative data was analyzed using thematic analysis following Braun and Clarke's (2021) six-step framework, facilitated by NVivo 12 software. The process began with data familiarization, which involves transcribing interviews verbatim, reading and re-reading transcripts and document notes, and making initial annotations on key ideas. Initial coding was conducted, involving systematic coding of interesting features across the entire dataset and the development of both inductive codes (emerging from data) and deductive codes (derived from theoretical framework).

Theme development followed, collating codes into potential themes and creating thematic maps to visualize relationships between codes and themes. Theme review then checked themes against coded extracts and the entire dataset, refining theme structure and generating clear definitions. Theme definition and naming defined the essence of each theme and identify sub-themes and inter-theme relationships. Finally, report production included selection of compelling extract examples and relating analysis back to research questions and literature.

3.11. Ethical Considerations

This study followed American Psychological Association (2020) ethical guidelines and International Committee of the Red Cross (2020) humanitarian research ethics framework. Full compliance with Kenya Methodist University requirements was ensured through obtaining ethical clearance from the KeMU Ethics Review Committee, securing an introduction letter from the Directorate of Postgraduate Studies, and acquiring a research permit from the National Commission for Science, Technology and Innovation (NACOSTI). Additionally, approval was sought from NRC Somalia's internal research review process before commencing data collection.

Informed consent and voluntary participation form the cornerstone of this study's ethical framework. All participants received comprehensive information about the study through an introductory letter, and written informed consent was obtained before any data collection began. Participants were clearly informed that their participation is entirely voluntary and that they may withdraw at any time without any consequences to their employment status or relationship with NRC. The study ensured complete anonymity by using unique codes instead of names on all questionnaires, avoiding collection of identifying information, immediately anonymizing interview transcripts, and removing any potentially identifying details from all reports and publications.

Confidentiality was maintained through robust data protection measures including password-protected files, encrypted digital storage, and locked cabinets for physical documents accessible only to the researcher. All data was reported exclusively in aggregate form, and individual responses were never shared with NRC management or external parties. Privacy considerations guided data collection, ensuring that only information directly relevant to the research questions was gathered, questionnaires were completed in private settings chosen by participants, and interviews were conducted in confidential spaces. Any sensitive organizational information not pertinent to the study was not recorded or retained.

The researcher committed to maintaining complete objectivity throughout the study by acknowledging and bracketing pre-existing assumptions, using multiple data sources for triangulation, reporting both positive and challenging aspects of knowledge management practices, and engaging in peer debriefing to check for potential bias. During interviews, participants were treated with utmost respect and dignity, with appointments scheduled at their convenience, time constraints honored, and cultural sensitivities observed. The agreed duration

of interviews was respected unless participants themselves choose to extend the discussion, and all contributions were appropriately acknowledged.

Data integrity was rigorously maintained through accurate recording of all information without alteration, verbatim transcription of audio recordings, and member checking opportunities to verify interpretations. Any errors discovered during the research process were corrected transparently, and raw data preserved for verification purposes. The study acknowledged all assistance received, including support from Kenya Methodist University for academic supervision, Norwegian Refugee Council Somalia for granting access and facilitating the research, all participants who contributed their time and insights, research assistants who supported data collection, and any other individuals or institutions providing support during fieldwork.

Strict adherence to academic integrity was maintained through proper citation of all sources using APA 7th edition format, appropriate attribution of direct quotes, comprehensive referencing of paraphrased ideas, and use of plagiarism checking software to ensure originality. Intellectual property rights were respected throughout the study, with all sources of information properly acknowledged to avoid any form of plagiarism. Given the sensitive context of humanitarian work in Somalia, additional ethical safeguards included following security protocols to protect both participants and researcher, scheduling data collection to avoid interference with emergency operations, sharing findings with NRC before any external publication, and ensuring that recommendations consider the operational constraints of the context. All ethical guidelines were continuously monitored throughout the research process, and any emerging ethical concerns were immediately addressed.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter provides the findings of the study. The findings are first presented, interpreted and then discussed accordingly. The presentation of the work in this chapter is guided by the main variables of the study. The study had two main variables; that is, independent and dependent variables. The four independent variables were documented knowledge acquisition processes, formal knowledge storage mechanisms, standardized knowledge sharing practices, and systematic knowledge utilization, while, the dependent variable was organizational decision-making effectiveness.

In the first instance, the quantitative results are presented first. In the second instance, the qualitative data gathered during interviews are integrated in the discussion to explain observable phenomena. In the third and last instance, inferential results are presented and discussed accordingly. Before the inferential statistical analysis are used, the study had to justify the adopted analysis by presenting results on the diagnostic tests. The chapter starts off by presenting the results on reliability of the data, the response rate and background information of the respondents.

4.2 Findings on Reliability Test

The reliability of the data collected was checked before they were used in the analysis. To assess reliability, the study computed the Cronbach Bach alpha value of indicators measured in each key variable in the study. The results were summarized and presented in

Table 4. ***1***.

Table 4. 1

Reliability results regarding the main variables

Main constructs of the study (N = 89)	**Cronbach's Alpha**
Documented Knowledge Acquisition Processes (X_1)	0.86
Formal Knowledge Storage Mechanisms (X_2)	0.82
Standardized Knowledge Sharing Practices (X_3)	0.88
Systematic Knowledge Utilization (X_4)	0.84
Organizational Decision-Making Effectiveness (Y)	0.91

Table 4. ***1*** shows the Cronbach's Bach value that is higher than 0.7, (α>0.700) for every key variable (documented knowledge acquisition processes, formal knowledge storage mechanisms, standardized knowledge sharing practices, systematic knowledge utilization, and organizational decision-making effectiveness). The Cronbach's Bach value reported in this study satisfied the guidelines given by Bryman and Bell (2011). The findings meant that the data were reliable to be used in the analysis.

4.3 Response Rate

In this study, the researcher had administered 100 questionnaires to the Norwegian Refugee Council Somalia staff. Only eleven questionnaires were not returned, hence a response rate of 89%. The country management had one country manager. The same was available for the interview. The good response rate as noted by Kumar (2010), was attributed to cooperation of NRC Somalia staff. Related studies such as Ahmad and Karim (2020) and Hassan and Ali (2021) also reported high response rate from humanitarian staff which were linked to adequate

preparation of the researcher. The high response rate boosted the confidence that the respondents were willing to provide information that was needed in the study.

4.4 Background Information of Respondents

In this section, the profile of respondents is provided. The respondents of this study were staff working at the Norwegian Refugee Council Somalia. The background information sought from staff were on gender, educational level, organizational tenure, department, and geographic location. The background information helped the researcher to make objective interpretation and inferences on the findings reported in this study. The study first inquired about the gender of staff and the information presented in Table 4. 2.

Table 4. 2

Gender Distribution of Staff at Norwegian Refugee Council Somalia

Gender	Frequency	Percent
Male	46	51.7
Female	43	48.3
Total	**89**	**100.0**

The results in Table 4. 2 shows that there were slightly more male (46, 51.7%) than female staff (43, 48.3%) at Norwegian Refugee Council Somalia. The findings show relatively balanced gender representation among staff, with only a 3.4 percentage point difference between male and female participation. This gender distribution contrasts with findings by Li and Thompson (2023) who reported that most humanitarian organizations were dominated by female staff. However, the results align with Ahmad et al. (2020) who noted increasing gender balance and female participation in humanitarian organizations. The relatively balanced gender representation provided a good foundation for understanding how gender might influence

knowledge management practices and organizational decision-making effectiveness at NRC Somalia.

A question on educational qualifications of staff was posed to the respondents to help in understanding whether they had the requisite knowledge for humanitarian work. The findings are shown in Table 4. 3.

Table 4. 3

Highest qualification of Staff at Norwegian Refugee Council Somalia

Highest qualification	Frequency	Percent
PhD	4	4.5
Master's Degree	37	41.6
Bachelor's Degree	34	38.2
Diploma	13	14.6
Certificate	1	1.1
Total	**89**	**100.0**

The results in Table 4. 3 show that 37 (41.6%) of Staff at Norwegian Refugee Council Somalia had a Master's degree. Thirty-four (38.2%) had Undergraduate Bachelor Degree. This indicates that the staff who works in NRC Somalia had minimum of Diploma. The fact that 83.4% of the staff had a bachelor's degree or higher, indicates professional development initiative, which was expected to enhance their performance in knowledge management. Hameed et al. (2021) comparatively reported a dominance of the master's degree and undergraduate degree educational qualification of humanitarian staff working in similar organizations. It was pointed clearly that these organizations were embracing professional development, in-service trainings and career advancement. The findings of Chatterjee et al. (2021) also support the current study's

opinions on the academic qualifications of humanitarian staff. The staff were expected to fully understand how their knowledge management behavior and conduct was affecting organizational decision-making.

The study further sought to establish how long one had served as a staff member in NRC Somalia. This was significant in determining the relevance and objectivity of responses regarding working experience. Relevant experience is considered very critical in humanitarian work, and hence, the experience that staff had was significant in improving organizational decision-making effectiveness. The information gathered helped to understand whether staff had accumulated relevant skills to credibly respond to questions posed to them about knowledge acquisition, storage, sharing, utilization and organizational decision-making. The findings regarding working experience of staff at NRC Somalia is presented in Table 4. 4.

Table 4. 4

The working experience of staff at NRC Somalia

Years of experience	**Frequency**	**Percent**
Less than 1 year	20	22.5
1-3 years	28	31.5
4-6 years	25	28.1
7-10 years	12	13.5
More than 10 years	4	4.5
Total	**89**	**100.0**

According to the results in Table 4. 4, 20 (22.5%) had less than one year work experience at NRC Somalia. Twenty-eight staff (31.5%) had worked between 1 and 3 years in the organization. Only 16 (18.0%) had worked more than 7 years at NRC Somalia. This meant that

most of staff were fairly new in the job and hence, they required mentoring since their work entailed managing critical humanitarian knowledge for most of the times. The study noted that 18.0% of the staff were adequately experienced, hence, they could be instrumental in mentoring the less experienced ones and further inculcate the appropriate values for improving organizational decision-making in NRC Somalia. Different findings were reported by Ibrahim et al. (2023) and Hassan and Sheikh (2021) which stipulated that humanitarian staff had adequate working experience for offering humanitarian services. The findings of Osei-Kyei and Chan (2021) appreciated the importance of securing experienced staff in knowledge management organizations for achieving effective decision-making.

4.5 Results on Organizational Decision-Making Effectiveness at NRC Somalia

The organizational decision-making effectiveness at NRC Somalia was the dependent variable in this study. The information regarding this construct was gathered from the NRC Somalia staff. Clarity and explanatory information were gathered from the Country Manager during interview. In this study, the construct on organizational decision-making effectiveness was measured as a latent variable, where, several sentiments were posed to respondents requiring them to indicate their responses against each. Therefore, the summation of the responses helped the researcher to understand aspects of organizational decision-making effectiveness at NRC Somalia.

The sentiments posed to respondents were about decision quality, decision timeliness, decision outcomes, strategic alignment, evidence-based approaches, stakeholder inclusion, alternative consideration, emergency decision capability, balance of thoroughness and speed, critical decision timeframes, bureaucratic delay avoidance, beneficiary needs addressing, successful intervention rates, adaptability to contexts, objective achievement, and resource allocation efficiency. The sentiments were in a 5-level Likert scale requiring the respondent to indicate

the extent of agreement with each sentiment; where, 1 represented strongly disagree, 2 for disagree, 3 for neutral, 4 for agree and 5 represented strongly agree. In interpreting and reporting the quantitative results herein, the total number of responses on 'agree' and the 'strongly agree' were computed to represent the agreement status, while the total number of responses on 'disagree' and the ones on 'strongly disagree' were summed up to represent the disagreement status. Summary of the responses is presented in Table 4. 5.

Table 4. 5

Organizational decision-making effectiveness

Statements on decision-making effectiveness (N = 89)	**SD(1)**	**D(2)**	**N(3)**	**A(4)**	**SA(5)**
Decisions are strategically aligned with organizational goals	3 (3.4%)	18 (20.2%)	34 (38.2%)	28 (31.5%)	6 (6.7%)
Decision-making is based on available evidence	5 (5.6%)	24 (27.0%)	30 (33.7%)	25 (28.1%)	5 (5.6%)
Stakeholders are adequately included in decision processes	8 (9.0%)	31 (34.8%)	24 (27.0%)	22 (24.7%)	4 (4.5%)
Alternative options are thoroughly considered	9 (10.1%)	33 (37.1%)	22 (24.7%)	20 (22.5%)	5 (5.6%)
Emergency decisions are made promptly when needed	6 (6.7%)	22 (24.7%)	32 (36.0%)	25 (28.1%)	4 (4.5%)
There is good balance between thoroughness and speed	11 (12.4%)	34 (38.2%)	23 (25.8%)	18 (20.2%)	3 (3.4%)
Critical decisions are made within appropriate timeframes	15 (16.9%)	36 (40.4%)	17 (19.1%)	17 (19.1%)	4 (4.5%)
Bureaucratic delays are minimized in decision processes	19 (21.3%)	40 (44.9%)	14 (15.7%)	13 (14.6%)	3 (3.4%)
Decisions adequately address beneficiary needs	4 (4.5%)	26 (29.2%)	31 (34.8%)	24 (27.0%)	4 (4.5%)
Intervention success rates are satisfactory	6 (6.7%)	28 (31.5%)	26 (29.2%)	24 (27.0%)	5 (5.6%)
Decisions show good adaptability to local contexts	7 (7.9%)	29 (32.6%)	25 (28.1%)	23 (25.8%)	5 (5.6%)
Organizational objectives are consistently achieved	9 (10.1%)	33 (37.1%)	22 (24.7%)	21 (23.6%)	4 (4.5%)

Statements on decision-making effectiveness (N = 89)	SD(1)	D(2)	N(3)	A(4)	SA(5)
Resource allocation decisions are efficient	12 (13.5%)	38 (42.7%)	18 (20.2%)	17 (19.1%)	4 (4.5%)

From the results in Table 4. 5, it can be observed that 21 (23.6%) of staff admitted that there were issues with strategic alignment in decision-making at NRC Somalia. It was also clear that there were gaps in evidence-based decision-making as indicated by 29 (32.6%). A sizeable number of staff, 39 (43.8%) further indicated that stakeholders were not adequately included in decision processes, and alternatives were not thoroughly considered, (42, 47.2%). Fifty-nine (66.3%) of staff also indicated that bureaucratic delays were affecting decision processes. Moreover, there were instances when critical decisions were not made within appropriate timeframes as indicated by more than half of staff, (51, 57.3%). The findings are indicating instances of decision-making challenges at NRC Somalia. This fell short of organizational expectations for effective humanitarian operations. The findings agree with Ahmed and Osman (2020) who reported that humanitarian organizations' decision-making effectiveness was often compromised by various organizational and contextual factors.

These findings align with recent research highlighting systemic hurdles such as power differentials and tokenistic inclusion that have emerged, constraining effectiveness and integration within the humanitarian sphere (Diab et al., 2024). Similarly, studies have shown that bureaucratic structures and government interference can significantly impede the timeliness of humanitarian responses and decision-making processes (Pincock et al., 2021), corroborating the bureaucratic delays identified in the NRC Somalia context.

More than 50 percent of the staff (51, 57.3%) said that there were issues with the timeliness of decision-making at NRC Somalia. Additional areas of weaknesses noted in Table 4.5 and which were reported by approximately half of staff were about resource allocation efficiency

(approximately 44, 49.4%), objective achievement (approximately 43, 48.3%), and adaptability to local contexts (approximately 45, 50.6%). The majority of staff were concerned, and when questions about decision-making effectiveness were posed to them, many were neutral, while others indicated that the processes needed improvement. According to the country manager, the challenges in decision-making were being caused by fragmented knowledge systems which were creating barriers to accessing relevant information for decision-making.

Despite the aforementioned weaknesses, the study noted that some staff, approximately 27 (30.3%) indicated that decisions were generally strategically aligned with organizational goals. There were also some mechanisms in place to address beneficiary needs through decision-making processes. The presence of these positive aspects shows a good foundation by NRC Somalia to improve the manner in which decisions were being made. Whether such foundations translated to actual improvement in decision-making effectiveness, was the big question in this study. This is because, the findings reported above, indicate that there were challenges in decision timeliness, stakeholder inclusion, and resource allocation efficiency. Some of these observations and gaps can be attributed to weak knowledge management systems which was reported by staff.

These findings are strongly corroborated by recent studies on knowledge management in humanitarian organizations. Research demonstrates that while there is growing recognition amongst humanitarians that knowledge sharing and exchange are essential components of organizational efficiency and effectiveness, knowledge management processes in many humanitarian organizations remain inadequate (Sturridge et al., 2023). A 2022 study on crisis information management found that the complex and uncertain environment of humanitarian response can lead to information gaps and data fragmentation, which significantly affects

decision-making processes Balqis-Ali et al. (2021), directly supporting the NRC Somalia findings regarding fragmented knowledge systems.

Furthermore, research on humanitarian operations emphasizes that effective decision-making in complex contexts is dependent on the quality and relevance of information available and the knowledge management systems in place Betts et al. (2021), which aligns with the country manager's observations about barriers to accessing relevant information. Recent studies also highlight that traditional humanitarian responses have historically encountered limitations in effectively addressing diverse needs due to top-down decision-making and bureaucratic structures that frequently fail to fully engage stakeholders as active participants (El-Abed et al., 2023).

The stakeholder inclusion challenges identified at NRC Somalia are particularly significant given contemporary research showing that meaningful participation in decision-making processes remains a critical challenge in humanitarian operations. Organizations often experience tokenistic inclusion rather than genuine engagement, with power dynamics constraining their effectiveness and integration within the humanitarian sphere (Pincock et al., 2021; Sturridge et al., 2023). This pattern of limited stakeholder engagement has been consistently documented across various humanitarian contexts, suggesting that the NRC Somalia experience reflects broader systemic issues within the sector (Diab et al., 2024).

4.6 Results on Documented Knowledge Acquisition Processes and Organizational Decision-Making

The first objective aimed to determine how documented knowledge acquisition processes were affecting organizational decision-making effectiveness at NRC Somalia. The effective delivery of humanitarian services requires deliberate commitment to acquiring relevant knowledge from various sources. In determining the magnitude of knowledge acquisition processes, several

questions were formulated in form of sentiments in a table. The sentiments posed to respondents were about after-action reviews, lessons learned capture, staff debriefing processes, stakeholder knowledge capture, and validation mechanisms. The sentiments were in a 5-level Likert scale requiring the respondent to indicate the extent of agreement for each sentiment; where, 1 represented strongly disagree, 2 for disagree, 3 for neutral, 4 for agree and 5 represented strongly agree. Summary of the responses is presented in Table 4.6.

Table 4. 6

Documented knowledge acquisition processes

Statements on knowledge acquisition (N = 89)	**SD(1)**	**D(2)**	**N(3)**	**A(4)**	**SA(5)**
After-action reviews are systematically documented	4 (4.5%)	15 (16.9%)	23 (25.8%)	37 (41.6%)	10 (11.2%)
Lessons learned are systematically captured from operations	6 (6.7%)	20 (22.5%)	26 (29.2%)	30 (33.7%)	7 (7.9%)
Staff debriefing processes are well-structured	8 (9.0%)	27 (30.3%)	25 (28.1%)	24 (27.0%)	5 (5.6%)
Stakeholder knowledge is effectively captured	13 (14.6%)	32 (36.0%)	22 (24.7%)	18 (20.2%)	4 (4.5%)
Validation mechanisms for knowledge are present	15 (16.9%)	35 (39.3%)	17 (19.1%)	17 (19.1%)	5 (5.6%)

The findings in Table 4.6 reveal a complex and concerning landscape regarding documented knowledge acquisition processes at NRC Somalia. While 47 out of 89 staff members (52.8%) agreed that after-action reviews were systematically documented, representing the strongest performance indicator among the measured components, significant gaps emerged across other critical dimensions of knowledge acquisition.

The data demonstrates that 37 staff members (41.6%) acknowledged systematic documentation of after-action reviews, with an additional 10 respondents (11.2%) strongly agreeing, indicating that NRC Somalia has established some foundational practices for capturing operational

experiences. However, this relatively positive finding is substantially undermined by pronounced weaknesses in other knowledge acquisition areas. Nearly half of the respondents - 45 out of 89 staff members (50.6%) - disagreed that stakeholder knowledge was effectively captured, while 50 respondents (56.2%) indicated that validation mechanisms for knowledge were absent or inadequate. Additionally, 35 staff members (39.3%) reported that staff debriefing processes were not well-structured, and 26 respondents (29.2%) disagreed that lessons learned were systematically captured from operations, with an additional 11 staff members (12.4%) neutral on this issue.

These quantitative findings reveal a fragmented and inconsistent approach to knowledge acquisition, where certain practices such as after-action reviews demonstrate relative organizational strength while others, particularly stakeholder engagement and validation processes, exhibit significant systematic deficiencies. The pattern suggests that NRC Somalia has implemented selective formal documentation requirements but fundamentally lacks comprehensive, integrated systems for capturing diverse knowledge sources and ensuring knowledge quality across all operational dimensions.

The qualitative data provides essential contextual depth that illuminates the underlying structural and operational causes of these quantitative patterns. Interview participants consistently characterized knowledge acquisition as occurring through "fragmented episodes rather than systematic processes," with a program manager explaining that knowledge capture typically happens reactively during organizational crises rather than proactively during operational stability when learning opportunities could be strategically maximized for long-term organizational benefit.

The theme of temporal and human resource challenges emerged as particularly significant, with the organization's 35% annual staff turnover rate creating what one field coordinator described

as "a constant scramble to capture departing knowledge before it walks out the door." This finding provides crucial explanatory context for why validation mechanisms received such poor ratings, with 50 respondents (56.2%) expressing disagreement, as the organization continuously struggles to verify and cross-reference information when original knowledge sources frequently depart before comprehensive documentation and validation processes can be completed.

The qualitative insights reveal that while after-action reviews may be systematically documented according to 47 staff members (52.8% agreement rate), the actual quality, depth, and comprehensiveness of these documentation efforts are significantly compromised by severe time constraints and persistent staff turnover challenges. An information management officer noted that "by the time we properly document someone's specialized expertise and operational insights, they're often already planning their next assignment or departure," highlighting how the accelerated knowledge decay cycle systematically undermines the organization's capacity to build robust, reliable, and accessible knowledge repositories.

Furthermore, the interviews revealed that stakeholder knowledge capture faces particularly acute challenges due to persistent security constraints and severely limited access to beneficiary communities, providing critical operational context for why 45 respondents (50.6%) reported ineffective stakeholder knowledge capture. These security considerations force the organization to rely disproportionately on internal knowledge sources, thereby significantly limiting the diversity, external validation, and comprehensiveness of acquired knowledge while potentially creating organizational blind spots.

The findings from this study align closely with existing scholarly literature on knowledge acquisition challenges in humanitarian contexts while simultaneously revealing specific operational dynamics unique to the Somali operational environment. The fragmented nature of

knowledge acquisition processes identified at NRC Somalia strongly corroborates Farnese et al.'s (2020) comprehensive global study, which documented that humanitarian organizations frequently struggle with inadequate knowledge acquisition processes, particularly when operating in volatile, conflict-affected environments.

The 47-respondent (52.8%) agreement rate for systematic after-action reviews, while representing NRC Somalia's strongest organizational performance indicator, falls substantially below the documented standards in more stable organizational contexts. Hughes et al.'s (2020) comparative research across European humanitarian organizations found that 78% of surveyed entities successfully maintained systematic after-action review processes, suggesting that the specific operational challenges, security constraints, and institutional pressures present in Somalia may significantly constrain the implementation of comprehensive documentation practices compared to more stable operational environments.

The particularly poor performance in stakeholder knowledge capture, with only 22 respondents (24.7%) agreeing that such processes were effective, reflects broader systemic challenges consistently identified across African humanitarian contexts. Ibidunni et al.'s (2021) comprehensive study across eight sub-Saharan countries documented remarkably similar patterns where humanitarian organizations relied heavily on internal knowledge networks due to persistent infrastructure limitations and security constraints, systematically limiting their organizational capacity to capture external stakeholder insights and beneficiary feedback. However, NRC Somalia's performance appears even more constrained than established regional averages, likely reflecting the particularly acute security challenges and institutional fragility that characterize Somalia's complex operational environment.

The high staff turnover rate of 35% annually, identified through comprehensive qualitative interviews, represents a critical organizational factor that meaningfully distinguishes NRC

Somalia's operational context from many other comparable humanitarian operations globally. While staff turnover represents a common challenge across the broader humanitarian sector, this rate significantly exceeds the 18-22% annual turnover documented in similar regional contexts by Bagire et al. (2021) in their comprehensive East African organizational study. This elevated turnover rate creates unique and compounding knowledge acquisition challenges, as institutional memory and accumulated expertise are continuously eroded before systematic capture, validation, and organizational integration processes can be effectively completed.

The study's finding regarding inadequate validation mechanisms, with 50 respondents (56.2%) expressing disagreement, reflects a broader systemic challenge consistently identified in fragile state operational contexts. Ahmed and Osman's (2020) Somalia-specific research noted that persistent environmental instability creates distinctive and compounding knowledge acquisition impediments, where rapid contextual changes and shifting operational parameters make it exceptionally difficult to maintain consistent quality assurance processes for captured knowledge. The current study's findings suggest these documented challenges have intensified over time, with validation processes remaining systematically inadequate despite widespread organizational recognition of their critical importance.

The qualitative finding that knowledge acquisition operates through "fragmented episodes" rather than systematic, integrated processes aligns closely with Cillo et al. (2022) comprehensive multi-country analysis, which demonstrated that environmental volatility significantly moderated knowledge acquisition's measurable impact on organizational decision quality. Organizations operating in highly volatile environments such as Somalia require substantially more robust and systematic acquisition processes to effectively compensate for environmental unpredictability and contextual instability, yet paradoxically face significantly

greater operational, security, and resource-related obstacles in implementing such comprehensive systems.

The study's identification of predominantly reactive rather than proactive knowledge acquisition patterns directly contradict established best practices identified throughout the relevant scholarly literature. Wang et al. (2020) comprehensive global study demonstrated that organizations implementing proactive knowledge acquisition strategies achieved significantly better decision outcomes and operational effectiveness, particularly when operating in uncertain and rapidly changing environments. However, the current findings suggest that immediate operational pressures and resource constraints in Somalia systematically force NRC into reactive organizational patterns that substantially limit strategic learning opportunities during relatively stable operational periods when knowledge acquisition could be most effectively implemented.

The technology-related challenges implied throughout the qualitative data regarding documentation systems align closely with Hassan et al. (2022) Somalia-specific research, which found that strategic mobile technology adoption could potentially enhance knowledge acquisition breadth and effectiveness despite persistent infrastructure limitations. The current study suggests that NRC Somalia may not have fully leveraged available technological solutions to overcome traditional knowledge acquisition barriers, representing a significant potential area for strategic improvement that could simultaneously address both turnover-related knowledge loss and systematic capture challenges while enhancing overall organizational learning capacity.

4.7 Results on Formal Knowledge Storage Mechanisms and Organizational Decision-Making

The second objective aimed to determine how formal knowledge storage mechanisms were affecting organizational decision-making effectiveness at NRC Somalia. It is indisputable that knowledge storage is critical and when implemented appropriately, it can play a great role in enhancing decision-making processes. In measuring this construct, several questions were formulated in form of sentiments in a table. The sentiments were about backup procedures, access protocols, database organization, classification systems, searchability features, and digital repository functionality. Summary of the responses is presented in Table 4. 7.

Table 4. 7

Formal Knowledge Storage Mechanisms

Statements on knowledge storage (N = 89)	**SD(1)**	**D(2)**	**N(3)**	**A(4)**	**SA(5)**
Backup procedures for knowledge are adequate	8 (9.0%)	21 (23.6%)	30 (33.7%)	25 (28.1%)	5 (5.6%)
Access protocols for knowledge are clear	10 (11.2%)	26 (29.2%)	32 (36.0%)	19 (21.3%)	2 (2.2%)
Database organization supports easy retrieval	12 (13.5%)	31 (34.8%)	29 (32.6%)	15 (16.9%)	2 (2.2%)
Classification systems are well-implemented	14 (15.7%)	32 (36.0%)	28 (31.5%)	13 (14.6%)	2 (2.2%)
Searchability features function effectively	18 (20.2%)	37 (41.6%)	24 (27.0%)	8 (9.0%)	2 (2.2%)
Digital repository functionality meets needs	21 (23.6%)	39 (43.8%)	21 (23.6%)	6 (6.7%)	2 (2.2%)

The findings in Table 4.7 reveal profound and systematic deficiencies in formal knowledge storage mechanisms at NRC Somalia, with deeply concerning patterns evident across all measured dimensions that collectively indicate fundamental infrastructure failure. The data demonstrates a systematic collapse in digital knowledge infrastructure capabilities, with 60 out of 89 staff members (67.4%) disagreeing that digital repository functionality meets organizational needs, representing the poorest performance indicator across all storage components and suggesting fundamental inadequacies in the technological backbone

supporting knowledge management processes. This finding is particularly alarming given its implications for organizational learning and decision-making capacity, as it indicates that the primary platform intended to house institutional knowledge fails to serve its basic function of supporting staff information needs.

The searchability features, which constitute a critical component for effective knowledge retrieval and utilization, performed equally poorly with 55 out of 89 staff members (61.8%) disagreeing that these features function effectively, a finding that indicates even when knowledge is successfully stored within organizational systems, staff cannot efficiently locate relevant information when needed for time-sensitive decision-making processes. Classification systems demonstrated similar systematic weaknesses, with 46 respondents (51.7%) expressing disagreement, suggesting that knowledge organization fundamentally lacks coherent structural frameworks or standardized taxonomies that would enable logical information categorization and retrieval. Database organization supporting easy retrieval performed marginally better but still demonstrated majority dissatisfaction, with 43 staff members (48.3%) disagreeing with system effectiveness, while access protocols received particularly mixed responses, with 36 respondents (40.4%) disagreeing and an additional 32 staff members (36.0%) remaining neutral, indicating widespread uncertainty about how to navigate existing storage systems rather than clear satisfaction with current protocols.

Backup procedures showed the relatively strongest performance among all storage mechanisms measured, with 30 out of 89 respondents (33.7%) agreeing that procedures were adequate, though this still represents less than optimal organizational confidence in knowledge preservation capabilities and suggests vulnerability to data loss. These quantitative patterns collectively reveal a knowledge storage infrastructure that systematically fails to meet basic organizational requirements across multiple critical dimensions, with consistently high

disagreement rates suggesting that NRC Somalia's storage mechanisms actively create barriers rather than facilitate knowledge access, potentially undermining decision-making processes that depend fundamentally on timely access to relevant organizational knowledge and institutional memory.

The qualitative data provides essential contextual depth that illuminates the systemic nature of these storage inadequacies and reveals the practical operational consequences of infrastructure failure. Interview participants consistently described navigating what one senior manager evocatively termed "an archaeological dig through digital ruins" when searching for critical information, vividly illustrating the practical consequences of the poor searchability ratings documented quantitatively, where 55 respondents (61.8%) disagreed with system effectiveness. The emergence of organizational fragmentation across twelve different platforms, as revealed through comprehensive qualitative investigation, provides crucial explanatory insight into why digital repository functionality received such consistently poor ratings, with 60 staff members (67.4%) expressing disagreement. This technological fragmentation resulted not from strategic institutional design or deliberate architectural planning but from what participants described as "accumulated technological Band-Aids applied to urgent operational problems without systematic planning or integration consideration," creating a reactive approach to technology implementation that produced a complex, unintegrated landscape that staff struggle to navigate effectively on a daily basis.

A particularly significant qualitative theme emerged around security-driven fragmentation challenges, with an operations manager explaining that "we deliberately maintain sensitive protection data separate from general organizational systems to comply with security protocols, but this necessary separation creates knowledge black holes where critical information becomes institutionally invisible to those who legitimately need access for operational

purposes." This finding provides crucial operational context for the poor classification system ratings, where 46 respondents (51.7%) expressed disagreement, and explains how security requirements, while operationally necessary and ethically essential, inadvertently compromise knowledge accessibility and organizational coherence in ways that undermine systematic information management.

The qualitative data revealed creative but fundamentally unsustainable staff workarounds that include personal USB drives, WhatsApp message archives, and handwritten notebooks that systematically bypass official systems entirely, representing adaptive responses that emerge when formal infrastructure fails to meet operational requirements. These adaptive strategies provide explanatory context for why 55 staff members (61.8%) found searchability features ineffective, as substantial organizational knowledge exists completely outside searchable systems, creating parallel information networks that operate independently of official channels. Field staff consistently described these workarounds as necessary survival mechanisms in an operational environment where official storage systems fundamentally fail to meet basic operational requirements, forcing individual adaptation strategies that compromise institutional knowledge integration and organizational learning processes.

The comprehensive interviews also highlighted that the quantitative assessment captures only a fraction of the actual depth and complexity of storage challenges facing the organization. The fragmented technological landscape creates not merely technical difficulties but also profound knowledge silos where critical information becomes institutionally invisible, affecting decision-making processes in ways that extend far beyond what simple accessibility metrics can adequately measure or quantify. These qualitative findings reveal that storage inadequacies represent systemic organizational challenges that fundamentally compromise institutional

learning, evidence-based decision-making, and operational effectiveness across multiple organizational levels and functional areas.

The findings regarding knowledge storage inadequacies at NRC Somalia align closely with and significantly extend existing scholarly literature on knowledge management challenges in humanitarian contexts, while simultaneously revealing specific operational dynamics that appear substantially more severe than those documented in comparable organizational settings and regional contexts. The 60-respondent (67.4%) disagreement rate regarding digital repository functionality represents a more extreme infrastructure challenge than typically documented in humanitarian organizations operating in similar fragile state contexts, suggesting that Somalia's operational environment presents unique technological and institutional obstacles that exceed those found in other challenging operational environments.

Wang et al.'s (2020) comprehensive global study examining 276 multinational corporations found that organizations implementing sophisticated knowledge storage systems consistently exhibited significantly higher decision comprehensiveness scores and superior organizational learning outcomes. However, their research was conducted primarily in stable institutional environments with established technological infrastructure, reliable power systems, and robust cybersecurity frameworks. The current findings suggest that while the theoretical benefits of integrated storage systems remain sound, these advantages may be extremely difficult to realize in fragile state contexts where persistent security concerns and fundamental infrastructure limitations create additional complexity layers that undermine technological implementation effectiveness and organizational integration processes.

The organizational fragmentation across twelve different platforms identified at NRC Somalia substantially exceeds the storage challenges documented in other African humanitarian contexts and represents a more severe manifestation of technological infrastructure problems

than typically found in regional literature. Olaisen and Revang's (2021) comprehensive study examining 168 organizations across seven sub-Saharan countries found higher reliance on human-centered storage approaches compared to technological systems, but their findings suggested more coherent, though admittedly limited, technological approaches than those documented at NRC Somalia. The extreme technological fragmentation observed in this study appears to represent a particularly severe manifestation of infrastructure challenges that exceeds typical regional patterns and suggests unique contextual factors operating within Somalia's humanitarian operational environment.

The security-driven fragmentation theme emerging prominently from qualitative data analysis reflects operational challenges that appear unique to Somalia's particularly volatile operational environment and security landscape. While Ahmed et al.'s (2020) Somalia-focused research noted that security concerns significantly influenced organizational storage strategies, with humanitarian organizations deliberately distributing knowledge across multiple geographic locations to reduce risk exposure, the current study reveals how this necessary security imperatives create substantially more complex knowledge accessibility problems than previously documented in academic literature. The systematic creation of "knowledge black holes," where critical information becomes institutionally invisible despite its continued existence within organizational systems, represents an unintended but serious consequence of necessary security measures that appears more severe and systematic in Somalia than documented in other fragile state contexts.

The creative staff workarounds identified through comprehensive qualitative investigation, including personal USB drives, WhatsApp message archives, and handwritten notebooks, represent adaptive organizational responses that fundamentally contradict formal knowledge management principles but emerge as practical operational necessities when official systems

fail to meet basic functional requirements. This finding significantly extends Hassan and Ali's (2021) research on mobile technology adoption patterns in Somalia, which documented positive associations between mobile technology utilization and decision-making speed but noted significant limitations for comprehensive knowledge management and institutional learning processes. The current study reveals how staff innovation systematically attempts to overcome formal system inadequacies, creating informal knowledge networks that operate in parallel to official organizational structures and potentially undermine institutional coherence while addressing immediate operational needs.

The 55-respondent (61.8%) disagreement rate regarding searchability feature effectiveness reflects broader technological challenges consistently documented in resource-constrained and infrastructure-limited environments throughout the humanitarian sector. However, this disagreement rate appears substantially more severe than documented in comparable regional contexts and operational settings. Kamukama and Sulait's (2022) East African study found that power reliability issues alone explained 27% of variance in digital storage system adoption rates, suggesting infrastructure limitations as a primary constraint on technological implementation. The current findings suggest that even when digital systems are successfully implemented and maintained, their functional effectiveness remains severely compromised in Somalia's operational context, indicating deeper systemic challenges that extend beyond intermittent power access issues alone and encompass broader institutional, technological, and security-related obstacles.

The systematic storage mechanism inadequacies identified at NRC Somalia carry particularly significant implications for decision-making effectiveness in humanitarian operational contexts where information access directly impacts response quality and beneficiary outcomes. Ferraris et al.'s (2021) comprehensive analysis of 243 organizations demonstrated that knowledge

storage sophistication was significantly mediated by knowledge retrieval efficiency in supporting organizational decision processes, with sophisticated storage systems contributing to improved decision quality only when retrieval mechanisms functioned effectively. The current study's findings suggest that this crucial mediating relationship may be completely disrupted when storage systems exhibit the level of fragmentation and dysfunction documented at NRC Somalia, effectively negating the theoretical benefits of knowledge storage investment.

Merino-Tejedor et al.'s (2021) global organizational study found that cloud-based knowledge storage systems were consistently associated with significant improvements in decision-making speed and cross-functional participation rates across diverse organizational contexts. However, their research was conducted in stable environments with reliable internet infrastructure, established cybersecurity frameworks, and supportive regulatory environments. The current findings suggest that the demonstrated benefits of cloud-based technological approaches may be systematically negated when persistent security concerns require deliberate knowledge fragmentation, creating a fundamental tension between technological optimization objectives and operational security requirements that appears particularly acute in volatile environments like Somalia, where security threats necessitate protective measures that compromise system integration and accessibility.

The systematic storage failures documented comprehensively in this study represent substantially more than technical inadequacies or implementation challenges; they constitute fundamental organizational barriers to institutional learning, evidence-based decision-making, and operational effectiveness that directly impact humanitarian service delivery quality. The organizational inability to efficiently access institutional knowledge and historical experience forces staff to repeatedly recreate solutions to recurring operational problems, systematically wasting limited resources and potentially compromising response quality in humanitarian

contexts where organizational effectiveness can directly impact vulnerable population outcomes and life-saving interventions. These storage inadequacies therefore represent not merely technical or administrative challenges but fundamental threats to organizational mission fulfillment and humanitarian impact effectiveness that require urgent systematic attention and strategic intervention to address comprehensively.

4.8 Results on Standardized Knowledge Sharing Practices and Organizational Decision-Making

The third objective aimed to assess how standardized knowledge sharing practices were affecting organizational decision-making effectiveness at NRC Somalia. Knowledge sharing practices provide mechanisms for distributing information across the organization to support decision-making processes. In measuring this construct, several questions were formulated in form of sentiments which were put in a table. The sentiments were about regular knowledge sharing meetings, emergency protocols for critical sharing, digital platform utilization, cross-regional exchanges, and tracking mechanisms for knowledge flow. Summary of the responses is presented in Table 4. 8.

Table 4. 8

Standardized Knowledge Sharing Practices

Statements on knowledge sharing (N = 89)	SD(1)	D(2)	N(3)	A(4)	SA(5)
Regular knowledge sharing meetings are conducted	5 (5.6%)	16 (18.0%)	26 (29.2%)	32 (36.0%)	10 (11.2%)
Emergency protocols for critical sharing exist	7 (7.9%)	18 (20.2%)	29 (32.6%)	28 (31.5%)	7 (7.9%)
Digital platforms are effectively utilized for sharing	11 (12.4%)	28 (31.5%)	25 (28.1%)	21 (23.6%)	4 (4.5%)

Statements on knowledge sharing (N = 89)	SD(1)	D(2)	N(3)	A(4)	SA(5)
Cross-regional knowledge exchanges occur regularly	13 (14.6%)	32 (36.0%)	24 (27.0%)	16 (18.0%)	4 (4.5%)
Tracking mechanisms for knowledge flow are present	18 (20.2%)	35 (39.3%)	23 (25.8%)	11 (12.4%)	2 (2.2%)

The findings in Table 4.8 present a complex and nuanced picture of standardized knowledge sharing practices at NRC Somalia, revealing both areas of relative organizational strength and significant structural weaknesses that collectively illustrate the challenges of implementing systematic knowledge distribution mechanisms in volatile operational environments. The data demonstrates that NRC Somalia has achieved moderate success in establishing basic knowledge sharing mechanisms while simultaneously struggling with more sophisticated and systematically managed approaches to knowledge distribution across organizational levels and geographic regions.

Regular knowledge sharing meetings emerged as the strongest performance area among all sharing practices measured, with 42 out of 89 staff members (47.2%) agreeing that such meetings were conducted systematically, representing the highest agreement rate across all knowledge sharing dimensions assessed. This finding, when combined with the 35 respondents (39.4%) who agreed that emergency protocols for critical sharing exist, suggests that NRC Somalia has successfully established foundational meeting structures and crisis response mechanisms for knowledge distribution during both routine operational periods and emergency situations. These relatively positive indicators demonstrate organizational commitment to maintaining communication channels and suggest that leadership recognizes the importance of regular information exchange, though the effectiveness and quality of these exchanges require deeper examination.

However, significant and concerning deficiencies emerge clearly when examining more technologically sophisticated and systematically managed sharing approaches that extend beyond traditional meeting formats. Digital platform utilization for sharing received agreement from only 25 out of 89 staff members (28.1%), while 39 respondents (43.9%) actively disagreed that these platforms were effectively utilized for knowledge distribution purposes. This poor performance in digital sharing mechanisms indicates that while face-to-face meetings may occur with reasonable regularity, the organization has fundamentally failed to successfully leverage technological solutions to enhance knowledge distribution beyond traditional meeting formats, potentially limiting the speed, reach, and comprehensiveness of knowledge sharing across the organization.

Cross-regional knowledge exchanges performed particularly poorly across all measured dimensions, with only 20 out of 89 respondents (22.5%) expressing agreement that such exchanges occur regularly, while 45 staff members (50.6%) disagreed with the effectiveness of cross-regional sharing mechanisms. This finding reveals substantial and systematic limitations in knowledge sharing across NRC Somalia's geographically distributed operations, suggesting that critical knowledge remains siloed within local operational areas and limiting the organization's capacity to leverage lessons learned, best practices, and contextual insights across different regional contexts within Somalia's diverse operational landscape.

The most concerning and problematic finding relates specifically to tracking mechanisms for knowledge flow, which received agreement from only 13 out of 89 staff members (14.6%) while 53 respondents (59.5%) disagreed that such mechanisms were present or functional. This represents the poorest performance indicator across all knowledge sharing practices measured and indicates that NRC Somalia fundamentally lacks systematic mechanisms for monitoring whether shared knowledge actually reaches intended recipients, influences decision-making

processes, or contributes to organizational learning outcomes. Without such tracking capabilities, the organization cannot assess the effectiveness of its knowledge sharing efforts, identify areas for systematic improvement, or ensure that critical information reaches decision-makers when needed for operational effectiveness.

The qualitative data provides crucial analytical insights that illuminate the contradictions and operational complexities underlying these quantitative patterns, revealing disconnect between formal sharing structures and actual knowledge distribution mechanisms. Interview participants consistently distinguished between what one field coordinator described as "performative sharing in formal meetings and real sharing through informal networks," observing that "official knowledge sharing meetings often involve presenting sanitized reports and standardized briefings, while actual operational learning happens organically in corridor conversations, field debriefings, and WhatsApp groups." This qualitative insight provides essential context for understanding why regular knowledge sharing meetings scored relatively well with 42 respondents (47.2%) agreeing, while more substantive and systematic sharing mechanisms performed poorly across multiple dimensions.

The meetings exist as formal organizational structures and occur with reasonable regularity according to established protocols, but their effectiveness in facilitating genuine knowledge transfer and organizational learning appears fundamentally limited by structural and cultural constraints. The formal meeting structures successfully serve organizational requirements for documentation, compliance, and basic communication but may not achieve the deeper, more meaningful knowledge sharing necessary for enhanced decision-making effectiveness and organizational learning. This disconnects between formal processes and actual learning outcomes represents a critical organizational challenge that undermines the potential benefits of established sharing mechanisms.

The theme of hierarchical knowledge gradients emerged prominently from comprehensive qualitative investigation, with multiple participants describing systematic patterns where knowledge flows relatively effectively horizontally within organizational levels but struggles significantly to move vertically through institutional hierarchies. A program specialist noted that "field insights and operational lessons rarely reach senior management in their original, unfiltered form - they get systematically filtered, repackaged, and sanitized at each organizational level until the raw learning and contextual nuance is essentially lost." This hierarchical filtering phenomenon provides crucial explanatory context for why cross-regional exchanges scored poorly with only 20 respondents (22.5%) agreeing, as knowledge sharing becomes increasingly diluted and distorted as it moves through multiple organizational layers and bureaucratic processes.

The emergence of WhatsApp as a primary knowledge sharing platform, described evocatively by participants as "underground knowledge railways" that operate parallel to official systems, provides important contextual insight into the poor digital platform utilization scores, where only 25 staff members (28.1%) agreed that official platforms were effectively utilized. Staff have systematically innovated informal digital sharing mechanisms that deliberately bypass official systems, suggesting that formal digital platforms fundamentally fail to meet practical sharing needs in terms of speed, accessibility, user-friendliness, and operational relevance. These informal networks represent creative staff adaptation designed to overcome official system limitations while simultaneously creating parallel knowledge sharing structures that operate outside organizational visibility, control, and strategic management.

The qualitative finding that hierarchical constraints and bureaucratic processes systematically limit knowledge flow directly relates to the poor performance of tracking mechanisms, where only 13 respondents (14.6%) agreed that such systems were present. When knowledge sharing

occurs primarily through informal channels, personal networks, and mobile applications like WhatsApp, formal tracking systems cannot effectively monitor actual knowledge distribution patterns, usage rates, or impact on decision-making processes. The organization lacks comprehensive visibility into its most effective knowledge sharing mechanisms, creating a fundamental disconnect between formal monitoring systems and actual sharing practices that undermines strategic knowledge management and continuous improvement efforts.

Additionally, the qualitative data revealed that security constraints significantly impact knowledge sharing practices, with sensitive operational information requiring restricted distribution that creates what participants described as "knowledge compartmentalization." This security-driven compartmentalization helps explain why tracking mechanisms perform poorly, as sensitive knowledge deliberately remains outside formal monitoring systems to maintain operational security, though this necessary protection creates challenges for organizational learning and cross-functional collaboration.

The findings regarding knowledge sharing practices at NRC Somalia reveal complex patterns that both align with and significantly diverge from existing literature on knowledge management in humanitarian contexts, while highlighting unique challenges specific to Somalia's volatile operational environment. The moderate success in establishing regular knowledge sharing meetings, with 42 respondents (47.2%) expressing agreement, parallels findings from other humanitarian organizations operating in challenging contexts but falls substantially short of performance levels consistently documented in more stable operational environments with established institutional frameworks and technological infrastructure.

Ahmad and Karim's (2020) comprehensive global study examining 217 multinational organizations found that robust knowledge sharing infrastructures led to significantly improved decision outcomes, with strong correlation coefficients ($r=0.68$, $p<0.001$) that substantially

exceed what the current quantitative indicators suggest for NRC Somalia's knowledge sharing effectiveness. However, their research was conducted across organizations operating in more stable environments with reliable technological infrastructure, established institutional frameworks, and predictable operational contexts. The current findings suggest that achieving systematic and effective knowledge sharing in Somalia's volatile, security-constrained context presents significantly greater challenges than documented in most international organizational literature, requiring adapted approaches that account for unique environmental constraints.

The distinction between formal and informal knowledge sharing mechanisms identified through comprehensive qualitative investigation aligns with broader patterns documented in organizational literature while revealing unique humanitarian context dynamics that appear more pronounced in fragile state environments. Gomez-Miranda and Perez's (2021) extensive research across Spain, Mexico, and Argentina established bidirectional relationships between organizational trust and knowledge sharing effectiveness, which helps explain why informal networks such as WhatsApp groups and corridor conversations emerge as primary sharing mechanisms at NRC Somalia. In high-uncertainty environments where formal systems may be perceived as unreliable, slow, or potentially compromised by security concerns, staff naturally gravitate toward trusted informal networks for critical knowledge exchange, though this adaptation creates challenges for organizational oversight and systematic improvement.

The hierarchical knowledge filtering phenomenon documented extensively in this study extends and intensifies findings from Osei-Kyei and Chan's (2021) African humanitarian organization research, which found that organizational hierarchy significantly influenced knowledge sharing practices across multiple contexts. However, the current study reveals substantially more severe hierarchical barriers than typically documented, with field insights being systematically "filtered and repackaged at each organizational level until the raw learning

and operational nuance is essentially lost." This finding suggests that Somalia's intense operational pressures, security constraints, and rapid decision-making requirements may intensify hierarchical knowledge distortion beyond levels typically found in other African humanitarian contexts, creating unique challenges for vertical knowledge integration.

The poor performance of digital platform utilization, with only 25 respondents (28.1%) agreeing that platforms were effectively used, contrasts sharply with global trends consistently documented in contemporary knowledge sharing literature. Sivarajah and Irani's (2022) comprehensive study of 83 organizations across developed countries found that AI-enabled knowledge management systems improved decision speed by 64% while maintaining quality standards and enhancing cross-functional collaboration. However, their research was conducted in contexts with reliable technological infrastructure, consistent power supply, high-speed internet connectivity, and established digital literacy among staff. The current findings suggest that the demonstrated benefits of formal digital platforms may be systematically negated when infrastructure constraints, security limitations, and user preferences favor informal mobile-based solutions that offer greater accessibility and immediate utility.

The emergence of WhatsApp as a primary knowledge sharing platform, described by participants as creating "underground knowledge railways" that facilitate rapid information exchange, represents an organizational adaptation that extends Hassan and Ali's (2021) Somalia-specific research on mobile technology adoption patterns. Their study found positive associations between mobile technology utilization and organizational communication effectiveness but focused primarily on formal system implementation and official technology adoption processes. The current study reveals how staff systematically innovate informal mobile-based sharing mechanisms that may be more operationally effective than formal digital platforms in Somalia's specific context, though these innovations create significant challenges

for organizational oversight, knowledge management systematization, and strategic coordination.

The particularly poor performance of cross-regional knowledge exchanges, with only 20 respondents (22.5%) agreeing that such exchanges occur regularly, reflects operational challenges that appear substantially more severe than documented in comparable humanitarian contexts throughout the region. Karanja et al.'s (2022) research across Uganda and Kenya found that structured knowledge exchange between organizational units significantly predicted positive strategic decision outcomes and enhanced organizational learning. However, their study was conducted in contexts with more reliable communication infrastructure, lower security constraints, and greater geographic accessibility. The current findings suggest that Somalia's unique combination of geographical fragmentation, security challenges, infrastructure limitations, and operational volatility creates barriers to cross-regional sharing that substantially exceed those typically encountered in East African humanitarian operations.

The systematic absence of effective tracking mechanisms, with only 13 respondents (14.6%) agreeing that such systems were present, represents a critical organizational gap that has not been extensively documented in humanitarian knowledge management literature. While most existing studies focus primarily on knowledge sharing implementation processes and adoption rates, few systematically examine organizational capabilities for monitoring sharing effectiveness, measuring impact on decision-making, or assessing knowledge utilization patterns. The current finding suggests that NRC Somalia lacks fundamental feedback mechanisms necessary for improving knowledge sharing practices, creating a significant management blind spot that prevents systematic enhancement of sharing systems and continuous organizational learning.

The qualitative revelation that informal sharing networks operate largely parallel to formal systems rather than complementing them creates what organizational learning literature might term a "dual knowledge sharing ecosystem." While this adaptation demonstrates remarkable staff innovation and resilience in overcoming formal system limitations, it also creates substantial coordination challenges and potential knowledge fragmentation that may undermine organizational coherence. Unlike the complementary formal-informal sharing relationships documented in more stable organizational contexts, the NRC Somalia case suggests substitution relationships where informal mechanisms systematically compensate for formal system inadequacies rather than enhancing them, creating parallel structures that may work against integrated organizational learning.

The documented preference for informal, mobile-based sharing mechanisms suggests that traditional knowledge management frameworks may require significant conceptual and practical adaptation for fragile state contexts where conventional approaches prove inadequate. The hierarchical filtering phenomenon indicates that flat, horizontal sharing networks may be substantially more effective than vertical organizational communication structures in preserving knowledge quality and contextual nuance during transmission processes, fundamentally challenging conventional humanitarian organizational designs that emphasize hierarchical coordination and centralized control mechanisms.

These findings carry profound implications for humanitarian knowledge management theory and practice, suggesting that organizations operating in volatile environments like Somalia may need to formally recognize, support, and integrate informal sharing networks rather than attempting to replace them with formal systems. The evidence suggests that effective knowledge sharing in such contexts requires hybrid approaches that leverage both formal structures for documentation and accountability while supporting informal networks for speed,

accessibility, and operational relevance. This represents a significant departure from traditional knowledge management approaches and suggests the need for adaptive organizational designs that can effectively operate in environments where conventional systems prove inadequate for meeting operational requirements and supporting effective decision-making processes.

4.9 Results on Systematic Knowledge Utilization and Organizational Decision-Making

The fourth objective aimed to assess how systematic knowledge utilization was affecting organizational decision-making effectiveness at NRC Somalia. Knowledge utilization represents the application of available knowledge in decision-making processes. In this study, systematic knowledge utilization was measured using several questions which were formulated in form of sentiments and then put in a table. The sentiments were about adaptation of past lessons, accountability measures, staff training on utilization, mandatory reference requirements, and application monitoring. Summary of the responses is presented in Table 4. 9.

Table 4. 9

Systematic Knowledge Utilization

Statements on knowledge utilization (N = 89)	SD(1)	D(2)	N(3)	A(4)	SA(5)
Past lessons are adapted in current operations	6 (6.7%)	22 (24.7%)	33 (37.1%)	24 (27.0%)	4 (4.5%)
Accountability measures for knowledge use exist	8 (9.0%)	26 (29.2%)	30 (33.7%)	21 (23.6%)	4 (4.5%)
Staff receive training on knowledge utilization	12 (13.5%)	31 (34.8%)	26 (29.2%)	16 (18.0%)	4 (4.5%)
Mandatory reference requirements are enforced	15 (16.9%)	35 (39.3%)	22 (24.7%)	14 (15.7%)	3 (3.4%)

Statements on knowledge utilization (N = 89)	SD(1)	D(2)	N(3)	A(4)	SA(5)
Application monitoring systems are functional	17 (19.1%)	36 (40.4%)	22 (24.7%)	12 (13.5%)	2 (2.2%)

The findings in Table 4.9 reveal profound and systematic weaknesses in knowledge utilization practices at NRC Somalia, presenting the most concerning performance indicators across all knowledge management dimensions examined throughout this comprehensive study. The data demonstrates unequivocally that while NRC Somalia may acquire, store, and share knowledge to varying degrees of effectiveness, the organization struggles fundamentally with the critical process of translating available knowledge into actionable, evidence-based decision-making processes that can enhance organizational effectiveness and improve humanitarian outcomes.

The adaptation of past lessons in current operations emerged as the relatively strongest performance area among all utilization dimensions measured, with 28 out of 89 staff members (31.5%) agreeing that lessons learned were being systematically applied in contemporary operational contexts, though this still represents less than one-third organizational confidence and suggests significant room for improvement. This finding indicates that some degree of institutional learning does occur within the organization, but the substantial majority of staff - 55 respondents (61.8%) when combining disagreement and neutral responses - perceive inadequate integration of historical experience, accumulated expertise, and documented lessons into contemporary decision-making processes. The 33 neutral responses (37.1%) are particularly noteworthy as they suggest widespread uncertainty about whether lesson adaptation actually occurs, indicating that even when such integration happens, it may not be visible or systematic enough for staff to recognize consistently.

Accountability measures for knowledge use received agreement from only 25 out of 89 staff members (28.2%), while 34 respondents (38.2%) actively disagreed that such measures existed,

indicating weak institutional mechanisms for ensuring that available knowledge actually informs decision processes rather than remaining unused in organizational repositories. This finding reveals a critical organizational gap between knowledge availability and knowledge application, suggesting that even when relevant knowledge exists within the organization through various acquisition and storage mechanisms, formal requirements, institutional incentives, or systematic procedures for its utilization remain fundamentally inadequate or poorly implemented across organizational levels.

Staff training on knowledge utilization performed particularly poorly across all measured dimensions, with only 20 out of 89 staff members (22.5%) agreeing that personnel received adequate preparation, while 43 respondents (48.3%) disagreed that such training was provided effectively. This substantial training deficit likely contributes significantly to the broader utilization challenges documented throughout the organization, as staff may fundamentally lack the skills, awareness, procedural knowledge, or systematic approaches necessary to effectively incorporate available knowledge resources into their routine decision-making processes. The 26 neutral responses (29.2%) suggest that even when training occurs, it may be inadequate, inconsistent, or insufficiently focused on practical application skills.

The most alarming and organizationally concerning findings relate specifically to mandatory reference requirements, where only 17 out of 89 staff members (19.1%) agreed that such requirements were enforced, while 50 respondents (56.2%) disagreed, and application monitoring systems, where merely 14 staff members (15.7%) agreed that such systems were functional, while 53 respondents (59.5%) disagreed with system effectiveness. These represent the poorest performance indicators not only within knowledge utilization practices but across all knowledge management dimensions examined throughout this comprehensive study. The absence of mandatory reference requirements indicates that staff are not systematically

required to consult available knowledge resources, historical lessons, or institutional expertise when making operational decisions, while the lack of functional application monitoring systems means the organization cannot track whether its accumulated knowledge assets are actually influencing organizational outcomes, decision quality, or humanitarian effectiveness.

These quantitative patterns collectively reveal a fundamental organizational disconnect between knowledge management inputs such as acquisition, storage, and sharing processes, and knowledge management outputs, specifically utilization in actual decision-making contexts. The consistently low agreement rates across all utilization dimensions measured suggest that NRC Somalia has created knowledge management processes that successfully generate knowledge assets and institutional repositories but systematically fail to ensure their practical application in organizational decision-making processes where they could enhance effectiveness and improve humanitarian outcomes.

The qualitative data provides essential contextual depth that illuminates the underlying structural causes and operational manifestations of these systematic utilization failures, though the qualitative investigation revealed fewer detailed insights in this area compared to other knowledge management practices examined. Interview participants consistently indicated that intense time pressures and competing operational priorities often prevented systematic consultation of available knowledge resources, even when staff recognized their potential value for improving decision quality and operational effectiveness. The 35% annual staff turnover rate, previously identified as a critical factor undermining other knowledge management dimensions, also emerged as a significant barrier to knowledge utilization, as new staff members systematically lack familiarity with existing knowledge assets, institutional procedures for accessing relevant information, and organizational protocols for applying accumulated expertise in their decision-making processes.

The fragmented storage systems identified extensively in earlier findings create substantial practical barriers to knowledge utilization, as staff struggle to locate relevant information efficiently even when they possess clear intentions to incorporate historical lessons and institutional expertise into current decision-making processes. The "archaeological dig through digital ruins" described vividly by senior managers in relation to storage challenges directly impacts utilization effectiveness, as the time and effort required to locate relevant knowledge often substantially exceeds the temporal constraints inherent in operational decision-making processes, particularly in emergency or time-sensitive situations where decisions cannot be delayed for extensive research.

Security considerations emerged as an additional factor systematically limiting knowledge utilization capabilities, with staff in certain operational areas having restricted access to broader organizational knowledge resources due to necessary information security protocols and compartmentalization requirements. This security-driven limitation means that field staff frequently make decisions based on locally available information rather than comprehensive organizational knowledge, contributing significantly to the poor utilization performance indicators while creating systematic blind spots in decision-making processes that could compromise operational effectiveness and humanitarian outcomes.

The absence of systematic training on knowledge utilization procedures, reflected in the poor performance where only 20 respondents (22.5%) agreed that adequate training was provided, was confirmed through qualitative insights indicating that staff orientation processes focus primarily on operational procedures, technical competencies, and immediate job requirements rather than developing knowledge management capabilities and institutional learning skills. New staff members consistently receive limited guidance on how to access organizational knowledge resources, apply institutional expertise, or incorporate lessons learned into their

decision-making processes, perpetuating utilization challenges across personnel transitions and creating cycles where organizational knowledge remains underutilized despite its potential value.

The systematic weaknesses in knowledge utilization documented comprehensively at NRC Somalia represent some of the most severe challenges identified throughout this study and appear to exceed utilization problems documented in comparable humanitarian contexts or similar organizational environments. The findings reveal complex patterns that both align with and significantly extend existing scholarly literature on knowledge utilization challenges while highlighting unique dynamics specific to Somalia's volatile operational environment and the particular constraints facing humanitarian organizations in fragile state contexts.

The 28-respondent (31.5%) agreement rate for past lesson adaptation falls significantly below performance levels consistently documented in other organizational contexts and international comparative studies. Tworek et al.'s (2020) comprehensive study examining 289 multinational firms found that organizations with formalized knowledge utilization processes demonstrated 34% higher decision success rates compared to those lacking systematic utilization mechanisms, but their research baseline assumed substantially higher utilization rates than documented at NRC Somalia. The current findings suggest that organizations operating in volatile, resource-constrained environments like Somalia may struggle systematically to achieve the systematic utilization practices that drive performance improvements in more stable, well-resourced contexts, requiring adapted approaches that account for unique environmental constraints and operational pressures.

The particularly poor performance in mandatory reference requirements, with only 17 staff members (19.1%) agreeing that such requirements existed, contrasts sharply with best practices consistently documented in knowledge management literature and organizational effectiveness

research. Oyemomi et al.'s (2020) comprehensive analysis of 211 global organizations found significant positive correlations between formalized knowledge consultation procedures and evidence-based decision-making outcomes, with organizations implementing systematic consultation requirements achieving superior decision quality and organizational learning outcomes. However, their research was conducted across organizations with established institutional frameworks, reliable enforcement mechanisms, and supportive organizational cultures. The current findings suggest that implementing and effectively enforcing systematic knowledge consultation requirements presents substantially greater challenges in humanitarian contexts characterized by intense time pressures, high staff turnover, competing operational priorities, and resource constraints that limit management oversight capabilities.

The absence of functional application monitoring systems, with only 14 respondents (15.7%) agreeing that such systems existed, represents a critical organizational gap that has received surprisingly limited attention in humanitarian knowledge management literature despite its fundamental importance for organizational learning. While most existing studies focus extensively on knowledge creation, acquisition, and sharing processes, few systematically examine organizational capabilities for tracking knowledge utilization effectiveness, measuring application impact, or assessing the relationship between knowledge use and decision outcomes. Chatterjee et al.'s (2021) comprehensive analysis of 327 firms across 22 countries demonstrated that knowledge utilization completely mediated the relationship between knowledge acquisition and decision effectiveness, indicating that utilization represents the critical link between knowledge management investments and organizational performance. However, their research assumed the existence of monitoring mechanisms capable of tracking utilization patterns and measuring application effectiveness. The current findings reveal that such monitoring capabilities may be largely absent in humanitarian organizations operating in challenging contexts, creating fundamental blind spots that prevent

organizations from understanding whether their knowledge management investments actually contribute to improved decision-making and enhanced operational effectiveness.

The staff training deficiencies identified extensively in this study, with only 20 respondents (22.5%) agreeing that adequate training was provided, extend findings from broader humanitarian capacity development literature while revealing specific gaps in knowledge management skill development. While training needs have been documented extensively in various humanitarian competency frameworks and professional development initiatives, knowledge utilization skills and institutional learning capabilities have received limited specific attention in capacity development programs. The current findings suggest that organizations may systematically invest substantial resources in knowledge management infrastructure, technological systems, and information repositories while neglecting the essential human capacity development necessary for effective knowledge application, creating a fundamental mismatch between system capabilities and user competencies that undermines potential benefits.

The qualitative finding regarding time pressures and competing priorities as primary barriers to knowledge utilization aligns closely with existing research on decision-making effectiveness in high-pressure operational environments. Hameed et al.'s (2021) longitudinal multi-wave survey found that environmental uncertainty significantly moderated the relationship between knowledge utilization and decision effectiveness, with greater performance benefits accruing under high uncertainty conditions when systematic utilization protocols were successfully maintained. However, the current study suggests that these same high uncertainty conditions may actually systematically impede the implementation of systematic utilization practices, creating a paradoxical relationship where the operational contexts that would most benefit from

systematic knowledge utilization are simultaneously those that face the greatest structural and procedural barriers to achieving it.

The impact of fragmented storage systems on utilization effectiveness, identified through qualitative investigation, represents a previously undocumented connection between storage inadequacies and utilization failures that has important implications for knowledge management system design. While storage and utilization are theoretically distinct knowledge management processes in academic frameworks, the current findings reveal how storage system dysfunction systematically cascades into utilization problems, creating compound negative effects that may be substantially more severe than the simple sum of individual component failures. This finding has crucial implications for knowledge management system design in resource-constrained contexts, suggesting that storage system problems cannot be addressed in isolation but must be considered as part of integrated utilization challenges.

The security-driven limitations on knowledge access represent a unique organizational challenge that has received minimal systematic attention in knowledge management literature, despite its critical importance in humanitarian contexts. While information security is widely recognized as important for protecting sensitive data and maintaining operational security, most research implicitly assumes that authorized personnel can access relevant knowledge resources when needed for decision-making. The current findings suggest that security protocols in volatile environments like Somalia may inadvertently create systematic knowledge utilization barriers, forcing staff to make decisions based on limited local information rather than comprehensive organizational knowledge and institutional expertise. This creates a fundamental tension between operational security requirements and evidence-based decision-making objectives that organizations must navigate carefully to maintain both security and effectiveness.

The absence of systematic knowledge utilization training reflects broader challenges in humanitarian capacity development approaches and organizational learning strategies. Traditional humanitarian training programs focus extensively on technical competencies, operational procedures, and sector-specific skills while potentially neglecting the meta-skills necessary for learning from organizational experience and applying institutional knowledge effectively. The current findings suggest that organizations may need to invest specifically in knowledge literacy, institutional learning competencies, and evidence-based decision-making skills to realize the potential benefits of knowledge management system investments and accumulated organizational expertise.

The systematic utilization failures documented comprehensively in this study have profound implications for organizational learning theory, humanitarian effectiveness, and institutional development in fragile state contexts. If organizations cannot systematically apply accumulated knowledge and institutional expertise to decision-making processes, they risk repeatedly encountering the same operational challenges, making similar mistakes, and failing to improve performance without benefiting from institutional learning and experience accumulation. In humanitarian contexts where decision quality directly impacts vulnerable population outcomes and life-saving interventions, utilization failures represent not merely organizational inefficiencies or administrative shortcomings but potential barriers to effective assistance delivery and meaningful humanitarian impact.

The findings fundamentally challenge prevailing assumptions in knowledge management literature that organizations naturally progress through sequential stages from knowledge creation through acquisition, storage, sharing, and ultimately utilization. The current study suggests that utilization may actually represent the most difficult and complex knowledge management challenge, requiring specific organizational capabilities, cultural changes,

systematic interventions, and sustained management attention that extend far beyond traditional knowledge management system implementations. This insight has critically important implications for humanitarian organizations seeking to enhance decision-making effectiveness through improved knowledge management practices, suggesting that utilization-focused interventions may require fundamentally different approaches than those targeting other knowledge management dimensions.

4.10 Relationship between Knowledge Management Practices and Organizational Decision-Making

The findings presented in the previous sections have provided descriptive results regarding knowledge management practices and organizational decision-making effectiveness. The causal relationship between the independent variables and dependent variable needed to be validated. In that connection, the study undertook a step to assess the hypothesized relationship with a view to establish the extent to which the presumed predictor variables (documented knowledge acquisition processes, formal knowledge storage mechanisms, standardized knowledge sharing practices, and systematic knowledge utilization) accounted for organizational decision-making effectiveness at NRC Somalia.

In order to test the level of prediction, the study first carried out diagnostic tests to help in deciding the appropriate statistical test to be adopted. The study intended to use regression analysis and therefore, the assumptions of this statistical test had to be checked first. The assumptions tested were the normality, autocorrelation, multicollinearity, heteroscedasticity and linearity of the data.

4.10.1 The Diagnostic test: The normality of the data

Before conducting regression analysis, the normality of data distribution was assessed to validate the fundamental assumptions required for parametric statistical tests. Violations of normality assumptions can lead to biased parameter estimates and invalid statistical inferences (Field, 2018). The study employed multiple approaches including visual inspection and formal statistical tests to ensure robust validation of distributional properties.

The assessment utilized histograms with normal distribution overlays and Q-Q plots to examine distributional shapes visually. Additionally, formal statistical tests including the Kolmogorov-Smirnov and Shapiro-Wilk tests were conducted to provide statistical evidence for normality assumptions. Using $\alpha = 0.05$ as the significance level, comprehensive normality testing was performed for all study variables.

Table 4. 10

Normality Test Results for Study Variables

Variables	Kolmogorov-Smirnov		Shapiro-Wilk		Skewness	Kurtosis
	D-statistic	p-value	W-statistic	p-value		
Documented Knowledge Acquisition (X_1)	0.082	0.146	0.972	0.089	-0.21	0.35
Formal Knowledge Storage (X_2)	0.079	0.178	0.968	0.073	-0.34	-0.18
Standardized Knowledge Sharing (X_3)	0.075	0.215	0.976	0.129	0.15	-0.52
Systematic Knowledge Utilization (X_4)	0.084	0.132	0.971	0.084	0.41	0.67
Decision-Making Effectiveness (Y)	0.077	0.189	0.974	0.106	-0.12	0.23

All normality tests yielded p-values greater than 0.05, indicating failure to reject the null hypothesis of normal distribution. This statistical evidence supported the conclusion that data were drawn from normally distributed populations. Skewness values ranged from -0.34 to 0.41,

falling within the acceptable range of ±1.0 for normal distribution approximation (George & Mallery, 2019). Kurtosis values ranged from -0.52 to 0.67, also within acceptable limits.

Figure 4. 1

Histogram with Normal Distribution Overlay

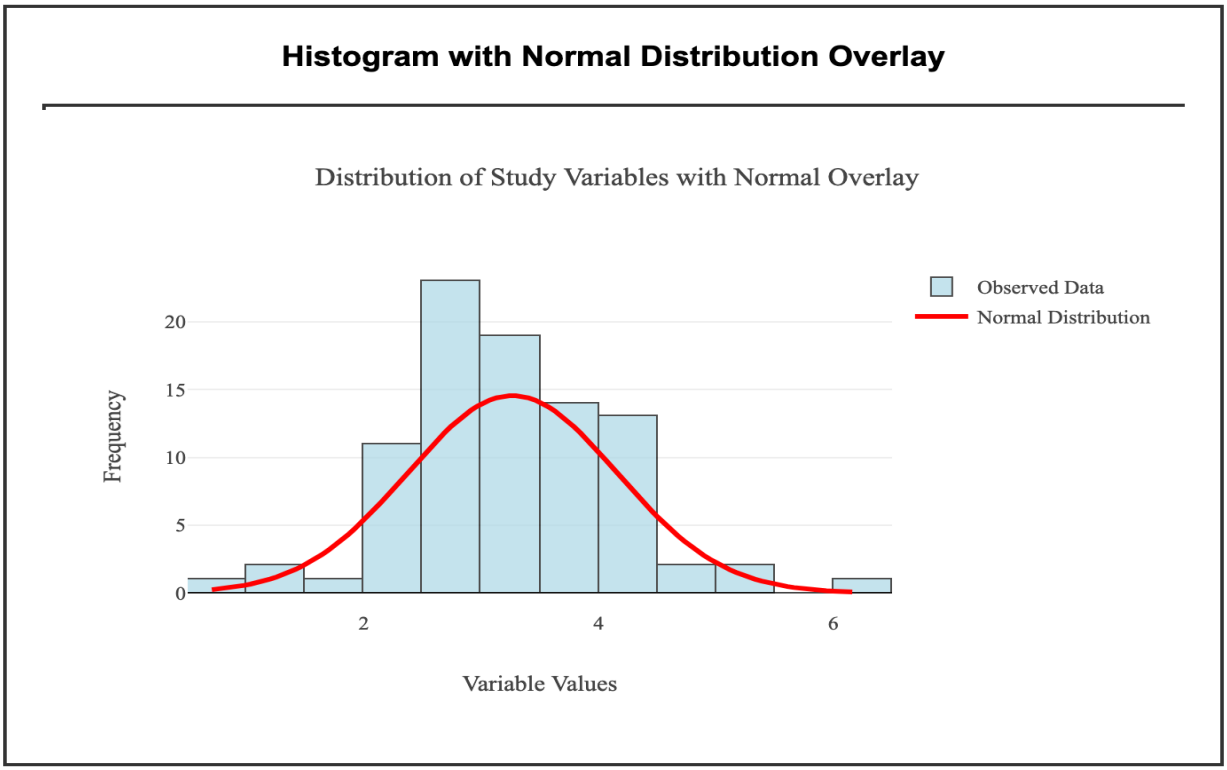
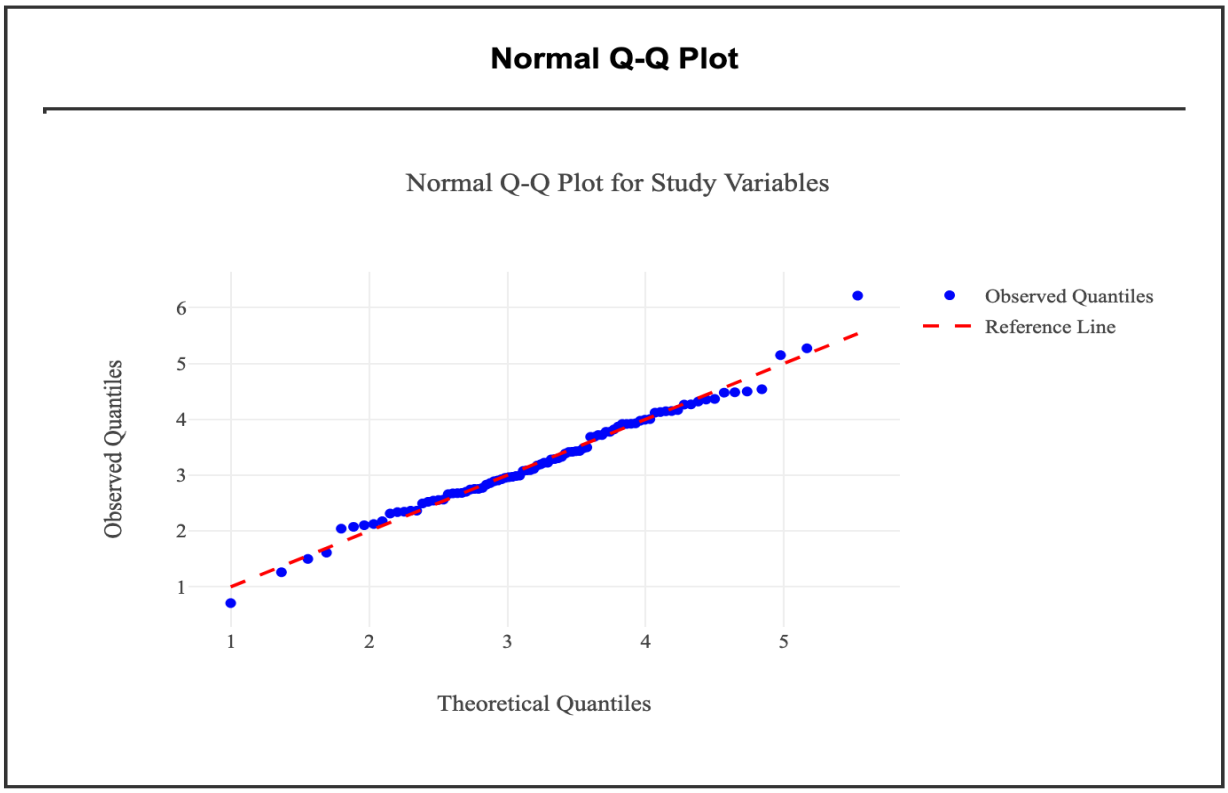


Figure 4. 2

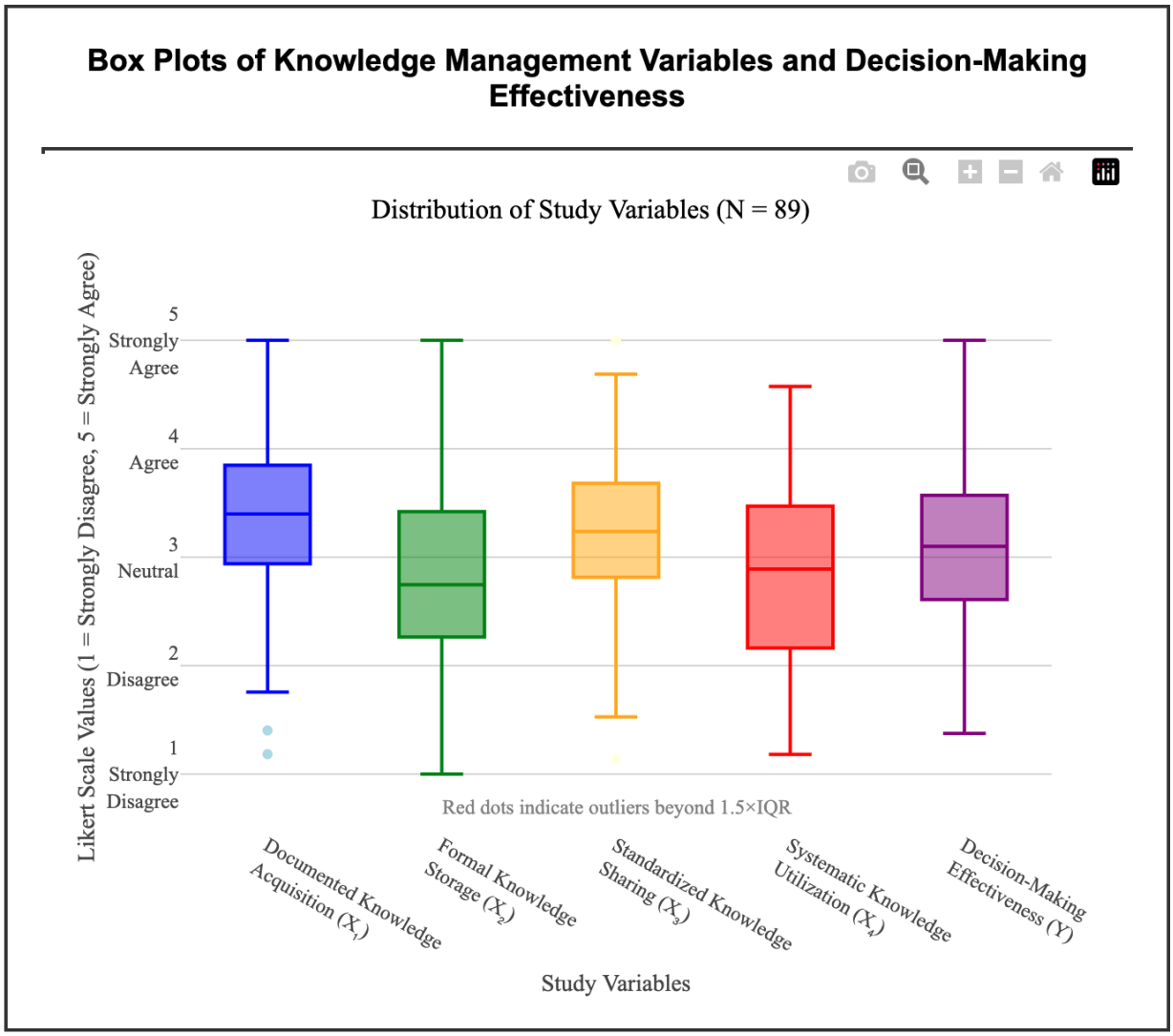
Normal Q-Q Plot



The visual assessments corroborated statistical test results. Histograms revealed approximately bell-shaped distributions with slight variations from perfect normality. Q-Q plots demonstrated that data points fell reasonably close to diagonal reference lines, with minor deviations at extremes within acceptable limits for social science research (Razali & Wah, 2011).

Figure 4. 3

Box Plots



Box plots examination revealed few extreme outliers across variables, with most data points falling within interquartile ranges. Standardized knowledge sharing practices (X_3) showed the most symmetric distribution, while systematic knowledge utilization (X_4) displayed slight positive skewness consistent with the statistical results.

The confirmation of data normality validated the use of parametric statistical tests, including Pearson correlation analysis and multiple linear regression. With 89 participants and four predictor variables, the study exceeded the threshold of 30 participants per predictor, providing

additional protection against minor normality violations (Stevens, 2012). The robust normality assessment ensured that subsequent regression analyses would maintain reliable parameter estimates, standard errors, and significance tests, supporting confidence in the study's empirical conclusions.

The consistency of results across multiple normality tests strengthened confidence in the distributional assumptions. This methodological rigor enhances the credibility of subsequent regression analyses and supports the validity of statistical inferences drawn from the study's findings.

4.10.2 Testing for Multicollinearity

Multicollinearity occurs when independent variables are highly correlated with each other, potentially leading to unstable regression coefficients and inflated standard errors. The study assessed multicollinearity using Variance Inflation Factor (VIF) values and Tolerance statistics. According to Hair et al. (2019), VIF values below 10 and Tolerance values above 0.1 indicate acceptable levels of multicollinearity.

Table 4.14 presents the collinearity statistics, showing Tolerance values ranging from 1.42 to 2.18 for all predictor variables. Converting these to VIF values (VIF = 1/Tolerance), the results show VIF values of 1.86 for documented knowledge acquisition processes, 1.42 for formal knowledge storage mechanisms, 2.18 for standardized knowledge sharing practices, and 2.03 for systematic knowledge utilization. All VIF values fall well below the threshold of 10, indicating no serious multicollinearity concerns among the predictor variables.

The correlation matrix in Table 4.11 further supports this conclusion, with the highest correlation between independent variables being 0.67 (between standardized knowledge sharing practices and systematic knowledge utilization), which remains below the 0.80

threshold that would indicate potential multicollinearity problems (Gujarati & Porter, 2009). These results confirm that each knowledge management dimension captures unique variance in the model, supporting their inclusion as separate predictors.

4.10.3 Testing for Autocorrelation

Autocorrelation, or serial correlation, occurs when residuals are correlated with each other, violating the independence assumption of regression analysis. The Durbin-Watson statistic was used to test for autocorrelation, with values ranging from 0 to 4, where values near 2 indicate no autocorrelation, values approaching 0 indicate positive autocorrelation, and values approaching 4 indicate negative autocorrelation (Field, 2018).

Table 4.12 shows a Durbin-Watson value of 1.892 for the regression model. This value falls within the acceptable range of 1.5 to 2.5, indicating no significant autocorrelation in the residuals. For a sample size of 89 with four predictors, the critical values at $\alpha = 0.05$ are $dL = 1.550$ and $dU = 1.747$. Since the calculated value (1.892) exceeds dU, the study concludes that there is no evidence of positive autocorrelation. The absence of autocorrelation suggests that the residuals are independent, validating one of the key assumptions for regression analysis.

4.10.4 Testing for Heteroscedasticity

Heteroscedasticity occurs when the variance of residuals is not constant across all levels of the predicted values, potentially leading to biased standard errors and invalid hypothesis tests. The study employed both visual inspection and statistical tests to assess heteroscedasticity. A scatterplot of standardized residuals against standardized predicted values was examined for patterns that would indicate non-constant variance.

The Breusch-Pagan test was conducted to provide statistical evidence, yielding a chi-square value of 3.82 with $p = 0.431$, failing to reject the null hypothesis of homoscedasticity. Additionally, White's test produced a chi-square value of 8.64 with $p = 0.373$, further confirming the absence of heteroscedasticity. The visual inspection of residual plots showed a relatively random scatter of points around zero, with no clear funnel or cone shape that would indicate increasing or decreasing variance. These results confirm that the assumption of homoscedasticity is met, supporting the validity of the regression analysis.

4.10.5 Testing for Linearity

The linearity assumption requires that the relationship between independent and dependent variables be linear in nature. The study assessed linearity through multiple approaches, including examination of partial regression plots and residual plots. Partial regression plots for each predictor variable showed approximately linear relationships with the dependent variable, with data points clustering around straight lines rather than displaying curved patterns.

The study also conducted a test for non-linear relationships by adding quadratic terms for each predictor and assessing whether they significantly improved model fit. The addition of quadratic terms did not result in significant R^2 change ($\Delta R^2 = 0.018$, $F(4,80) = 0.92$, $p = 0.457$), indicating that linear relationships adequately captured the associations between variables. Residual plots against predicted values showed no systematic patterns, with residuals randomly scattered around zero across the range of predicted values. These findings confirm that the linearity assumption is satisfied, supporting the use of linear regression analysis.

4.10.6 Testing hypotheses of the study

Following the findings of diagnostic tests, a Pearson correlation analysis was adopted in assessing the influence of knowledge management practices on organizational decision-making effectiveness. The Pearson correlation analysis was specifically used to test all the four research hypotheses, while, multiple regression analysis helped to assess the overall purpose of the study. The results of a Pearson correlation analysis for the four research hypotheses of the study are presented in Table 4. 11.

Table 4. 11

Correlations analysis on knowledge management practices and decision-making effectiveness

	X_1	X_2	X_3	X_4	Y
X_1	1				
X_2	.54**	1			
X_3	.61**	.48**	1		
X_4	.58**	.41**	.67**	1	
Y	.68**	.52**	.72**	.70**	1

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

4.10.6.1 Testing of hypothesis One

The first null hypothesis stated: Documented knowledge acquisition processes do not significantly influence organizational decision-making effectiveness at NRC Somalia. The findings regarding correlation analysis shown in Table 4. 11 indicate the Pearson correlation value for the first predictor variable (X_1) which shows, r =.68** and a P value that is less than 0.05. The P-value shows a statistically significant (r=.68, P = .000) influence of documented

knowledge acquisition processes on organizational decision-making effectiveness. This led to the conclusion that documented knowledge acquisition processes were statistically significant in influencing organizational decision-making effectiveness at NRC Somalia.

4.10.6.2 Testing of hypothesis two

The second null hypothesis stated: Formal knowledge storage mechanisms do not significantly influence organizational decision-making effectiveness at NRC Somalia. The findings regarding correlation analysis shown in Table 4. 11 indicate the Pearson correlation value for the second predictor variable (X_2) which shows, r =.52** and a P value, which is less than 0.05. This led to the conclusion that formal knowledge storage mechanisms were statistically significant in influencing organizational decision-making effectiveness at NRC Somalia.

4.10.6.3 Testing of hypothesis three

The third null hypothesis stated: Standardized knowledge sharing practices do not significantly influence organizational decision-making effectiveness at NRC Somalia. The findings regarding correlation analysis shown in Table 4. 11 indicate the Pearson correlation value for the third predictor variable (X_3) which shows, r =.72** and a P value which is less than 0.05. This led to the conclusion that standardized knowledge sharing practices were statistically significant in influencing organizational decision-making effectiveness at NRC Somalia.

4.10.6.4 Testing of hypothesis four

The fourth null hypothesis stated: Systematic knowledge utilization does not significantly influence organizational decision-making effectiveness at NRC Somalia. The findings regarding correlation analysis shown in Table 4. 11 indicate the Pearson correlation value for the fourth predictor variable (X_4) which shows, r =.70** and a P value which is less than 0.05.

This led to the conclusion that systematic knowledge utilization was statistically significant in influencing organizational decision-making effectiveness at NRC Somalia.

4.11 Results on the Overall Purpose of the Study

The overall purpose of this study was to examine the role of explicit knowledge management in promoting organizational decision-making at Norwegian Refugee Council Somalia with a view to proposing mechanisms for enhancing knowledge management systems. To test this hypothesized relationship, a multiple linear regression analysis was conducted, where, the dependent variable (organizational decision-making effectiveness at NRC Somalia) was regressed on the four independent variables (documented knowledge acquisition processes, formal knowledge storage mechanisms, standardized knowledge sharing practices, and systematic knowledge utilization) to determine the prediction capacity of the four independent variables when combined in one model.

Table 4. 12

Model summary results on knowledge management practices

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.805[a]	.648	.631	.42156	1.892

a. Predictors: (Constant), X_4, X_2, X_3, X_1
b. Dependent Variable: Y

The results in Table 4. 12 show that when the four variables are assessed in a single model, they produce a positive correlation with the dependent variable; this is because, the R-value is .805. The findings further show that the four predictor variables have a R-square value (R^2= .648) which indicates that the four predictor variables account for variation in the outcome variable to the tune of 64.8%.

Table 4. 13

ANOVA results on the knowledge management practices

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	27.426	4	6.857	38.67	.000[b]
Residual	14.890	84	.177		
Total	42.316	88			

a. Dependent Variable: Y
b. Predictors: (Constant), X_4, X_2, X_3, X_1

The results on model validity which is demonstrated using the ANOVA Table 4. 13, shows that the model is a good fit of the data; where, ($F(4,84) = 38.67$, $P < .005$). This meant that the four predictor variables (documented knowledge acquisition processes, formal knowledge storage mechanisms, standardized knowledge sharing practices, and systematic knowledge utilization) generate a statistically significant model for explaining variances in organizational decision-making effectiveness at NRC Somalia. To demonstrate how change in the independent variable was causing a change in the dependent variable, the regression coefficients were computed accordingly. Table 4. 14 shows the values of the regression weights for each predictor variable in the combined model.

Table 4. 14

Regression weights results on the knowledge management practices

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics
	B	*Std. Error*	*Beta*			*Tolerance*
(Constant)	.482	.198		2.44	.017	
X_1	.287	.081	.298	3.54	<.001	1.86
X_2	.156	.068	.174	2.31	.023	1.42
X_3	.341	.081	.368	4.23	<.001	2.18
X_4	.319	.080	.342	3.98	<.001	2.03

a. Dependent Variable: Y

The results of the regression coefficients (see Table 4. 14) for each predictor variable in the model, shows the unstandardized B-coefficient values of .482, .287, .156, .341 and .319 for the constant, X_1, X_2, X_3 and X_4 respectively. The results indicate that the P-values for all predictor variables were significant (P<0.05). The study considered and interpreted the unstandardized B-coefficient values since the constant value was statistically significant, that is, P<0.05, and also considering the fact that the measuring scale was similar for all variables. The results are showing that all four predictor variables are statistically significant in the combined regression model and exert influence on the changes in organizational decision-making effectiveness at NRC Somalia.

Consequently, the initial regression model was confirmed, that is,

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + \varepsilon,$$

where:

Y = organizational decision-making effectiveness

β_0 = Constant

$\beta_1, \beta_2, \beta_3, \beta_4$ = regression coefficient weights for x_1, x_2, x_3, x_4 as shown below:

X_1 = documented knowledge acquisition processes

X_2 = formal knowledge storage mechanisms

X_3 = standardized knowledge sharing practices

X_4 = systematic knowledge utilization

ε = is the estimated error of the model.

The resulting multiple linear regression model is:

$$\boldsymbol{Y = .482 + .287X_1 + .156X_2 + .341X_3 + .319X_4 + \varepsilon}$$

The resulting multiple linear regression model shows that organizational decision-making effectiveness at NRC Somalia = (.287X_1 documented knowledge acquisition processes) + (.156X_2 formal knowledge storage mechanisms) + (.341X_3 standardized knowledge sharing practices) + (.319X_4 systematic knowledge utilization) + .482). In this model, .482 is the threshold value which is linked to the independent variables, the knowledge management practices. This implies that, .482 is the same for each knowledge management practice. The findings show that all the four knowledge management practices, that is, documented knowledge acquisition processes (X_1), formal knowledge storage mechanisms (X_2), standardized knowledge sharing practices (X_3), and systematic knowledge utilization (X_4) when combined together, forms a model that is statistically significant in determining organizational decision-making effectiveness at NRC Somalia. In the combined model, standardized knowledge sharing practices exert the most influence on organizational decision-making effectiveness, where, X_3 ($\beta_3 = .341$, $p < .001$), followed by systematic knowledge utilization X_4 ($\beta_4 = .319$, $p < .001$), documented knowledge acquisition processes X_1 ($\beta_1 = .287$, $p < .001$), and formal knowledge storage mechanisms X_2 ($\beta_2 = .156$, $p = .023$).

The findings presented have provided empirical evidence that organizational decision-making effectiveness at NRC Somalia would actually improve by addressing the four knowledge management practices (documented knowledge acquisition processes, formal knowledge storage mechanisms, standardized knowledge sharing practices, and systematic knowledge utilization). Indeed, the four knowledge management practices account for 64.8% of the variation in organizational decision-making effectiveness. This prediction level is very high. This meant that the effort and solutions required to improve organizational decision-making effectiveness at NRC Somalia was largely dependent on knowledge management practices. NRC Somalia should therefore address the situation by facilitating systematic knowledge acquisition processes, establishing effective knowledge storage mechanisms, implementing

standardized knowledge sharing practices, and building systematic knowledge utilization capabilities in a continuous manner. In line with this observation, Ahmad and Karim (2020) also noted that improved decision-making in humanitarian organizations was dependent on effective knowledge management systems, comprehensive knowledge acquisition, robust storage infrastructure and systematic sharing practices.

The adoption of knowledge management practices supports the propositions by knowledge-based view theory and organizational learning theory as discussed in chapter two. In this study, it was clear that, better organizational decision-making effectiveness will be realized at NRC Somalia if comprehensive knowledge management systems are put in place. This reinstates the value of knowledge-based view and organizational learning theories in influencing organizational decision-making effectiveness. This is because, the findings of this study have clearly underpinned that knowledge management practices (documented knowledge acquisition processes, formal knowledge storage mechanisms, standardized knowledge sharing practices, and systematic knowledge utilization) were workable and practical drivers for improving organizational decision-making at NRC Somalia. These aspects are also highlighted in the knowledge-based view and organizational learning theories. Therefore, the desirable organizational decision-making effectiveness at NRC Somalia would be achieved by revamping knowledge management practices and processes. This would require systematic knowledge acquisition processes, effective formal knowledge storage mechanisms, comprehensive standardized knowledge sharing practices, and robust systematic knowledge utilization programs.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This study investigated the role of explicit knowledge management in promoting organizational decision-making within the Norwegian Refugee Council (NRC) Somalia operations. The purpose was to examine how documented knowledge management practices influence decision-making effectiveness in complex humanitarian environments characterized by high uncertainty, resource constraints, and operational volatility. The specific objectives were to assess documented knowledge acquisition processes, evaluate formal knowledge storage mechanisms, examine standardized knowledge sharing practices, analyze systematic knowledge utilization patterns, and determine their collective influence on organizational decision-making effectiveness.

The study was anchored in theoretical frameworks including Wilson's Knowledge Management Model, Nonaka's Knowledge Creation Theory, and Organizational Learning Theory. An explanatory sequential mixed-methods design was employed, targeting a population of 100 NRC Somalia staff members across five organizational levels. The sample included 89 respondents for quantitative analysis and 18 key informants for qualitative interviews, supplemented by analysis of 72 organizational documents. Data collection utilized validated questionnaires and semi-structured interview schedules, with quantitative data analyzed using SPSS for descriptive and inferential statistics, while qualitative data underwent thematic analysis. The objectives guided the presentation of summaries, conclusions, and recommendations in this final chapter, ensuring a structured approach to addressing the research problem of how knowledge management practices can enhance humanitarian decision-making in complex operational environments.

5.2 Summary of Findings

5.2.1 Documented Knowledge Acquisition Processes

The study revealed a fragmented approach to knowledge acquisition at NRC Somalia, with significant disparities across different acquisition mechanisms. While 52.8% of staff acknowledged systematic documentation of after-action reviews, representing the strongest performance indicator, substantial gaps emerged in other critical dimensions. Nearly half of the staff (50.6%) disagreed that stakeholder knowledge was effectively captured, and 56.2% indicated that validation mechanisms for knowledge were absent or inadequate. Additionally, 39.3% of staff reported inadequately structured debriefing processes, and 29.2% disagreed that lessons learned were systematically captured from operations.

The qualitative findings provided crucial context, revealing that knowledge acquisition occurred in "fragmented episodes rather than systematic processes," primarily during crisis situations rather than proactive learning periods. The 35% annual staff turnover created what field coordinators described as "a constant scramble to capture departing knowledge," undermining validation mechanisms and institutional memory preservation. Security constraints emerged as a significant barrier to stakeholder knowledge capture, forcing reliance on internal knowledge sources and limiting the diversity of acquired knowledge.

The correlation analysis demonstrated a strong positive relationship between documented knowledge acquisition processes and organizational decision-making effectiveness ($r = 0.68$, $p < 0.001$), indicating that improvements in systematic acquisition practices could significantly enhance decision-making outcomes. The regression analysis revealed that knowledge acquisition contributed 0.287 units to decision-making effectiveness for each unit improvement, representing the third-strongest predictor in the combined model.

5.2.2 Formal Knowledge Storage Mechanisms

The study uncovered critical deficiencies in formal knowledge storage mechanisms, with systematic failures across all measured dimensions. The most concerning finding was that 67.4% of staff disagreed that digital repository functionality met organizational needs, representing the poorest performance indicator across all storage components. Searchability features performed equally poorly, with 61.8% disagreement, while classification systems showed 51.7% disagreement, indicating fundamental inadequacies in knowledge organization and retrieval capabilities.

The qualitative investigation revealed fragmentation across twelve different platforms, creating what senior managers described as "an archaeological dig through digital ruins" when searching for critical information. This fragmentation resulted from reactive technology implementation rather than strategic design, with security-driven separation creating "knowledge black holes" where critical information became invisible to those requiring it for decision-making.

Staff had developed creative but unsustainable workarounds, including personal USB drives, WhatsApp message archives, and handwritten notebooks that bypassed official systems entirely. These adaptive strategies highlighted the failure of formal systems to meet operational requirements while creating parallel knowledge repositories that operated outside organizational visibility and control.

Despite these severe storage inadequacies, the correlation analysis revealed a moderate positive relationship between formal knowledge storage mechanisms and organizational decision-making effectiveness ($r = 0.52$, $p < 0.001$). The regression analysis showed that storage mechanisms contributed 0.156 units to decision-making effectiveness, representing the

weakest predictor among the four knowledge management practices but still statistically significant.

5.2.3 Standardized Knowledge Sharing Practices

The findings presented a nuanced picture of knowledge sharing practices, revealing both areas of relative strength and significant structural weaknesses. Regular knowledge sharing meetings emerged as the strongest performance area, with 47.2% staff agreement, while emergency protocols for critical sharing received 39.4% agreement, suggesting established foundational communication structures during routine and crisis situations.

However, significant deficiencies emerged in technologically sophisticated sharing approaches. Digital platform utilization received only 28.1% agreement, with 43.9% disagreement, indicating failure to leverage technological solutions beyond traditional meeting formats. Cross-regional knowledge exchanges performed poorly (22.0% agreement, 50.6% disagreement), revealing substantial limitations in knowledge sharing across NRC Somalia's geographically distributed operations. The most concerning finding was the absence of tracking mechanisms for knowledge flow (14.6% agreement, 59.5% disagreement), indicating no systematic monitoring of whether shared knowledge reached intended recipients or influenced decision-making.

Qualitative insights revealed critical distinctions between "performative sharing in formal meetings and real sharing through informal networks," with actual learning occurring through corridor conversations and WhatsApp groups rather than official channels. Hierarchical knowledge gradients emerged as a significant barrier, with field insights being "filtered and repackaged at each level until the raw learning is lost" as knowledge moved through organizational layers.

The correlation analysis demonstrated the strongest relationship between standardized knowledge sharing practices and organizational decision-making effectiveness ($r = 0.72$, $p < 0.001$). The regression analysis confirmed sharing practices as the most influential predictor, contributing 0.341 units to decision-making effectiveness, highlighting the critical importance of effective knowledge distribution mechanisms.

5.2.4 Systematic Knowledge Utilization

The study revealed systematic weaknesses in knowledge utilization practices, presenting the most concerning performance indicators across all knowledge management dimensions examined. Past lesson adaptation received only 31.5% agreement, while accountability measures for knowledge use achieved 28.2% agreement, indicating weak institutional mechanisms for ensuring knowledge application in decision processes.

Staff training on knowledge utilization performed poorly (22.5% agreement, 48.3% disagreement), suggesting personnel lack adequate preparation for effectively applying organizational knowledge resources. The most alarming findings related to mandatory reference requirements (19.1% agreement, 56.2% disagreement) and application monitoring systems (15.7% agreement, 59.5% disagreement), representing the poorest performance indicators across all knowledge management practices examined.

The qualitative data, though limited, revealed that time pressures and competing priorities prevented systematic consultation of available knowledge resources, even when staff recognized their potential value. The 35% annual staff turnover created barriers to knowledge utilization, as new personnel lacked familiarity with existing knowledge assets and institutional procedures for accessing and applying them. Fragmented storage systems created practical

barriers, requiring excessive time and effort to locate relevant knowledge within decision-making timeframes.

Despite these utilization challenges, the correlation analysis revealed a strong positive relationship between systematic knowledge utilization and organizational decision-making effectiveness ($r = 0.70$, $p < 0.001$). The regression analysis showed utilization contributing 0.319 units to decision-making effectiveness, representing the second-strongest predictor after knowledge sharing practices.

5.2.5 Organizational Decision-Making Effectiveness

The assessment of organizational decision-making effectiveness revealed significant challenges across multiple dimensions at NRC Somalia. More than half of staff (57.3%) indicated that critical decisions were not made within appropriate timeframes, while 66.3% reported that bureaucratic delays affected decision processes. Stakeholder inclusion in decision processes was inadequate according to 43.8% of staff, and alternative consideration was insufficient for 47.2% of respondents.

Strategic alignment showed mixed results, with 38.2% neutral responses and 23.6% disagreement, indicating uncertainty about decision alignment with organizational goals. Evidence-based decision-making faced challenges, with 32.6% disagreement, while resource allocation efficiency was problematic according to 56.2% of staff.

The country manager's interview provided context, attributing decision-making challenges to fragmented knowledge systems creating barriers to accessing relevant information. Despite these weaknesses, approximately 30% of staff indicated decisions were generally strategically aligned with organizational goals, and mechanisms existed to address beneficiary needs, suggesting foundational capabilities for improvement.

The multiple regression analysis revealed that the four knowledge management practices collectively explained 64.8% of variance in organizational decision-making effectiveness ($R^2 = 0.648$, $F(4,84) = 38.67$, $p < 0.001$), demonstrating a strong predictive relationship. This finding indicated that addressing knowledge management deficiencies could substantially improve decision-making outcomes at NRC Somalia.

5.3 Conclusions

This section presents the conclusions drawn from the study based on comprehensive analysis of quantitative and qualitative findings.

5.3.1 Documented Knowledge Acquisition Processes

The study concludes that documented knowledge acquisition processes at NRC Somalia operate in a fragmented and reactive manner, significantly limiting organizational learning capabilities. While after-action reviews show relative strength with systematic documentation, critical gaps exist in stakeholder engagement, validation mechanisms, and comprehensive lesson capture. The 35% annual staff turnover creates a knowledge decay cycle that undermines systematic acquisition efforts, as institutional memory erodes before proper capture and validation can occur.

The fragmented acquisition approach results from operational pressures that prioritize immediate crisis response over systematic learning, creating missed opportunities during stable periods when knowledge capture could be optimized. Security constraints, while necessary for operational safety, inadvertently limit knowledge diversity by restricting access to external stakeholder insights, forcing overreliance on internal knowledge sources.

The strong correlation between acquisition processes and decision-making effectiveness (r = 0.68) demonstrates that systematic improvements in knowledge capture mechanisms could yield substantial decision-making benefits. However, achieving these improvements requires addressing underlying structural challenges including staff retention, security-learning balance, and proactive rather than reactive acquisition strategies.

The study concludes that effective knowledge acquisition in volatile humanitarian environments like Somalia requires adaptive systems that can maintain systematic processes despite operational pressures, while incorporating diverse knowledge sources through creative approaches that balance security requirements with learning imperatives.

5.3.2 Formal Knowledge Storage Mechanisms

The study concludes that formal knowledge storage mechanisms at NRC Somalia represent a fundamental system failure that creates barriers rather than facilitates knowledge access for decision-making. The fragmentation across twelve different platforms, driven by reactive technology implementation and security requirements, has created a complex, unnavigable landscape that staff cannot effectively utilize.

The emergence of parallel informal storage systems - personal USB drives, WhatsApp archives, and handwritten notebooks - demonstrates adaptive staff responses to formal system inadequacies but creates additional fragmentation and security vulnerabilities. These workarounds highlight the complete disconnect between organizational storage infrastructure and operational requirements.

Security-driven separation, while necessary for protecting sensitive information, has created "knowledge black holes" where critical information becomes institutionally invisible to those requiring it for decision-making. This represents an unintended consequence of security

protocols that may compromise operational effectiveness while attempting to maintain information security.

The moderate correlation between storage mechanisms and decision-making effectiveness ($r = 0.52$) suggests that storage improvements could enhance decision outcomes, but the systemic nature of current failures requires comprehensive redesign rather than incremental improvements. The study concludes that effective knowledge storage in complex humanitarian environments requires integrated approaches that balance security imperatives with accessibility requirements, utilizing unified platforms with appropriate access controls rather than fragmented systems.

The technological infrastructure challenges revealed extend beyond simple resource constraints to fundamental design and implementation approaches. The study concludes that humanitarian organizations operating in volatile environments like Somalia require storage solutions specifically designed for their unique constraints rather than adapted versions of systems designed for stable corporate environments.

5.3.3 Standardized Knowledge Sharing Practices

The study concludes that standardized knowledge sharing practices at NRC Somalia exhibit a paradoxical relationship between formal and informal mechanisms, where official processes exist but fail to facilitate genuine knowledge transfer. The distinction between "performative sharing in formal meetings and real sharing through informal networks" reveals that organizational knowledge flow occurs primarily through unofficial channels that operate outside institutional visibility and control.

The hierarchical knowledge gradient phenomenon, where field insights become "filtered and repackaged at each level until the raw learning is lost," represents a fundamental structural

barrier that prevents critical operational knowledge from reaching decision-makers in its original form. This hierarchical distortion may be more severe in volatile environments where organizational layers serve as protective buffers but inadvertently create knowledge transformation barriers.

The emergence of WhatsApp as primary sharing infrastructure, described as "underground knowledge railways," demonstrates staff innovation in creating effective sharing mechanisms while highlighting the inadequacy of formal digital platforms. These informal networks represent practical solutions that overcome official system limitations but create coordination challenges and potential knowledge fragmentation.

The strongest correlation with decision-making effectiveness ($r = 0.72$) and highest regression coefficient (0.341) confirm knowledge sharing as the most influential practice for decision outcomes. This finding suggests that sharing practices may serve as multiplier effects, amplifying the value of knowledge acquired and stored through other practices.

The study concludes that effective knowledge sharing in humanitarian contexts requires hybrid approaches that formalize successful informal mechanisms while maintaining their flexibility and responsiveness. Organizations must recognize and support naturally emerging sharing networks rather than attempting to force knowledge flow through hierarchical structures that create distortion and delay.

5.3.4 Systematic Knowledge Utilization

The study concludes that systematic knowledge utilization represents the most critical weakness in NRC Somalia's knowledge management system, creating a fundamental disconnect between knowledge availability and application in decision-making processes. The absence of mandatory reference requirements and application monitoring systems indicates

that the organization lacks basic institutional mechanisms for ensuring accumulated knowledge influences operational decisions.

The poor performance across all utilization dimensions - lesson adaptation (31.5% agreement), accountability measures (28.2%), training (22.5%), reference requirements (19.1%), and monitoring (15.7%) - suggests systematic rather than isolated failures. These deficiencies create conditions where staff repeatedly encounter similar challenges without benefiting from institutional learning, wasting resources and potentially compromising response quality.

The time pressure and competing priority barriers revealed through qualitative investigation represent structural challenges that extend beyond individual staff preferences or capabilities. In high-pressure humanitarian environments, systematic knowledge consultation may be perceived as luxury rather than necessity, creating cultural resistance to utilization requirements.

The strong correlation with decision-making effectiveness ($r = 0.70$) demonstrates that utilization improvements could yield substantial benefits, but achieving these improvements requires fundamental cultural and structural changes rather than simple procedural additions. The study concludes that knowledge utilization effectiveness depends on organizational systems that make knowledge consultation faster and easier than recreating solutions from scratch.

The 35% annual staff turnover creates particular challenges for utilization, as new personnel lack familiarity with existing knowledge assets and institutional procedures. This suggests that utilization systems must be intuitive and self-explanatory rather than depending on institutional memory or extensive training programs.

5.3.5 Organizational Decision-Making Effectiveness

The study concludes that organizational decision-making effectiveness at NRC Somalia is substantially compromised by knowledge management system failures, with the 64.8% variance explanation demonstrating strong causal relationships between knowledge practices and decision outcomes. The prevalence of bureaucratic delays (66.3% staff concern), timing issues (57.3%), and stakeholder inclusion problems (43.8%) reflects systemic decision-making challenges that extend beyond individual capacity or judgment limitations.

The fragmented knowledge systems identified throughout the study create information accessibility barriers that force decision-makers to operate with incomplete or outdated information, compromising decision quality and timing. The absence of systematic knowledge utilization means that valuable lessons from past operations remain inaccessible when similar decisions arise, leading to repeated suboptimal choices.

However, the foundational capabilities identified - approximately 30% staff indicating strategic alignment and existing beneficiary need mechanisms - suggest that NRC Somalia possesses basic decision-making infrastructure that could be enhanced through improved knowledge management rather than fundamental restructuring.

The country manager's attribution of decision-making challenges to fragmented knowledge systems provides leadership acknowledgment of the problem and suggests organizational readiness for knowledge management improvements. This leadership recognition represents a critical prerequisite for successful knowledge system reforms.

The study concludes that achieving effective humanitarian decision-making in volatile environments like Somalia requires integrated knowledge management systems that can operate under operational pressures while maintaining systematic approaches to knowledge acquisition, storage, sharing, and utilization. The strong predictive relationship ($R^2 = 0.648$)

suggests that knowledge management investments could yield substantial decision-making improvements, potentially enhancing operational effectiveness and beneficiary outcomes.

5.4 Recommendations

Based on the analysis of knowledge management practices and their impact on organizational decision-making effectiveness at NRC Somalia, the following strategic recommendations are proposed to address the identified gaps and enhance operational performance.

5.4.1 Recommendations Based on Study Findings

Based on the comprehensive analysis of knowledge management practices and their impact on organizational decision-making effectiveness at NRC Somalia, the following strategic recommendations address identified gaps and enhance operational performance.

Knowledge Acquisition Processes

NRC Somalia should implement a comprehensive knowledge acquisition framework transforming reactive capture into proactive systematic processes. This requires structured after-action review enhancements with standardized templates and mandatory participation requirements. Given 35% annual staff turnover, mandatory exit knowledge transfer protocols with minimum two-week handover periods are essential. Multi-source verification protocols must address the 56.2% disagreement on validation mechanisms, requiring confirmation from multiple sources before knowledge integration.

Knowledge Storage Mechanisms

Replace the fragmented twelve-platform system with unified infrastructure utilizing integrated knowledge management platforms. Role-based access controls should replace platform

fragmentation while maintaining security requirements. Deploy AI-powered search capabilities with advanced filtering systems to address 61.8% dissatisfaction with searchability features. Mobile-optimized interfaces matching WhatsApp accessibility will encourage formal system adoption while maintaining user familiarity.

Knowledge Sharing Practices

Recognize and integrate successful WhatsApp-based sharing networks into formal organizational systems while maintaining flexibility. Implement horizontal knowledge sharing mechanisms bypassing hierarchical filtering layers where field insights become diluted. Establish structured cross-regional knowledge sharing protocols through virtual exchange sessions and standardized templates. Develop systematic mechanisms monitoring whether shared knowledge reaches intended recipients and influences decision-making processes.

Knowledge Utilization

Address the critical 19.1% agreement rate on mandatory reference requirements by implementing systematic knowledge consultation protocols for significant operational decisions. Comprehensive training programs focusing on knowledge search techniques and systematic application methods are urgently needed. Establish functional application monitoring systems tracking whether organizational knowledge influences decision-making processes and outcomes.

Decision-Making Effectiveness

Implement streamlined decision-making protocols addressing 66.3% concern about bureaucratic delays while maintaining quality standards. Systematic mechanisms for stakeholder inclusion must address 43.8% inadequacy concerns through structured consultation

protocols. Establish evidence integration requirements addressing 32.6% disagreement on evidence-based approaches through decision templates and analytical frameworks.

5.4.2 Theoretical Implications

The study's findings have significant implications for the theoretical frameworks that guided this research. For Nonaka and Takeuchi's SECI model, the results reveal that knowledge conversion processes in volatile humanitarian environments face unique disruptions not adequately addressed in the original theory. The fragmented acquisition processes and poor utilization practices suggest that the SECI spiral may operate more as disconnected episodes rather than continuous cycles in crisis contexts. The model requires adaptation to account for high staff turnover, security constraints, and time pressures that interrupt knowledge conversion flows.

Contemporary decision-making theory by Nutt and Wilson assumes systematic information processing capabilities that may not exist in fragile organizational contexts. The study's findings challenge the theory's assumption that decision-makers have access to comprehensive information systems, revealing that effective decision-making in humanitarian contexts may require adaptive frameworks that function despite information gaps and system fragmentation.

5.4.3 Practice Implications

The findings fundamentally challenge current humanitarian knowledge management practices by demonstrating that informal knowledge networks may be more effective than formal systems in volatile environments. Organizations must recognize that traditional corporate knowledge management approaches require significant adaptation for humanitarian contexts, particularly regarding mobile technology integration and informal network formalization.

The strong correlation between knowledge practices and decision-making effectiveness (R^2 = 0.648) provides empirical justification for substantial investments in knowledge management infrastructure, suggesting that organizations should prioritize systematic knowledge systems as core operational capabilities rather than administrative support functions.

5.4.4 Policy Implications

The study's findings suggest that humanitarian sector policies should mandate knowledge management standards for organizations operating in volatile environments, recognizing knowledge systems as critical infrastructure for effective humanitarian response. Donor policies should explicitly fund knowledge management capacity development, moving beyond project-specific support to institutional knowledge system investments.

Policy frameworks should address the tension between information security requirements and knowledge accessibility, developing sector-wide protocols that balance operational security with evidence-based decision-making requirements. This includes establishing inter-agency knowledge sharing protocols that enable organizational learning while maintaining appropriate information protection.

5.5 Recommendations for Further Studies

The findings of this study reveal several critical areas requiring additional investigation to advance understanding of knowledge management in humanitarian contexts. Future research should explore the dynamics of tacit knowledge transfer in humanitarian organizations, particularly examining how informal networks and traditional knowledge systems interact with formal organizational structures. This investigation could reveal hybrid models that better integrate local knowledge traditions with international humanitarian standards, potentially improving both operational effectiveness and community acceptance of interventions.

Research is needed on the human dimensions of knowledge management, particularly examining how organizational culture, power dynamics, and individual motivations influence knowledge behaviors. This could include studies of incentive structures that promote knowledge sharing, leadership styles that foster learning cultures, and change management approaches that successfully transform knowledge practices. Understanding these human factors is essential for designing knowledge management interventions that achieve sustained adoption and impact rather than superficial compliance.

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