



IMPACT OF KNOWDLEGE MANAGEMENT SYSTEM IN AN ORGANISATION IN
LESOTHO: ISSUES, CHALLENGES, BENEFITS

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Approval of the Thesis

IMPACT OF KNOWLEDGE MANAGEMENT SYSTEM IN AN ORGANISATION IN LESOTHO: ISSUES, CHALLENGES, BENEFITS

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Abstract

IMPACT OF KNOWLEDGE MANAGEMENT SYSTEM IN AN ORGANISATION IN LESOTHO: ISSUES, CHALLENGES, BENEFITS

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This study provides a thorough examination of knowledge management (KM) and its critical role in organisational functions, where the implementation of knowledge management systems can enhance these procedures. The study draws attention to the different kinds of KMS that businesses frequently use. Additionally, it looks at several facets of information management systems and how they impact the production, preservation, and sharing of knowledge inside a company. Knowledge can be made easily available and shared both internally and externally, as demonstrated by a real-world example of KMS in terms of knowledge production, retention, and dissemination. The use of KMS in organisations is also covered in this study, which also highlights the challenges in putting them into practice.

The elements and strategies that influence employees' propensity to share information are not well understood. The purpose of this study is to identify the key organisational components or features pertaining to the use of social networks and online communities as a component of the organisation's implementation of knowledge administration. The study looked at three theories and frameworks: the theory of reasoned action (TRA), the system integration theory (SIT), and the technological acceptance model (TAM). In the context of organisations' drive to embrace online

communities and social networks for the purpose of practising and controlling organisational knowledge, it was imperative to assess all theories and their consequences for digital resources (Pourmand, 2020; Yang et al., 2014). Additionally, this study examined employee behaviour and acceptance of integrating social network and online community applications, highlighting the fact that these applications are still in their infancy but have the potential to benefit both employees and the company overall (Tracy, 2014; Dove & Kelman, 2018; Mlaiki et al., 2017). Employees, managers, and technical support staff in the Lesotho Ministry, ranging in age from 18 to 70, were given self-administered quantitative surveys. After that, a sample of 331 people was used for the investigation. A questionnaire was distributed both online and on paper to the technical management, practitioners, and departments of the ministry. The questionnaires were designed to be completed in about five minutes. The respondents' data was analysed using SPSS and PLS-SEM, a structural formula modelling technique. Our results show a strong and favourable impact on system user satisfaction and lend credence to the suggested theoretical framework.

The findings also show that user happiness has a significant impact on organisational performance, efficiency, commitment, and competitive advantage in knowledge management systems. Thus, we propose that the five highlighted knowledge capabilities—expertise, rules and procedures, lessons learnt, data, and knowledge documentation—should be the focus of future research. According to our research, businesses should incorporate knowledge management procedures into their knowledge handling procedures, which include gathering, storing, validating, securing, sharing, and using knowledge.

Declaration

I affirm this thesis has been entirely crafted by me and that it hasn't been presented, in full or, in part, in any earlier request regarding a qualification.

AL Acknowledgements

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Dedication Page

This study is truly dedicated to my beloved late father, who has been my wellspring of inspiration and provided me with bravery in my darkest hours, continually offering his moral, spiritual, emotional, and financial support.

To my siblings, relatives, mentors, friends, and colleagues who shared their words of wisdom and motivation to bring this study to fruition.

Finally, I dedicate this research to the Almighty God; I am grateful for your guidance, strength, mental clarity, protection, skills, and for bestowing upon me good health. I humbly present all of this to you.

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List of Abbreviations

Abbreviation	Full Expression
HR	Human Resources
IT	Information Technology
KM	Knowledge Management
KMS	Knowledge Management
KQ	SystemKnowledge Quality
US	User SatisfactionSystem
SQ	Quality Service Quality
SQ	User Trust
MS	Management Support
TAM	Technology Acceptance Model
HCI	Human-Computer-Interaction
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
PEU	Perceived Ease of Use
PU	Perceived Usefulness
ATT-TAM	Attitude Towards using Technology Acceptance model
ATTU	Attitude Towards Use
T	Trust Towards Use
IAT	Implicit Association Test
ITA	Intention to Accept KMS
EA	Explicit Attitude
IA	Implicit Attitude

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Chapter 1: Introduction

Social media serves as a diverse arena filled with various digital sources where individuals generate and share their creative content along with real-time reactions (Nasir et al., 2017). Notably, popular social networking websites like Facebook, Twitter, and YouTube function as venues for individuals to exchange and debate information via the internet and online channels (Neti, 2011). Organizations that engage with social networks often seek to develop closer and mutually beneficial relationships while acquiring more pertinent insights into their needs (Nezamabad, 2011). This research examines the factors and strategies that influence knowledge management capability development, the connections among the success of knowledge management initiatives from an organizational capability standpoint, and how the Lesotho Ministry of Foreign Affairs and International Relations disseminates knowledge and oversees activities. This facilitates researchers in identifying relevant products associated with the abilities for governing, tracking, optimizing, and autonomizing digital transformations, which enable a knowledge-based economy (Porter and Heppelmann, 2014).

Achieving successful social media adoption in business necessitates a transformation and re-engineering of organizational processes (Kotadia, 2012). Researchers have identified this as a continual effort to uncover and address methods of managing the workforce of the organization through social media practices (Buchanan, 2010). Insights from social media influence knowledge management (Porter and Heppelmann, 2014; Kotadia, 2012), while offering insights that support organizational strategies and product innovation. These agile firms have been digitizing at subsequent levels, including team, individual, and organizational (Porter and Heppelmann, 2014; Holbeche, 2018; Wapenaar, 2021).

Consequently, the prosperity of organizations hinges on measurable contributions from commercial marketing by leveraging marketing principles and practices to influence and motivate individuals towards the adoption of beneficial behaviors that serve individuals, communities, and society (Hastings, Angus & Bryant, 2013) through social marketing. In the realm of digital knowledge groups or digital transformation initiatives, social marketing programs adopt a distinct viewpoint and pursue divergent objectives (North et al., 2018). Their research emphasizes the necessity for organizations to raise awareness, concentrating on product evolution, processes, organizational frameworks, and the complex aspects of emerging technologies from a business-oriented viewpoint. From a human-centric angle, knowledge management emphasizes aggregating documented information that extends to include interconnections among individuals by fostering social relationships with the aid of positioning technology recognized as the social awareness environment (Pawlowski et al., 2014; Kashg et al., 2016). Pedler (1991) asserts, “Understanding the knowledge of an organization is an organization that facilitates the knowledge acquisition of all its members and perpetually evolves itself.” (p, 3).

Thus, Public Service of Canada (2016) reinforces these assertions by proclaiming that the e-learning enterprise is characterized by continuous enhancement through innovation, expertise, and insights. Furthermore, Senge (2010) emphasizes learning institutions as “entities where individuals continuously expand their ability to produce the results they genuinely desire, where new and broad patterns of thought are encouraged, where collective aspirations are liberated, and where individuals are perpetually learning to explore together.” (p,13) This introductory chapter will provide a history of learning by concentrating on this investigation, exploring the factors and methodologies that influence the advancement of understanding in management capabilities, the relationships among effective knowledge management operations from the standpoint of organizational performance, and the way the Lesotho Ministry of Foreign Affairs and International Relations disseminates knowledge and supervises it. The technical challenges associated with knowledge sharing faced by organizations globally and specifically within Lesotho are also

examined.

This chapter on the introduction to the research begins by outlining the background of the study, concentrating on the issues surrounding knowledge sharing encountered worldwide, with a particular focus on the Lesotho Ministry of Foreign Affairs and International Relations. Following this, a description of the study's research problem and secondary objectives will be presented. A preliminary review of the literature will lead into the development of an integrated conceptual model designed for this research. Subsequently, an overview detailing the purpose of the study, its aims, and its objectives will be offered, accompanied by a brief discussion on the nature and importance of the research. The chapter will wrap up by delineating the structure of the study.

Statement of the problem

The leadership of the Lesotho Ministry of Foreign Affairs and International Relations acknowledges the significance of knowledge exchange among its personnel while pursuing a knowledge management framework within its institution (He & Yan, 2014; He, 2013; Hislop, 2013). Nonetheless, there is limited understanding regarding the factors and tactics of employees. The ministry combines Human resource strategies with Systems for managing knowledge, explores the types of HR designs to adopt, and considers the potential behavioral impacts of such a tactic on the creation, distribution, and utilization of knowledge. The research reviews recent literature concerning the relations among knowledge management and human resource management (HRM). Thus, if leadership concentrates on three misguided approaches and attempts to implement both simultaneously, their organization risks rapid deterioration or becoming trapped in outdated designs, thereby hindering future applications.

In determining crucial elements influencing the uptake and application of new technology, an individual's character plays a vital role in shaping support and acceptance behaviors (Sumbal et al., 2021; Drucker, 2014). Their findings highlight that despite existing studies on technological revolutions, only a few organizations engage in large-scale utilization of ICT, which presents a

challenge to the cultural attributes of the organization. Iansiti and Lakhani (2014) demonstrate how educational institutions may also play a fundamental role in expediting the proliferation of technology-driven learning approaches. However, Za, Scomavacca, and Carrilo (2015) note that organizational and cultural dimensions alone are insufficient for achieving a competitive technological advantage. The adoption of a strategic science approach is much more likely to facilitate and foster a learning process utilizing ubiquitous technology (Iansiti and Lakhani, 2014; Tseole & Marutha, 2022). Porter and Hepperman (2014) explain how researchers identify connected products that possess capabilities for controlling, monitoring, optimizing, and autonomizing the transformation of digital processes that support the knowledge economy.

According to Davenport and Kirby (2016), expertise in professional capabilities is increasingly enhanced or leveraged through networked and cognitive methods. For instance, McKinsey's estimates suggest that by 2025, the potential economic impact of automating knowledge work could reach between five and seven trillion US dollars (Manyika et al., 2013), indicating challenges for organizations managing knowledge and necessitating the development of their frameworks for organizational knowledge management. Therefore, digital knowledge societies or digital transformation techniques take diverse perspectives and adopt various objectives (North et al., 2018; Lee & Lee, 2015; Rosenkranz & Feddersen, 2010). They focus on product transformation, processes, organizational models, and the organizational aspects of integrating new technologies from a business-centered viewpoint (Manyika et al., 2013; North et al., 2018). From a person-centered viewpoint, knowledge management systems emphasizes compilations of recorded knowledge that are enhanced to include connections among individuals (Kaschg et al., 2016; Pawlowski et al., 2014; Chohan, 2013; Li et al., 2009), along with fostering social relationships, supported by technology, referred to as networked knowledge conditions (Pawlowski et al., 2014; North et al., 2018; Kietzmann & Canhoto, 2013). This research investigates the mediating role of knowledge management in relation to organizational culture, strategies, and

organizational effectiveness.

This study provides a comprehensive approach to delivering an integrated model that incorporates economic factors, socio-demographic characteristics, and socio-psychological motivations. Consequently, senior managers must grasp the importance of disseminating information among staff and establishing a knowledge management paradigm within their organizations, as knowledge management practices significantly impact organizational effectiveness (Tharenou, 2010; McDermoh & Archibald, 2010; Drucker, 2014; Aiello et al., 2014; Agrifoglio, 2015).

The initiatives implemented within the ministry and insights from employee online communities and social networks contribute towards organizational sustainability. Tharenou (2010) and Noel (2010) indicate that training is geared towards enhancing employee performance in their current roles. Training can be perceived as the intentional efforts by organizations to facilitate employee learning related to job functions. The competencies include skills, knowledge, or behaviors essential for effective job performance (Bryma et al., 2019; Pauleen et al., 2017; Albrecht, 2016; Noe et al., 2010). Managers should emphasize performance expectations by supporting employees in achieving their performance goals through the use of online communities and social networks. Specifically, a manager must educate and guide individuals to the necessary performance levels. Motivated employees are those who are eager and willing to work towards meeting organizational objectives. Various motivational theories provide a framework for understanding this dynamic. A structure for understanding employee behavior and overall performance within the workplace. Managers should also consider the motivation of an employee, as they'll increasingly play a significant involvement in the future workforce (Albrecht, 2016; Canning & Harackiewicz, 2015; Noel, 2010). The developmental interventions are forward-looking and aim to enhance skills within the staff to enable them to transition into roles that may not yet exist (Nasir et al., 2017; Hartwell & Kaplan, 2014; Noel, 2010).

Purpose of the study, research aims, and objectives

The purpose of this investigation is to investigate the elements that affect the use of digitized communities as well as social media sites, which act as an all-encompassing framework for overseeing training information within the organization. Furthermore, the ministry is required to regularly assess and pinpoint essential organizational factors and their relationships that influence information management. Additionally, we aim to advance the field of information management to bridge the divide between theoretical concepts and practical applications that improve the principles, methodologies, and strategies of training information governance. This study utilizes a quantitative methodology with the goal of evaluating the influences on information management practices and the obstacles presented by digital communities and social network modeling (variable one) on an individual's behavioral inclinations and actions (variable two). Digital communities exist across urban, suburban, and rural regions, while individual behaviors regarding the adoption of social networks like Facebook, Twitter, Google+, LinkedIn, etc. The questions incorporated in the questionnaires will adhere to a structured format and will be aligned with the study inquiries as well as the study's goals.

The aims of the study

This research provides a comprehensive insight into knowledge management (KM) and its role in organizational functions, where these functions can be facilitated through putting in place a knowledge management system. The research also highlights various forms of Knowledge Management Systems (KMS) commonly utilized in organizations. Additionally, it delves into different facets of systems for managing knowledge and their influence on the processes of knowledge generation, preservation, and dissemination within an organization. An example illustrating the application of KMS concerning knowledge generation, preservation, and dissemination is provided, demonstrating how knowledge can be made readily available and shared both internally and externally within the organization.

Research objectives

Primary objectives

The primary goal of this study is to tackle the problem by creating a comprehensive framework within organizations for practicing knowledge management. This will be explored by pinpointing the elements that lead to the development of knowledge management capabilities, examining the interconnections among effective knowledge applications from an organizational capability perspective, and evaluating the training provided by the Lesotho Government for officials at the Ministry of Foreign Affairs and International Relations to facilitate knowledge sharing and safeguarding. To fulfill the primary aims, this involves achieving the secondary objectives outlined in the subsequent section.

Secondary goals

The secondary goals of this research are as following:

- ❖ Pinpoint the best KMS available in the Ministry of Foreign Affairs and International Relations.
- ❖ Discover the outcomes of KMS best practices adopted in the Ministry.
- ❖ Find out some of the challenges of KMS utilization in the Ministry.
- ❖ Building knowledge bases of information storage and retrieval when it's needed promptly in the Ministry.
- ❖ Facilitate the operations of the exchange of knowledge and sharing between all Ministry employees.
- ❖ HRM offer a centralised source of knowledge that allows to be created, deliver, and report training courses and program.

Nature and significance of te study

The study approach utilized for this study was a quantitative method, where data was gathered through a cross-sectional survey. The target population and sampling strategy involved household heads selected randomly from the Lesotho Ministry of Foreign Affairs and International

Relations, aged between 18 and 70. A self-administered questionnaire was employed in both an online format and a paper-based version to gather data for this investigation. The completed sample size consisted of 331 household heads. Data analysis comprised descriptive analysis, exploratory factor analysis, and SEM. The collected data was processed using PLS-SEM through the SPSS(Statistical Packages for Social Science) tool for data analysis. Table 1.1 outlines several characteristics of this quantitative study, including the population and sampling, data collection, and data analysis, which are discussed in the following subsections.

Table 1.1: Summary of research design

Elements	Description
Target population and sampling method	Heads of household at the Lesotho Ministry of Foreign affairs and International Relations; Random Sampling.
Data collection method	Self-administered questionnaire: paper-based and online version.
Sample size achieved	331 heads of household.
Data analysis	Descriptive analysis, exploratory factor analysis and SEM. Data were analyzed using SPSS and SmartPLS.

Significance of the study

This research suggests that the ministry's concern over the potential loss of knowledgeable and seasoned employees is increasing globally and within various organizations. The latter is exploring numerous solutions. The economy we inhabit has morphed into a knowledge-centric economy. This notion emphasizes the dissemination of knowledge to a wide array of professionals and workers within organizations through multiple avenues. All efforts should prioritize making information and knowledge available to a broad audience. This significantly impacts the turnover rates within firms. Consequently, the concept of knowledge management has become more essential than ever.

Key metrics include Chi-square/Df, Standardized Root Mean Square Residual (SRMR), Goodness-of-Fit Index (GFI), Geodesic discrepancy (d_G), Normed Fit Index (NFI), and Squared Euclidean distance discrepancy (d_ULS). Alongside the structural equation modeling (SEM) conducted using the SmartPLS software package, the SPSS software package was utilized for most of the remaining statistical analyses, include Partial least squares structural equation modeling (PLS-SEM).

Therefore, a systematically crafted submission should be formulated to achieve the intended objectives. Each component must incorporate two integrated elements as part of the assessment and implementation process. There is no standardized format for this; rather, there exists a tailored framework that aligns with the organization's goals. In this analysis, after an in-depth investigation in the field supported by professional experience, we present a comprehensive framework model in knowledge management that will significantly benefit numerous organizations and various disciplines.

The research question

The inquiry posed is: In what ways do human resource departments enhance knowledge through the promotion of innovative transformation, learning, and development throughout the organization? Efficient knowledge calls for an organization to acquire, generate, encode, disseminate, access, utilize, reapply, and how HR professionals can harness pre-existing knowledge assets to refine processes and practices within the Lesotho Ministry of Foreign Affairs and International Relations?

How significant are these questions?

1. When you are addressing these factors mentioned above, the question is, what is the identified problem at the Ministry of Foreign Affairs and International Relations?
2. The factors contributing to the unidentified problem were clearly spelt out using hypothetical statements.

Q1: What are the major factors of knowledge management practices and challenge

Q2: What are the relations among effective knowledge management applications, knowledge collaboration and protection?

Q3: How to capture knowledge gained by individuals and dissemination through information technology?

Q4: What is the role of information technology in the knowledge management programs?

Q5: How an organization should organize knowledge management?

Hypotheses

H1: Attitude toward utilizing KMS (ATT) is significantly positively correlated with perceived usefulness (PU).

H2: Attitude toward utilizing KMS (ATT) is significantly positively correlated with perceived ease of use (PEOU).

H3: There is a noteworthy positive correlation between attitude toward utilizing KMS (ATT) and trust towards using the system (TRU).

H4: The intention to accept KMS (INT) and attitude toward using KMS (ATT) show a strong positive correlation.

H5: Perceived utility and attitude toward utilizing KMS (ATT) significantly and favorably affect the indirect effects of perceived ease of use (PEOU) on intention to accept KMS

Chapter 2: Literature review

Understanding knowledge management

In today's competitive world with technological advancements and innovative entity approaches, maintaining competitive advantage and profitability within organizations has become a major challenge. The strategic and consistent use of internal and external resources is crucial for entities to achieve sustainable competitive advantages. Knowledge is considered an intangible asset of the organization, which is characterized by its complexity, making it difficult to understand, transfer, or effectively apply in different areas of an entity (Martins et al., 2019). Knowledge management (KM) represents a targeted and systematic coordination of an organization's human resources, technologies, processes, and structural components that aims to create added value through knowledge reuse and innovation. This coordination is achieved through the creation, transformation, and application of knowledge. Additionally, it includes capturing valuable organizational memory insights and best practices to promote consistent organizational learning. This approach manages enormous amounts of information in organizations to provide a continuous flow of information to the appropriate individuals at the appropriate moment, improving their efficiency and generating corporate profits (Dalkir & Liebowitz, 2011; Jia, 2020; Kai et al., 2021).

Knowledge management (KM) is about building organizational intelligence by enabling people to improve the way they work in capturing, sharing, and using knowledge (Tseng & Lee, 2014; Jayasingam et al., 2013). The process of creating, storing, and sharing Such intangible assets are the basic principle of knowledge management (Jimenez-Jemenez & Sanz-Valle, 2013; Obeiat et al., 2014; Rana, 2015). The ideas and experiences of employees, customers, and suppliers are used to improve the performance of the organization. Building on what works well leads to better practices, strategies, and policies.

Knowledge is power, as they say anonymously, but it is the knowledge properly created, stored, and applied through the right systems that is actually power. This is because many organizations have knowledge, but the problem lies in the right system for applying the existing knowledge that leads to improved organizational performance. Effective and efficient knowledge management is extremely important for increasing organizational success (Evwierhurma et al., 2020; Zaim et al., 2024; Martins et al., 2019). Dalkir & Liebowitz (2011) defined knowledge as all factors that can influence human thinking, actions, and behavior and sometimes enable the prediction, explanation, and control of physical phenomena.

The application of knowledge management is essentially a ten-step procedure, which enables the knowledge management system to be established based upon the existing facilities of data warehousing, Internet connectivity, and investments for future projected enhancements. Knowledge has become highly important today. It is a fact that is agreed upon by researchers of diverse disciplines, such as economics, management science, sociology, and others. The combination of information generated, together with the learning and experiences, is essential knowledge that can be used at any time. The purpose of which is the interpretation of data and events that may take place during the course of action (Davenport, Long & Beers, 1998; Jones & Shideh, 2020).

The ministry's knowledge about anything and everything is very limited. This implies that accumulating knowledge is of great importance in today's world. Knowledge, and the ability to use it through appropriate channels, are perhaps among the most vital resources an entity can possess. This knowledge should not be locked up in vaults or made inaccessible. It rather must be made available and accessible to employees at all the working levels (Gupta, et al., 2000; Jones & Shideh, 2020).

Applying knowledge management

Information gathering and processing are the most valuable intangible assets in any organization (Davenport, 1996). Resistance, in the initial stages, towards establishing a management system that can be accessible to all is inevitable. The latter is expected during and throughout any process. This idea of resistance to change was also projected in a study of overcoming the cultural barriers in sharing knowledge within an entity. It is mentioned that employees generally try to link the knowledge-sharing process to problem-solving by linking their organization's culture or pre-existing values with it (McDermott & O'Dell, 2001; Jones & Shideh, 2020).

Essentially, there are three distinct areas of knowledge management. First, external information related to competition, market conditions, and consumer behavior patterns. The second is the internal information related to organizational structure, knowledge, and product development. The third, which is perhaps the most important, is the collection of the internal knowledge of know-how, production process improvements, and the intangible efforts required to do so (Gupta et al., 2000). Knowledge may suffer from two major drawbacks: knowledge disappearance and knowledge distortion. This is particularly the case for entities where knowledge-intensive is of significance in scope and utilization.

The article by Montano speaks about the large variety of efforts that have gone into the application of knowledge management and into the evolution and implementation of a standard framework for generic use. The authors first undertake an exploration of the works that have been completed so far and try to identify the areas of commonalities in these efforts. The efforts have shown a focus on one function or an entity. The absence of a generic methodology has been highlighted by the authors. This research is found to be outstanding in its efforts and the extent of importance laid by it towards formulating an action plan for generic use of the concept of knowledge management. The efforts in this investigation have been made by emphasizing the positioning of knowledge management into a wider methodology within a systemic approach. This

will enable a closer and better ability towards identifying and addressing the factors and aspects that cause the failures or create the success of such endeavors (Rubenstein-Montano et al., 2001; Jones & Shideh, 2020; Chan, 2017).

There is a need for having well-laid-out procedures for the evolution and implementation of suitable knowledge management processes for every situation, in every organization, and every function within an organized area of work. Until recently, the methods of evolving a suitable knowledge management system were not only undefined but also unorganized (Tiwana, 2020; Dalkir, 2017).

Process of knowledge management

Knowledge management should contain an intervention of content, strategies, instruments or systems, and knowledge management organization and processes (Maier & Remus, 2003). Four steps or stages have been mentioned by the authors, which lead to an effective implementation of the knowledge management application. These stages are the identification of relevant knowledge, finding a proper system of storage, dissemination of the contents to the respective and prospective users, and using knowledge to check its effectiveness and conduct further fine-tuning (Alavi & Leidner, 2001).

Knowledge management focuses on the effective management of organizational knowledge through the systematic creation, storage, and sharing of knowledge. Knowledge utilization, according to Mohammad, Musa, and Hasan (2016), must be followed by proper planning and knowledge management in an organization, especially in relation to the employee, to ensure the continuous supply of qualified human resources to various sector elements. Knowledge management mainly focuses on the types of knowledge that exists in an organization or institution. This is primarily the knowledge that employees or researchers learn through the work of an organization, and the knowledge here is different from book knowledge or from directories of regulations or databases of customer information (Bhattacharya and Kumar, 2004; Lopez-Torres et al., 2019; Abidi

et al., 2023; Oyefolahan, 2017).

The process of creating knowledge is one that leads to the transformation of knowledge. The process involves creating tacit knowledge through informal sharing, moving to explicit knowledge and improving explicit content through combining codified knowledge, and using explicit knowledge to create new tacit knowledge through thinking and sharing (Ferreira et al., 2018; Isandar et al., 2020; Geisler & Wickramasinghe, 2015). Knowledge storage is also an organizational activity that involves storing knowledge in various components or forms, including written documentation, codified human knowledge, and information in electronic databases for the benefit of the organization. Knowledge transfer is about sharing knowledge within the organization for use, which ultimately results in the production of new knowledge (Jarrah et al., 2023; Jia, 2020; Kai et al., 2021). The main aim of this research is to discuss systems for managing knowledge and how they affect an organization's knowledge management operations.

Polanyi (2009) categorized knowledge into both explicit and implicit knowledge. Tacit knowledge is the type of unwritten or unspoken knowledge that individuals possess based on their experiences, insights, and intuition. This knowledge is difficult to convey in formal language because it often lies with the individual, while explicit knowledge is recorded and transferable in an official manner. Knowledge is an important and intangible asset that people, organizations, and society can possess. Various scientists and experts.

Knowledge management implementation

The implementation of knowledge administration deals with the successful application of development, retrieval, storage, and dissemination of information in an entity in order to enhance its functionality. Moreover, the knowledge management implementation is required in an entities in a systematic manner to remain competitive (Gupta et al., 2000; Jones & Shider, 2020).

Knowledge storage in an organization may refer to the organizational memory formation process in which knowledge is formally stored in physical memory systems, which is ultimately preserved informally in the form of values, beliefs, and rules connected to the culture and organizational structures (Alavi & Leidner , 2001; Argote et al., 2003; Mia et al., 2021). Organizational memory includes knowledge that exists in various component forms, including written documentation, documented organizational procedures, human knowledge that has been codified and kept in expert systems, processes as well as implicit knowledge obtained by individuals and systems of individuals, and structured information that is stored in electronic databases (Tan et al., 1999). Lin (2007) explains that knowledge storage involves a transformation process that includes organizing, structuring, storing, and ultimately combining knowledge to facilitate future use by those concerned.

The organization stores knowledge in different ways. According to Meneghello et al. (2020), there are five types of knowledge repositories: The first is the people who build the organization and are based on their experiences and direct observations. Culture is the second reservoir that can define the way of thinking and feeling the problems of the individual. The third repository is the transformation process that takes place through development. The fourth repository is to assess the accuracy of that knowledge. Finally, is the distribution of that knowledge to the whole team or ministry referred to in table 2.1 below.

Table 2.1: Knowledge representation ontology

Authors	Year	Description
Hodgson & Gindy	2010	A structure of an ontology-driven knowledge management system encompassing both design and implementation within a practical case produced in a universal system and the Protégé environment.
Hayette et al.,	2011	Crafting an ontology framework for a knowledge map that facilitates an effective depiction of

		information to assist users in the retrieval of insights.
ZHENG et al.,	2012	Putting up a fresh idea for creating of knowledge management system that is powered by ontologies.
Fenza et al.,	2013	Establishing an ontology-based knowledge management platform that incorporates techniques to assist the life cycle of knowledge bases in large, diverse enterprises.
Pujaraet et al.,	2013	A method grounded in ontological information utilized for the amplification of knowledge graph detection, collaboratively creating a knowledge network from an information extraction framework's inconsistent output.
Zhong et al.,	2015	Declarative and procedural understanding are both depicted in an ontology knowledge diagram.
Houhamdi & Athamena	2015	An approach to using ontology to describe knowledge and apply it to multi-agent systems.
Giménez & Boyce	2015	An ontology-based system capable of representing, classifying, and evaluating the growing body of knowledge management.
Socaciu & Pascu	2016	An ontology-driven semantic network framework that makes use of the resource description framework and web ontology language to make knowledge management easier.

[Sources: Adapted from Usrof & Elmorsey, 2016; Hasani & Sheikhesmaeili, 2016]

People view knowledge management (KM) as a process that involves the formation of numerous connected activities to carry out important aspects of KM operations and strategy. Researchers from various backgrounds have presented a range of knowledge management (KM) processes over the last 20 years. Additionally, some significant explanations of the KM process have been evaluated and condensed. This result is shown in Table 2.2. The terms "creation," "storage," "transmission," and "application" appear to be more essential and fundamental than others, despite the fact that the KM process is described in a variety of ways. Knowledge generation is the process of producing new knowledge. Within tacit and explicit knowledge, this step entails creating new content or replacing preexisting content (Ajmal and Koskinen, 2008; Ewrierhurhoma et al., 2020; Zaim et al., 2024; Martins et al., 2019). The practice of documenting knowledge and keeping it in repositories, such as databases, file systems, and archives, is known as knowledge storage. Additionally, it seeks to impart knowledge to individuals, groups, or units that require it (Johannsen, 2000).

Transferring knowledge to locations where it is needed and useful is known as knowledge transfer, and it is a crucial KM process (Pirkkalainen and Pawlowski, 2013). Since the transfer must result in modifications to the knowledge base, this stage is essential to the KM process' success (Argote and Ingram, 2000). The updating of knowledge is referred to as knowledge application. Strategic direction can be changed through this approach. This table did not fit on the bottom of the previous page. Therefore, the entire table was moved to the next page.

Table 2.2: Major descriptions about knowledge management

Authors	Year	Description
Horwitch & Armacost	2002	The generation, retrieval, alteration, and preservation of accurate expertise and data to formulate improved policy, adjust actions, and achieve outcomes.
Skyrme	2003	Information is essential for effective decision-making and strategic planning within any organization. By implementing robust systems to manage this data, companies can improve their operational efficiency and foster innovation.
April & Izadi	2004	The gather The philosophy of knowledge management is made up of the link function (knowledge and wisdom function) and the function (data and information dimensions).
Pearce-Moses	2005	The management and supervision of an Intellectual property of the organization through the control of information and its utilization to optimize its worth.
Wang	2007	Both explicit and tacit knowledge are transferred between individuals and the collective.
Serrat	2009	The ability to identify, generate, store, share, and use important individual and group knowledge resources is made possible by the explicit and methodical management of processes. The combination of organizational learning and information management is its practical manifestation.
Ramsin & Paige	2010	Like all approaches, this framework for implementing KM development methods is

		divided into two sections: process and modeling language.
Becerra-Fernandez & Sabherwal	2010	Carrying out the tasks required to find, record, share, and use information to improve—in an economical manner—the influence of knowledge on the accomplishment of the unit's objectives.
Pauleen & Gorman	2011	Applying knowledge management using customized tactics based on expertise and abilities to maximize value for persons.
Groff & Jones	2012	A collection of organizational actions to maximize knowledge utilization in order to accomplish organizational goals.
Clobridge	2013	The methodical process of gathering, characterizing, arranging, and disseminating knowledge in order to make it practical, usable, flexible, and reusable.
Rouse	2013	An organization actively and thoroughly collects, arranges, disseminates, and evaluates its knowledge in terms of human resources, records, and abilities.
Chang & Lin	2015	A method of gathering, preserving, disseminating, and using knowledge.
Navimipour & Charband	2016	The process of gathering, disseminating, creating, and effectively applying knowledge.
Liu et al.,	2017	Managing physical content from the literature is just one aspect of it; another is gathering data from the unprocessed data on organization and systematization.

[Sources: Adapted from Usrof & Elmorsey, 2016; Hasani & Sheikhesmaeili, 2016]

Kai et al. (2021) developed a novel method for estimating semantic similarity to address certain KM-related issues. Based on the knowledge graph concept, they created a genetic method for estimating semantic similarity. In order to produce semantically interpretable representations that are used to explicitly describe knowledge, Xiao et al. (2016) presented a new knowledge semantic representation (KSR) paradigm. A semantics-based knowledge management paradigm was put up by Che Cob et al. (2016) to facilitate a collaborative learning environment. Cob et al. (2015) talked about using SLN to improve knowledge management and proposed a semantic knowledge management model to support a collaborative learning environment. Liu et al. (2014) described the development of a semantics-based KM platform for web-enabled environments with intelligence and insight capabilities. Among the uses of SLN in knowledge transfer, ontology is the most popular approach. Ontology is a philosophical term that refers to a methodical explanation of existence. Predicates, the semantics of concepts and terms, and their relationships are all included in an ontology, which is a list of all the concepts that currently exist in a field (Natalya et al., 2001).. As shown in Table 2.3, different descriptions of the knowledge process.

Table 2.3: Different descriptions about KM process

Authors	Year	Description
Alavi & Leidner	2001	1. Retention or storage
		2. Diffusion or transfer
		2. Use or application
Argote, McEvily & Reagans	2003	Innovation
		2. Preservation
		3. Transmission
		1. Record
		2. Describe
Arostegui	2004	3. Move,
		4. Store,
		5. Distribute
Lee et al.	2005	1.. Originality
		2. The accumulation of

		3. Sharing
		4. Utilization.
		5. Making use of
		6. Embedding
		1. Producing
		2. Collecting
		3. Arranging
Chong & Choi	2005	4. Storing
		5. Diffusing
		6. Using
		7. Exploitation
		1. Recognition and capture
Tikhomirova <i>et al.</i> ,	2008	2. Innovation
		3. Categorization and preservation
		4. Distribution and circulation
		5. Utilization
		1. Creation
Huang & Shih	2009	2. Storage
		3. Distribution
		4. Application
Turner, Zimmerman & Allen	2012	Production or procurement
		2. Storage
		3. Transfer or dissemination
		4. Use
Clobridge	2013	1. Recording
		2. Explaining
		3. Arranging
		4. Disseminating
		1. Production
Kanat & Atilgan	2014	2. Storage
		3. Movement
		1. Record
		2. Save

		3. Disseminate
Chang & Lin	2015	4. Utilize
		1. Innovation
		2. Internalization
Hamoud <i>et al.</i> ,.	2016	3. Purchase
		4. Improvement
		5.Utilization
		1.Capture
Navimipour &	2016	2.Share
Charband		3.Develop
		4.Use
Ibrahim & Cin		1.Creation
	2023	2. Storage
		3. Transfer

[Sources: Adapted from Usrof & Elmorsey, 2016; Hasani & Sheikhesmaeili, 2016]

Many organizations are deploying KM systems as a tactical advantage and for a competitive edge. These systems may be technology-based, which emphasizes the technologies or tools that facilitate the creation, processing, storage, sharing, and usage of knowledge (Oliva & Kotabe, 2019; Frost, 2014, 2018), or non-technologically based, consisting of the processes, culture, and people elements that facilitate KM practices in organizations (Young, 2010; Craig, 2014).

While the people components focus on the individual(s) or groups and the various roles they play in managing knowledge in organizations (Harlow, 2017), the processes are concerned with the procedure for producing, processing, sharing, storage, and application of knowledge of organisations (Hajric, 2017; Owusu-Manu et al., 2018). Again, the culture component seeks to address the various protocols, rules, norms, and traditions that guide the knowledge creation, sharing, storage, and use

within and outside organizations (Dei, 2017; Anduvare, 2015). Finally, the technology emphasizes the tools/infrastructure that are used to enable knowledge creation, processing, storage, usage, and dissemination in organizations (Al Mansoori, 2021; Anderton & Watson, 2018; Dei, 2017).

Challenges in the application of KM

Encouraging others to share knowledge is one of the most difficult tasks in knowledge management. In actuality, successful information sharing is necessary for efficient knowledge management (Swacha, 2015). The communication of information between and among people is known as knowledge sharing. Additionally, it seeks to combine many knowledge sources and transform them into novel routines or knowledge structures. Transferring and exchanging knowledge can occasionally be used interchangeably or are assumed to overlap in content (Dan and Sunesson, 2012). Following most of the literature, we will consider knowledge sharing to be semantically the same as knowledge transfer (Paulin and Suneson, 2012; Onifade and Akinwade, 2019). The success of knowledge exchange depended on how well the recipient was able to retrieve the information. Swacha (2015) established a set of suitable gamification guidelines that employs a number of purposefully chosen gamification elements and seeks to encourage people to engage in a variety of knowledge-sharing activities.

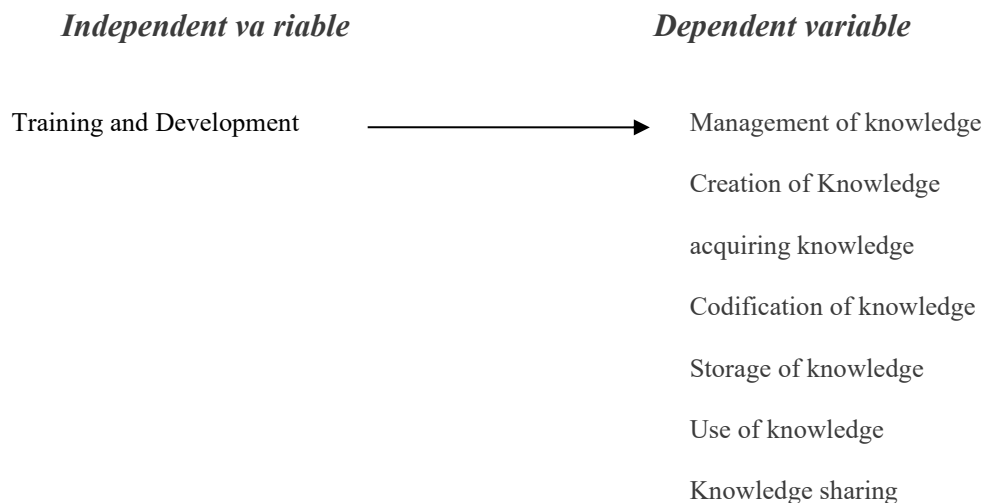
Yong (2013) offered fresh perspectives on how individuals' intentions to share knowledge are impacted by organizational reward, reciprocity, enjoyment, and social capital—all of which have been overlooked in earlier studies. Our knowledge of the relative effects of social capital and personal motives on people's intents to share knowledge will be greatly enhanced by their fresh perspectives. An online knowledge study was proposed by Ma and Yuen (2011).

Training and development of KM in an organization

Tutoring and training, communities of practice, and questions and answers. These examples all involve the direct transfer of information from the knowledge holder to other employees. This could be through personal tutoring, organization-wide training, online chats, group discussions, or a

mix of these and other options (Obeidat et al., 2014; Al-Hawary, 2015; Indumathi, 2016; Usrof & Elmorsey, 2016). The primary aim regarding this investigation was to learn whether there is an training and development's effects on knowledge management in selected southern and northern regions. According to empirical research on the gap throughout the literature about the impact of training and development on KM, there was no complete research model to identify training and development's effects on KM with a complete view of the problem (Obeidat et al., 2014; Al-Hawary, 2015; Indumathi, 2016; Usrof & Elmorsey, 2016). Table 2.4 shows the training and development of the organization.

Table 2.4: Training and development of the organization



Source: Author's own illustration

Therefore, the conceptual model of the study was developed by researchers based on proposed models of these two concepts, empirical findings from various authors, and theoretical perspectives. Accordingly, the conceptual model of this study was derived from the HRM practices model proposed by Usrof and Elmorsey (2016) and the KM model proposed by Hasani and Sheikhesmaeili (2016) in accordance with the empirical findings and TAM theory.

Dimensions of training and development

The dimensions of training and development are defined by previous authors as follows. Training consists of learning process in which workers learn, skills, experiences, and attitudes to perform their jobs better and thereby achieve the goals of their organization, whereas development is a continuous process that enables people to move from a current state of understanding and skills to further develop a future state where higher-level skills, knowledge, and competencies are required (Boadu et al., 2014).

Table 2. 5: Dmensions of training and development

NO	Dimensions	Related Research Studies
1	Training and Development	Munjuri, 2011; Rana, 2015; Obeidat et al., 2014; Al-Hawary, 2015; Indumathi, 2016; Usrof & Elmorsey, 2016.

[Sources: Adapted from Usrof & Elmorsey, 2016; Hasani & Sheikhesmaeili, 2016]

The relationship between human resource management practices and KM

Many previous professionals or scholars have attempted to identify the relations among HRM practices and KM. The following Table 2.6 displays the synopsis of previous related research studies that were published by various authors in the world.

Table 2. 6: The summary of previous research studies

Author	Findings of Empirical Studies
Choy & Suk (2005)	According to the findings, employee training is one of eleven essential enablers that are necessary regarding the successful putting a knowledge management program into action.
Fong et al., (2011)	Results show that performance evaluation, training and development, and recruiting and selection all possess a positive effect on the exchange of knowledge. But there was no discernible correlation between remuneration and sharing of knowledge.

Ozbebek & Kilicarsian (2011)	Results indicate a positive correlation between employee empowerment and knowledge-sharing behavior.
Jimenez-Jimenez & Sanz-Valle (2013)	The results show that training, performance evaluation, and recruiting and selection are important methods for improving knowledge distribution and acquisition, and that pay is essential for knowledge dissemination. Additionally, they point out that training and remuneration are HRM practices that have an impact on knowledge storage; nonetheless, their results indicate a negative correlation between compensation and knowledge acquisition.
Obeidat et al., (2014)	Results indicate that HRM procedures have little impact on knowledge management (KM) processes (acquisition, distribution, interpretation, and organizational memory). HRM techniques include hiring and selection, training and development, performance management, compensation and rewards, and teamwork.
Rana (2015)	KM (knowledge acquisition, conversion, application, and protection) and HRM practices (reward strategy, career-oriented training, and recruiting strategy) are significantly correlated.
AL-Hawary (2015)	The findings suggest that KM implementation (acquiring, sharing, storing, and applying) has a favorable effect on hiring and selection, education and training, assessment of performance, and remuneration.
Nanda (2016)	The relationship between HRM and KM is very strong. Compensation, performance management, training and development, and recruitment and selection and reward are all included in HRM dimensions, while all five of this study's dimensions are included in KM dimensions.
Hansani & Sheikhesmaeili (2016)	The results show a favorable correlation between KM and employee empowerment, but they also show that KM predicts employee empowerment.
Yin (2016)	Results show that knowledge transmission is positively impacted by employee empowerment strategies.
Ibrahim & Cin (2023)	Results indicate that using knowledge and investing in organizational resources and sustainability have a favorable impact on organizational performance.

[Sources: Adapted from Usrof & Elmorsey, 2016; Hasani & Sheikhesmaeili, 2016]

Thus, several researchers have reported that training and development have significant positive impacts on KM in a variety of studies.

Financial plan

To effectively manage and allocate resources so that all of the services and support offered to readers may be reviewed, a financial plan or budget is utilised. The growing costs of archive resources and stagnating budgets underscore the need for precise collection development and budget usage to satisfy users (Jiang et al., 2019). Despite limited funding, the ministry archive continues to provide users with resources to enhance research and learning environments. In their 2019 study, Stejskal et al. examined how fiscal policies and a lack of funding hinder innovation in technology-driven information consumption, resource sourcing, effective management, and enhanced learning. Research culture reading and promotion are substantially aided by the supply of appropriate funds. According to Díaz-Morales and Navia-Vázquez (2017), the money is highly optimised for staff training, technical engagement, student-teacher connections, and event organisation. Lyons and Blosser (2012) confirmed that formulas are used to determine the value of materials used in budget allocation to combine the average cost of resources in the archive.

This method considers the ordering costs for each department and the pricing information provided by the supplier to determine the total cost. Wu (2003) suggested putting in place effective processes to maximise the use of the allocated funds. Because archive management often has to significantly raise the value of materials, both in terms of quantity and quality. The cost of archival resources has increased over the past decade, which may be a challenge for organisations worldwide, according to Arora and Klabjan (2002). Currency fluctuations are increasingly affecting database resources and printed materials. Therefore, in order to increase staff productivity, use technology, and provide reliable archiving services, a policy is required.

Knowledge management for finance is essential for optimizing financial operations, ensuring regulatory compliance, and supporting strategic decision-making. By investing in effective KM practices, organizations can achieve greater financial stability, improved performance, and a competitive edge in the market. Implementing robust knowledge management practices in finance offers numerous benefits that extend throughout the organization by improving financial reporting, bettering budget management, and enhancing forecasting, driving overall financial performance (Kavalic, 2021). Cost savings by reducing redundancies and improving the efficiency of financial operations, KM helps lower operational costs and increase profitability (Allameh, 2018). Better strategic planning and access to comprehensive financial data and insights allow for more effective long-term strategic planning and resource allocation (Crema & Verbano, 2016).

Enhanced collaboration by knowledge sharing fosters collaboration within the finance team and with other departments, leading to more cohesive and aligned organization operations (Dzenopoljac et al., 2017). Increased agility by a well-managed knowledge system enables the finance team to quickly adapt to changes in the market or regulatory environment, maintaining the organization's competitiveness (Ferramosca & Ghio, 2018). Data-driven culture by promoting a culture of data-driven decision-making across the organization enhances overall organizational intelligence and performance.

Theoretical background

Among the most popular is the Technology Acceptance Model (TAM) models that helps model how people accept and use new technologies. The model focuses on factors that determine behavioral intention to use new technologies from the end user's perspective (Bhattacharyya et al., 2020; Liu et al., 2020; Deng & Yuan, 2020). TAM includes core variables of user motivation: perceived ease of use, perceived usefulness, and attitudes toward technology. Of these elements, perceived usefulness (PU) and perceived ease of use (PEU) are considered the main determinants that directly or indirectly explain the behavioral intention to use new technologies ("acceptance")

(Deng et al., 2021; Bhattacharyya et al., 2020; Liu et al., 2020). In this investigation, we hypothesized that the constructs and associations described in the modified TAM model are valid for measuring the behavioral intention of management professionals in resource-poor environments to use information technology. The proposed research variables, their relationships, and the research framework. This study examined three theories and models are the system integration theory (SIT), the theory of reasoned action (TRA), and the technological acceptance model (TAM). Considering each theory and its relevance to electronic resources in organisations was essential. Understanding the knowledge frameworks of prospective researchers in the digital space is crucial for enhancing archive services according to their perspectives.

Theme/Subtopic

The first major theme: Understanding KM

This major theme can be divided based on interviewee response into five sub-themes: (1) a process of knowledge creation, socialization, externalization, combination, and internationalization; (2) sharing tacit knowledge; (3) finding data electronically; (4) transferring tacit knowledge to explicit knowledge; and (5) sharing information.

Table 2.1.1: Frequencies of understanding KM

Mentioned points	Frequencies
1. Process of knowledge creation, socialisation, externalisation, combination and internationalisation	6
2. Sharing tacit knowledge	5
3. Finding data electronically	15
4. Transferring tacit knowledge to explicit knowledge	5
5. sharing information	8

[Author's Own Illustration]

Table 2.1.1 shows that respondents understand KM in different ways. They appear to have little understanding of its components, but they do note some aspects of the concept. The majority of respondents saw the most important function of KM as electronic data collection or exchange of information, while only three saw KM as a model for the generation of knowledge. Another small number of respondents viewed KM as the dissemination of implicit knowledge and the transfer of tacit knowledge to explicit knowledge. From these perspectives, it appears that participants have little understanding of KM and associate it with the sharing of basic data and information rather than a process of knowledge management at a higher level (Martins et al., 2019; Rana, 2015; Tiwana, 2020) .

A process of knowledge creation

In contrast to what polling analysts have forecasted, a thorough comprehension can be expressed through language or formulas and communicated effectively. SECI consists of four stages of knowledge development that may transpire at the individual, group, or organizational scale.

Socialization denotes the sharing of tacit knowledge, which usually happens through collective experiences, such as spending time together, collaborating in the same setting, and participating in informal social events. A quintessential instance is an apprenticeship, where learners gain the tacit knowledge pertinent to their craft through hands-on experiences, rather than through documentation (Nonaka & Takeuchi, 1995; Gracia, 2009; Polanyi, 1966).

Externalization entails making explicit knowledge out of tacit knowledge. Once tacit knowledge is articulated, it can be disseminated among others, laying the groundwork for novel knowledge. An illustration of this is employees creating innovations in the manufacturing process by vocalizing the tacit knowledge they have amassed from their work experience (Polanyi, 1966).

Combination is the procedure of transforming explicit knowledge into more intricate and methodical bodies of explicit knowledge. Explicit knowledge is sourced externally and then amalgamated, refined, or repurposed to generate new knowledge. This newly created explicit knowledge is also available to other members of the organization as well as external groups

(Gracia, 2009; Nonaka & Takeuchi, 1995) .

Internalization alludes to the transition from explicit knowledge back into tacit knowledge. For example, in training sessions, new employees might read about their roles and the organization, and through introspection, integrate these concepts into their tacit knowledge reservoir. When knowledge is internalized, it becomes part of individuals' reservoir of implicit information in the form of common internal models or real-world experience. When shared with others through socialisation, implicit knowledge that has been learnt on an individual basis might start a new cycle of knowledge generation (Nonaka & Takeuchi, 1995; Gracia, 2009; Nonaka & von Krogh, 2009, p. 641).

Sharing tacit knowledge

While it is beneficial for leadership to inspire employees to convey their implicit insights, this knowledge tends to remain locked within the minds of the workforce, creating potential voids in understanding should those individuals choose to leave. The predicament arises because implicit insights are inherently complex to document effectively. Often, organizations pursuing knowledge management resort to straightforward, process-driven documentation, such as tutorials, manuals, and handbooks. Although these tools provide clear and functional information, they do not capture the nuances of implicit knowledge. To effectively gather implicit insights, organizations must think innovatively. Leaders are urged to find creative methods to make knowledge documentation more engaging and to incorporate the rich experiences and expertise of their team members. Essentially, it comes down to the art of storytelling (Noe, 2016; Figueredo et al., 2016). To integrate more implicit insights, ministries might encourage employees to document their unique experiences. Rather than simply offering a brief explanation of why a trainer continues to develop staff, for instance, they should explore what succeeded or faltered, allowing other trainers to gain valuable perspectives. These stories will foster deeper connections among colleagues, transforming ordinary, straightforward information into vibrant, unforgettable, and immersive content. Naturally, organizing and structuring that implicit A strong knowledge management system is necessary for knowledge. When businesses use a technology that facilitates rich publication in a variety of formats, they may safeguard their workers'

intrinsic knowledge and preserve it as a strategic asset (Nonaka & Takeuchi, 1995; Gracia, 2009).

Finding data electronically

In the current competitive environment, data mining (DM) has surfaced as a significant IT asset within the ministry, particularly as society engages with the Big Data movement. From an organizational standpoint, it exists at the intersection of human participation, machine learning, mathematical modeling, and databases. Recently, the implementation of data mining within the ministry has become an essential tactic for many departments aiming to draw in new clients while keeping hold of current ones. Data mining software helps the ministry uncover previously hidden, legitimate, and actionable insights from a variety of diverse and extensive sources (including databases and open data channels like the internet) for crucial ministerial decisions by applying mathematical techniques like neural networks, decision trees, mathematical optimisation, fuzzy logic, and statistical analysis.

Several programming languages, including C++, Java, SQL, online analytical processing (OLAP), and R, are used to implement the algorithms that power these mathematical models. Phases of the data mining process include data selection, transformation, mining, and interpretation. Extracting knowledge from data to improve user decision-making is the main goal of data mining. Thus, knowledge and knowledge management are intimately related to data mining.

Transferring tacit knowledge

The quantitative portion of the data was gathered using an online survey. Feedback from those working on particular initiatives using different forms of external technology integration was gathered for this survey. Participants included practitioners, members of the technical management team, and staff from both South and North digital digitalimagin. In charge of a major technical deliverable, the responders were key technical authorities. Projects were selected by utilizing both professional and personal networks. Additionally, we chose to assess initiatives that took part in the online poll using the knowledge life cycle as a framework. Four stages make up the evolution of

knowledge along the curve, stages of creation, mobilisation, diffusion, and commoditisation.

The knowledge lifecycle is crucial for the transfer of tacit information because knowledge becomes less tacit and more explicit as it progresses from the development stage to the commoditisation stage. In order to verify that each initiative was in the creation or mobilisation phase at the time of execution—the diffusion phase is when tacit information starts to be formalised and made public—we evaluated each project for the online survey. The survey was guaranteed to concentrate on project types where technology transfer and tacit knowledge were most crucial thanks to this kind of assessment tool. The survey did not include any projects that were at the diffusion or commoditization stages. By narrowing our focus in this way, we aimed to capture the dynamics of knowledge transfer more effectively. This approach not only ensured the relevance of the data collected but also enhanced our understanding of how tacit knowledge influences project outcomes during these critical phases.

Descriptive statistics and construct measurement

The basic descriptive statistics and the sources of the significant quantitative variables we use in our empirical research are explained in Table 2.1.2. This table did not fit on the bottom of the previous page. Therefore, the entire table was moved to the next page.

Dependent variable

Table 2.1.2: Phase of the Knowledge Life Cycle for Survey Answers

	Creation	Mobilization	Diffusion	Commoditization
North	14	8	0	0
South	11	6	0	0
Management	1	2	0	0
Practitioners	1	2	0	0
Total	27	18	0	0

[Author's Own Illustration]

We created the survey's variables. The primary indication of successful tacit knowledge transfer is a variable that consists of two assessments of an organisation's capacity to use information and incorporate it into its operations without the assistance of an outside technology partner. To characterise this variable, the term tacit knowledge ownership (TACITOWN) was created. We had to get a second measure of the transmission of tacit information because this one had never been utilised previously. As a result, we also asked participants if they believed that the objectives of tacit knowledge transmission (TACIT GOALS) had been achieved.

Independent variable

As a measure of trust (TRUST), we performed a factor analysis on the respondent's assessment in the following areas: the ability of the project team to work as "one team" as opposed to two distinct teams from different companies, mutual trust, honesty in information sharing, and agreement on the project's goals and a shared strategy for reaching them.

We made the assumption that the answers to these questions were influenced by a small number of underlying aspects of trust. Actually, one aspect weighed highly on all of the questions. In order to determine how early the relationship started in the product development cycle, we asked

them to specify when they first got in touch with the partner on the product development continuum (INITIATION). To determine the level of due diligence (DUE DIL), we simply asked the respondents to score the extent of due diligence performed for that particular project.

Control variable

The difficulty of communicating implicit information will depend on the specific technology being developed. The organisation's prior expertise with the technology is a crucial consideration. Because of this, we asked participants to score how much the technology either significantly complemented or diverged from the company's key technologies (TECHNOLOGY).

We factored in project outcomes since it was important to reduce any biases in replies that might surface if a project turned out to be exceptionally successful or unsuccessful in order to assess views surrounding tacit knowledge transfer. Several criteria for measuring project success were identified via secondary research, including developing a framework for evaluating success and failure. We assessed project success (PROJACCOMP), a composite measure that reflects respondents' opinions about how well the project accomplished performance goals and customer satisfaction standards using these indicators.

There was significant ambiguity about the actual nature on how the organisation should handle the transfer of tacit knowledge during the interview process and the open-ended survey section. The results of the survey demonstrated the ability or systematic approach. Although almost two-thirds of those surveyed said they made an attempt to incorporate tacit knowledge, an astonishing 98 percent recognized that there was a defined process for this. Comments from the survey included. They identified knowledge transfer as a crucial objective for the organization. Improving product launches by leveraging individual partners' strengths were notably highlighted. Knowledge transfer took place in both a structured and an as-needed manner.

This statement is especially significant as it came from a joint venture, where one might expect a strong inclination to leverage tacit knowledge for favorable results. The complex aspect of tacit knowledge was apparent, yet it went unnoticed; consequently, it wasn't used to its full potential. Another comment was made by a contributor to the joint development agreement: Although the team had a strategy for transmitting technical documents, they lacked a plan for transmitting tacit knowledge, which led to delays, errors, and dissatisfaction.

Disparities in knowledge and expectations

The results also indicated that there might be some misunderstandings about the actual nature of tacit knowledge. The qualitative information clearly demonstrates that very few managers distinguish sharply between the transfer of technology and the transfer of tacit knowledge. Throughout the extensive interviews, we made an effort to steer the conversation in the direction of the transfer of tacit knowledge. The senior executives appeared to recognize the importance of this issue. However, while most acknowledged its importance in external technology procurement, all participants tended to shy away from engaging in this topic.

We gathered data on two aspects of tacit knowledge for this study. The opinions of ministry employees (participants) provided one dimension. The ownership of tacit knowledge is located in a realm that extends beyond the usual product introduction, according to high-level managers and practitioners who were interviewed for the other dimension. Consequently, we developed the second dimension based on the idea that environments where ownership of tacit knowledge is actualised might facilitate ongoing management, development, and training without the assistance of an external technical ally. The two aspects of tacit knowledge transfer were shown to be positively correlated in our study. Based on our conversations, it seems that this anticipated relationship originates from a conviction associated with the objectives of managing tacit knowledge.

Clearly different aims and expectations impact different levels of an organisation's hierarchy. Generally speaking, senior executives focus on strategic issues that are pertinent to their companies; in other words, they search for the proper alignments in "technology acquisition". These strategic choices often seek both short-term and long-term sustainable technical outcomes. The 'expectation' of senior leaders is that the technology they purchase will come with the background knowledge and context needed to develop next-generation solutions.

Conversely, technical managers are not particularly concerned about the long-term effects of implicit knowledge transmission. It is their duty to deliver a technological product inside a precisely defined time frame. While attempting to meet the project scope requirements, they are assessed based on implementation, scheduling, and budget compliance. Any implicit information they believe they are receiving from their partner is the absolute minimum required to launch the product onto the market. It is believed that the specific technology is the only deliverable. The technical manager is not responsible for the "next generation" product, especially if they are not involved in it.

Finding the crucial relationships that affect two partners' transfer of implicit information is the aim of this study. Overall, we provide evidence that the extent to which implicit knowledge-sharing expectations and technology transfer expectations are met is influenced by trust, early engagement, and careful assessment. Both the survey findings and interviews strongly supported that trust is vital for the perceived effectiveness of implicit knowledge transfer. While the survey reinforced this notion, interviews revealed that thorough evaluation significantly contributes to building trust by facilitating the acquisition of organization to recognize the obstacles and enablers before committing for the long term. This, consequently, encourages a more significant transfer of implicit knowledge. Furthermore, interviews affirmed that early involvement in training and development cultivates trusting relations.

Furthermore, it enhances perceived implicit knowledge transfer in two more ways: it promotes cooperation between the departments of both organizations during the times when implicit knowledge sharing is most active and serves as a sign of thorough evaluation by enabling each party to evaluate its partner's capabilities and needs. We also found that the ideas of implicit knowledge transfer, which encompass both content and procedure, are not well understood. There were differing views on the objectives of effective information transfer and a dearth of procedures to oversee this transfer, despite managers and top professionals acknowledging the importance of implicit knowledge. In terms of goals, project-level managers are more likely to concentrate on tactical actions that provide results right away, even while senior managers are aware of the long-term advantages of using implicit information. As a result, project managers have successfully enabled the transmission of knowledge for continuous product management, even if they may think they have control over implicit knowledge transfer.

Lack of specific management systems designed to monitor tacit knowledge may be partially explained by this view of success. Other contributing elements, however, might also be important. Formal solutions for integrating tacit information are routinely neglected, usually until it is too late, maybe due to the challenge of recognizing and recording it. The inability of the recipients to apply new concepts efficiently and the tiresome and disjointed interaction between the source and the recipient are the main obstacles to effectively communicating mostly tacit knowledge. Furthermore, it can be difficult to identify precisely which original tacit information has to be transferred. Nonetheless, there is strong evidence that different management frameworks are required for tacit knowledge and that these frameworks will be different from those that apply to more explicit types of information.

Multiple constraints influence the breadth of these findings. To begin with, our survey sample comprised ministry staff from diverse regions, including the South and North, as well as practitioners and technical managers. Subsequent surveys should aim to capture a broader array of participants, spanning both horizontal and vertical spectrums. Furthermore, only a sizable sample of ministry

staff, technical managers, and practitioners were included in the surveys and interviews. The results' statistical significance would be strengthened by a bigger sample size. Increased sample diversity with regard to organization size, industry, and region might also be advantageous for future research. Although the results were uniform across the South and North and among management and practitioners, they may be applicable to a variety of other groups; however, later research should include a wide range of entities. More critically, the cultural context does affect knowledge transfer dynamics, which merit further exploration. Finally, more validation is needed for the measurement of transfer of tacit knowledge. Our findings support accurate and consistent views of the transmission of tacit knowledge throughout a number of organisational levels. Encourage project teams to exchange tacit knowledge by fostering a culture of trust. Even if this is a difficult task, it is doable; management may create a list of specific actions to promote trust both within and between project teams: Define and communicate the long-term objectives of tacit knowledge management; allocate resources to capitalise on the tacit knowledge of outside partners; create and incorporate a system for soliciting implicit knowledge during the product development process. To help the team track their progress in incorporating tacit knowledge, create project-specific measures and evaluate performance in reference to these metrics.

The ministry's management teams reaffirm their conviction that improving the ability and capacity for effective action is crucial. There are two types of knowledge: explicit knowledge and tacit knowledge. The former is the solely personal concept that exists in a person's mind and is firmly anchored in their experiences and behaviours. On the other hand, information that is typically articulated, recorded, and codified—such as in manuals, databases, and other comparable resources—is included in explicit knowledge.

To meet the demands of organisational efficiency, knowledge management refers to the methods and procedures that facilitate the generation, production, and effective flow of knowledge. Consider knowledge management (KM) as the procedures that help an organisation maximise its human resource management (HRM), which includes teaching, research, and 34 administrative

tasks, as well as to strengthen the use and exchange of data and information for decision-making. The ability of senior executives to access and obtain the necessary knowledge to make critical business choices is known as knowledge management.

Theme/ Subtopic

The second major theme: Applying KM

This significant theme can be categorized according to the interviewee feedback into five subcategories: (1) incomplete execution and implicit knowledge, (2) inquiry, (3) initiative development, (4) administrative support, and (5) strategic guidance, assistance, technology, and infrastructure (refer to table 2.2.1).

Table 2.2. 1: Frequencies of applying

Mentioned points	Frequencies
Partial implementation and tacit knowledge	18
Research	15
Administration	9
Technology and infrastructure	16
Program development	13

[Source for the Research Purpose]

A significant number of respondents highlighted that knowledge management (KM) is utilized in certain aspects within the department, yet much of the knowledge remains tacit and does not convey explicit knowledge. They further mentioned that the bulk of knowledge (and even some data) is not systematically organized, necessitating verbal communication from ministry staff. The majority of respondents pointed out that the application of KM is evident particularly in research, where a wealth of resources is accessible both manually and digitally. However, many confirmed that the practice of KM is lacking in the field of administrative services, meaning employees receive

inadequate information about their entitlements, including the accessibility of research services. Additionally, ministry staff face obstacles in acquiring knowledge related to administrative functions.

Furthermore, several participants emphasized the importance of technology and infrastructure, highlighting the considerable time spent at home due to insufficient resources like computers and printers. They also pointed out the lack of electronically accessible knowledge, claiming its critical role in the successful implementation of KM. Concerning program development, participants indicated that the Human Resources Management (HRM) department is still in the early stages of knowledge creation. Each employee has unique perspectives on course development yet does not communicate this information. HRM has acknowledged this issue and is actively working to create a unit that will transform all implicit knowledge in this area into explicit knowledge for ministry staff.

The interview questions are created using the framework that was chosen, which includes five main areas that are appropriate for use in the ministry: programme development, members' services, administrative services, strategic planning, and research. The head of the ministry administrative department and every employee were questioned by the researcher to obtain a comprehensive understanding of the KM-related topics discussed in the current study. Themes pertaining to the study's goals are included in the interview guide. Table 2.2.2 lists the relationships between the framework, research questions, and interview questions. This table did not fit on the bottom of the previous page. Therefore, the entire table was moved to the next page.

Table 2.2.2: The interview guide

Interview questions	Research questions	Relations to the framework
In order to apply KM at the department, there are a number of factors that can be applied. To which factors do you consider it more important to apply KM in your department?	How are concepts of KM applied in the department?	Participant's point of view concerning the areas of KM that can be applied in the department, e.g. research, program development, member services and strategic planning, technology and infrastructure competency of personal and sharing culture.
Are there any challenges of applying KM in your department?	What are challenges of implementing KM in the department?	How participant's express their opinion about the challenges that may affect the implementation of this concept, i.e. weakness in knowledge sharing culture, organizational strategy weakness information overcrowding, and other factors that can be raised from the participants.

[Author's Own Illustration for the Research Purpose]

For the analysis, a number of recurrent patterns were found in the interview responses. To answer the research questions, the information obtained from the closed-ended surveys was manually reviewed. The participant responses were divided into three primary themes, each with multiple sub-themes, in line with the research questions. Consult Table 2.2.3.

Table 2.2.3: Understanding KM-Applying KM- Challenges

Understanding KM	Applying KM	Challenges of applying KM
✓ Process of knowledge Creation, Socialisation, Externalisation, Combination, and Internalisation.	1. Partial execution and tacit knowledge	1. Administrations 2. Cultures
	2. Research.	
	3. Program development	
	4. Administrative services	
	5. Technology and infrastructure	
✓ Sharing tacit knowledge.		
✓ Finding data		
Electronically.		
✓ Transferring tacit knowledge to explicit knowledge		
✓ Sharing information		

[Source for the Research Purpose]

Somatic tacit knowledge consists of physical human behaviors that are difficult for laypersons to articulate. Collective between tacit and knowledge, in and the term "tacit knowledge" describes information that is interwoven within a social context, like a specific dialect within a particular locality. Relational and somatic tacit knowledge can be collected, but collective tacit knowledge cannot. Collective tacit knowledge is not collectable. Furthermore, because machines cannot interact socially or form meaningful connections within an organisation, AI can only support

knowledge management in the area of collective tacit knowledge (KM). Neural networks can also be used to extract somatic tacit information. According to the literature, people and organisations can develop tacit knowledge by improving predictive analytics through self-learning analytical skills, identifying patterns that were previously overlooked, examining organisational data and finding connections, and producing new declarative knowledge.

Two-Part Strategy

The following recommendations are meant for managers who want to learn tacit information. Choose an AI program. The overall goal of their implementation determines the range of AI applications. Managers, for example, regularly use programs to obtain marketing insights. On the other hand, various programs like Analytics, Google Analytics, Adobe Analytics, and Google Cloud are useful for learning and analysing data. Identify the functions of AI and learn how to connect them to human roles.

The following recommendations are meant for managers who want to learn tacit information. Choose an AI program. The overall goal of their implementation determines the range of AI applications. Managers, for example, regularly use programs to obtain marketing insights. On the other hand, various programs like Analytics, Google Analytics, Adobe Analytics, and Google Cloud are useful for learning and analysing data. Identify the functions of AI and learn how to connect them to human roles. Human Resources/Recruiting KM is concerned with the archiving and retrieval of information about current and prospective employees. Furthermore, KMS conserves information like policies, instructional documents, and FAQs, allowing this data to be searchable independently from human involvement. Social media platforms can serve to conserve information, attract suitable talent, and disseminate organization-wide communications and alerts.

Marketing

Marketing techniques are continuously transforming, particularly within the realm of social media. In the pre-social media era, businesses would provide complimentary white papers in exchange for contact details and relied heavily on email campaigns. Today, organizations enlist

influencers and individuals to promote their products and services. In the midst of the fluctuating marketing landscape on social media, knowledge management (KM) can prove to be exceptionally useful. KM assists an organization in enhancing operational knowledge, conducting market research, and fostering sales relationships.

Operations

Entities leveraging social media for their operations mainly do so to deliver customer support and collect surveys from their intended audience to assess feedback and grievances. Reviews on social media and service activities are closely linked to customer contentment. An effective social media approach necessitates that businesses take social media earnestly, oversee reactions to reviews, and design posts to keep audiences updated.

The approach commenced with formulating a search framework that included specific inclusion and exclusion guidelines, relevant keywords, and sources of assistance; monitoring the search process; and selecting academic papers for evaluation. No relevant research (i.e., articles focusing on KM AI systems) was ignored to avoid scope expansion; the number of studies that satisfied the inclusion criteria (i.e., articles focusing on KM AI systems) was sufficient to enable a credible review. The terms knowledge management strategies, artificial intelligence, AI, data integration, gamification, and implicit knowledge collection were included in the Google Scholar search. The majority of articles, with a few exceptions, were published between 2018 and 2024 to cover the development and foundation of knowledge management.

Critical appraisal

A thorough evaluation of the results limited the selection to studies that met entrance standards. We looked at the search results that were pertinent to the keywords and the researchers' direct or indirect findings to address the study questions at the final sampling step. Organisations must manage their knowledge assets effectively and proficiently in order to be competitive in knowledge-driven economies. This study provides more empirical evidence in favour of this well-

accepted claim. Furthermore, the findings of study suggest that this association is mediated by sustainability strategy and knowledge application. These results imply that knowledge creation, systematisation, and dissemination only improve organisational performance when used and combined with a long-term plan.

The ability of an organisation to gather, recognise, and convert knowledge into useful goods and services, integrate it into decision-making procedures, and put it into practice is known as knowledge application. Therefore, an organisation's ability to effectively use knowledge to accomplish its strategic goals is intimately related to producing real value through the development, systematisation, and sharing of knowledge. Thus, emphasising the critical role of knowledge application in KM execution is one of the research's suggestions for practitioners and academic researchers. Furthermore, managers must understand how knowledge management procedures improve organisational performance.

The mediating role of sustainability in KM execution is another noteworthy contribution of this study. A long-term, comprehensive, and linked viewpoint is required for a sustainable strategy. It encompasses an organisation's understanding of its environment, which is essential to achieving strategic goals. Therefore, when implemented with a sustainable perspective, knowledge management procedures enhance organisational performance. Managers must take sustainable strategies into account when implementing knowledge management operations, particularly in the current unstable business.

The findings of the study also show that sustainability and knowledge application have a direct and substantial impact on organisational success. Therefore, integrating sustainability and knowledge application with strategic operational functions is crucial from a managerial perspective. Several managers believe that sustainability is an unaffordable burden for organisations, and many organisations are hesitant to embrace it because of growing costs. However, the findings of this study indicate that knowledge leveraging and the adoption of sustainable strategies are not only associated

with improved organisational performance but also boost the benefits of other organizational processes, such as knowledge management.

Numerous technologies are ready to be used within organisations to support these approaches, thanks to the rapid improvements in the field of ICT support for institutions. Information and communication technologies that are relevant to knowledge management include, for example:

Intranet frameworks, Document and content governance systems; Workflow oversight systems; AI technologies; Business analytics tools; Visualization applications; Groupware and cooperative software, and E-learning platforms

From a knowledge management perspective, Knowledge Management Systems (KMS) offer significantly enhanced capability by integrating a large number of the previously stated information and communication tools and systems. It is incorrect to think about KMS as just a huge centralised database. Rather, they can be thought of as vast, interrelated sets of contextualised information and documents linked to directories of people and abilities, offering intelligence to examine these documents, connections, employee interests, and behaviours, along with sophisticated tools for collaboration and knowledge exchange. Generating, sharing, and applying knowledge; identifying experts and networks; actively participating in networks and communities; producing and exchanging knowledge within these networks; improving employees' learning capacities; and comprehending the connections among knowledge, people, and processes are among the goals of using KMS.

Any organisation's knowledge management system should have collaborative capabilities that use a variety of methods to help staff members share explicit and implicit information. Although it involves a process that helps organisations identify, select, organise, and disseminate important information and expertise in a less structured manner, it aims to change people's behaviours so that others can access their experiences and expertise. This process is part of the organisational memory. The knowledge management system is based on technology, but in order to continuously expand and

optimise the organisation's knowledge base, human involvement is necessary. The project scope, timeline schedule, and project team are the most commonly created and distributed documents in the knowledge management system.

However, the vast majority of employees in this organisation are primarily using this technology to catalogue and retrieve documents rather than to promote collaborative knowledge creation and exchange. Organisational knowledge management platforms, research and insights repositories, customer service knowledge hubs, library management systems, and online community discussion boards are some of the types of knowledge management systems that are often used today.

Knowledge Management Systems (KMS) provide methods and tools for externalising knowledge that is hidden in organisational experts' brains and preserving it for later use to improve decision-making and problem-solving. KMS influences how knowledge and information are used to solve problems and support decision-making in many organisations. Using KMS in an organisation is a real-world example that shows how KMS can be both a benefit and a drawback in helping professionals make decisions by generating organisational knowledge. Implementing knowledge management (KM) initiatives or knowledge management systems (KMS), which are the technologies that enable KM in creating, storing, sharing, and disseminating knowledge, is crucial for organisations to fully benefit from KM.

Notably, some academics wonder if KMS users might not develop their own knowledge while relying on the expertise of others. This could result in a lack of expertise development among the organisation's future "experts" and, eventually, a decline in human knowledge within the organisation. Additionally, the KMS should encourage interpretative problem-solving and make it easier for users to find a rule and/or illustration that is pertinent to the current situation. The goal of knowledge management systems (KMS) is to compile the explicit knowledge that is present in an organisation.

In this study, we concentrate on offering a comprehensive theoretical assessment and analysis of KM. The theoretical underpinnings of knowledge management, including its concepts and phases, were first summarised and examined. Next, we assessed several key approaches to structuring the knowledge management system from several angles, such as knowledge representation and structure, information exchange, and KM performance metrics. The majority of individuals concur that knowledge management encompasses the creation, use, application, storage, distribution, and utilisation of knowledge inside an organisation. However, in order to achieve this, the company needs to actively collaborate on a variety of projects by using KMS to improve knowledge management initiatives. According to the report, despite the challenges associated with implementing KMS within an organisation, it can result in a wider and deeper range of knowledge creation, application, storage, and dissemination within the organisation; these advancements will ultimately lead to a more efficient use of the knowledge that is already available, improving productivity, organisational efficiency, and decision-making.

Accurate and current knowledge is essential for knowledge workers to do their jobs well. The problem is that organisations find it challenging to distinguish between what they do and do not do because knowledge is a resource that is always changing. Unlike other resources, knowledge is unique. It continuously renders itself outdated, turning today's sophisticated knowledge into tomorrow's stupidity. Important knowledge can change quickly and suddenly. Employees can receive knowledge in a format that works best for them thanks to a knowledge management system that can routinely adjust to changes.

Employee productivity and teamwork will both increase with the use of the appropriate knowledge management resource. In addition to saving time looking for information, they will have the confidence to share what they know, which will aid in their professional growth. The following are knowledge management's primary advantages:

Employees that are empowered to accomplish their goals waste less time and resources. losing less important knowledge when important personnel depart and take it with them. When

workers have access to the information they need to perform their jobs, they make better decisions. Businesses have a major competitive edge over competitors who are less adept at transferring and preserving information. Wasting less time and money since workers are empowered to accomplish their objectives.

A culture of sharing knowledge is fostered in the ministry by senior officials and knowledge champions. Employees are more likely to emulate the proper conduct of powerful leaders when they witness it in action. More importantly, staff members will be inspired to participate once they perceive the advantages of knowledge-sharing. Employee engagement and willingness to contribute increase when knowledge-sharing is accepted in the workplace culture. It should become so ingrained in the culture that using the tools and mechanisms to find and exchange knowledge comes naturally.

Theme/ Subtopic

The third major theme: The challenges of implementing KM

This major theme can be divided based on interviewee response into eight subthemes. (1) empowering ministry teams to share their knowledge, (2) delivering the right knowledge for an organization, (3) scaling knowledge as an entity grows, and (4) keeping knowledge bases up-to-date. (5) Getting buy-in from senior executives, (6) Employee resistance to adopting new technology, (7) Finding answers too slowly, (8) Incorporating knowledge into an entity's everyday systems.

Challenges of KM and how to overcome them

Though a knowledge base offers numerous advantages, it does have its downsides. Nevertheless, staff can tackle these obstacles by utilizing tools and adhering to best practices. Let's explore some of the prevalent challenges in knowledge management and the corresponding solutions.

Empowering team members to share their knowledge

It might be difficult for managers to encourage all team members to share knowledge instead of keeping it to themselves. Even though this could seem OK for a while, all of their implicit knowledge disappears with them if they decide to depart for another company or stop being reachable. Establishing a structure that motivates all staff members to contribute their knowledge and keep it up-to-date is crucial for the benefit of others. In this way, all relevant data and protocols are recorded beforehand for when a team member needs to access them.

Solution: Make knowledge sharing simple and engaging

Facilitate a seamless and enjoyable experience for the entire team to exchange their tacit and explicit insights and essential lessons. Encourage team members to present their knowledge in diverse formats that align with their personalities and skills. Solutions like Stonly simplify the dissemination of organizational wisdom by making it engaging and straightforward. Nobody enjoys sifting through a lengthy, tedious paragraph of unchanging text. Opting for a platform with interactive capabilities makes content creation and consumption both easy and enjoyable. Furthermore, this approach proves to be a more potent educational strategy, leading to improved information retention among employees.

Delivering the right knowledge for an organization

What proves effective for one organization's knowledge management might not be suitable for another. Selecting a system or approach that aligns with the needs of the organization and complements current tools and procedures can be challenging. If the solution the ministry adopts lacks ample adaptability or personalization, it will become increasingly difficult to modify as the organization grows and changes.

Solution: Don't follow one-size fits all solutions

Don't settle for a generic employee onboarding blueprint. Rather, present the critical information in relation to the organization and unique processes. Opt for a platform such as Stonly, which boasts a finely tailored knowledge base system. It's adaptable and displays only the relevant

information to team members contextually instead of inundating them with all of the help resources.

Scaling knowledge as the organization grow

As the workforce expands, the methods of knowledge generation and sharing will need to adapt. A business with five staff members likely communicates differently than one with 500. Rather than casually discussing a new project with the team, you'll need to disseminate and archive that information in a more systematic manner. If the team doesn't establish scalable knowledge management practices within the organization at the earliest opportunity, it will become increasingly difficult to pivot and reorganize in the future. They will have to undertake a comprehensive migration, dedicating substantial time to transfer knowledge between various platforms.

Solution: Implement a scalable system

Enhance employee efficiency and reduce stress by adopting a scalable knowledge management strategy as your organization expands. This approach will provide a competitive edge over competitors who cling to obsolete methods and enable the company to harness the advantages of knowledge management efforts. Establish clear guidelines for knowledge contributions, ensuring all staff are aligned and have uniform access to information. Stonly features a modular knowledge base, making it simple to update and grow alongside the company. Furthermore, it operates as a low-maintenance, no-code solution that seamlessly integrates with your current systems and tools.

Keeping knowledge bases up-to-date

Complicated software that requires permissions or development support might make it difficult to keep organisational knowledge repositories up-to-date. The requirement to open a ticket for any small modification to the documentation should be discouraged by management. Employees are deterred from sharing information and taking the initiative to update content by this practice. If the ministry has a knowledge base, it should be very easy for all employees to update without requiring involvement from the support or development teams. Solution: Choose a tool that's easy to update.

Solution: Choose a tool that's easy to update

Choose an application or knowledge management platform that is accessible to all ministry employees and easy to adapt. Because Stonly is a modular, code-free solution, team members can easily incorporate updates quickly without the need for developers, which promotes knowledge development. Additionally, setting up time for knowledge base assessments could be helpful in locating out-of-date information or eliminating pointless documents. These evaluations could be planned for once or twice a year, every few months, or every few years. Getting buy-in from senior executive.

Getting buy-in from senior executive

Team members will still need the support of senior executives and other leaders who are usually involved in decision-making, even if they are in favour of updating workflows or purchasing knowledge management software. Their enthusiasm and leadership are essential for driving successful changes. If top executives aren't advocating for new methodologies to the rest of the organization, it's unlikely that other staff will feel motivated. Organizational transformation often begins at the highest level.

Solution: Ask senior executives to help lead the charge

Before rolling out any new processes or tools, engage with senior leadership and other key stakeholders. Encourage them to act as champions of the initiative. They can illustrate examples of knowledge management by utilizing the new tools for the rest of the organization, establishing standards, promoting uniformity, and being accessible to clarify any inquiries employees may have regarding the new implementation.

Employee's resistance to adopting new technology

As is common with many fresh initiatives, the launch of a new knowledge base might encounter resistance from employees. Numerous individuals can feel uneasy about alterations and skeptical of new technology, particularly if they believe that existing systems are performing adequately. If staff members are under tight deadlines, they might be concerned about the time commitment required to grasp a new process. Furthermore, if the updated tool consists solely of

dreary, unchanging text blocks, they probably won't see much reason to engage with it.

Solution: Show employees that the new solution will benefit them

Show staff members how the revised processes will streamline their work and save them time. Give them comprehensive, approachable training so they can become proficient with new tools faster. Using a platform like Stonly to create a knowledge base can be beneficial since it helps remove barriers to use, makes training, information, and onboarding engaging and interactive, customises guides according to team and individual needs, and adapts the learning experience. You can also include screenshots and visually appealing elements.

Finding answers too slowly

It's frustrating when staff squander precious time hunting through a chaotic knowledge repository for particular information, only to come up empty-handed. An excess of companies rely on knowledge management systems that lack searchability or are overly complex. In the absence of visual aids to facilitate learning, employees struggle to remember information.

Solution: Choose a tool that's searchable

Introduce a solution designed to assist staff in locating the information they require with just a few effortless clicks. Stonly's troubleshooting and search functions provide users with precise search outcomes. Its contextually relevant interactive tooltips offer your team the answers they need instantaneously, sparing them the trouble of sifting through extensive documents filled with extraneous details.

Incorporating knowledge into everyday systems

Maintaining a knowledge repository that is entirely distinct from other organizational platforms and procedures can pose challenges in seamlessly integrating it into your workflow. Without integration points or specific steps within company operations to contribute to or revise your knowledge management, it can swiftly become obsolete.

Solution: Make knowledge sharing part of the workflow

Integrating consistent learning and knowledge exchange into the organization's workflow is vital. A platform like Stonly can seamlessly initiate guides within the existing third-party

applications that your team utilizes daily for contextual training, enhancing the utilization of the organization's tools. With a clearer understanding of the prevalent challenges associated with knowledge management, they are now prepared to make informed decisions and establish a robust, sustainable system within the organization. Whether incorporating new tools into their technology arsenal or fine-tuning existing processes, they can elevate team productivity and ensure alignment across the board. The responses garnered from the closed-ended surveys revealed several recurring themes for evaluation. The gathered information was examined manually to address the research inquiries. The participant insights were grouped into three main themes, each of which had multiple sub-themes, in accordance with the research questions (see Table 2.3.1).

Table 2.3.1: The challenges of implementing KM

Mentioned points	Frequencies
Administrations	18
Cultures	15

[Source Own Illustration for Research Purpose]

A number of respondents, particularly those well-versed in the principles of knowledge management (KM), emphasized that the primary challenges encountered in the adoption of KM within the department are linked to managerial and cultural factors. Every respondent reported facing various hurdles related to management originating from the prevailing leadership style. (1) The lack of educational programs for both students and faculty regarding the notion of knowledge management (KM), as well as its importance and ramifications. Acknowledgment is inadequate; ministry employees reported that the department's leadership does not adequately value their knowledge and does not advocate for ways to make the best use of it, including how to administer it. A knowledgeable employee described her task of establishing the department's knowledge management system. However, she was relocated to another positions and replaced by the department head after initiating the process and skilfully handling its obstacles. Interviewees noted

that confusing decision-making makes it impossible to manage knowledge efficiently. The extensive amount of duties assigned to staff members. All respondents noted that they are given a plethora of tasks that impede their capacity to implement knowledge management. Therefore, although tacit knowledge may initially build up, it is often lost when employees retire or shift to other departments.

The majority of interviewees identified culture as the second sub-theme influencing or enhancing knowledge management. They contended that ministry members exhibit limited willingness to share information due to two primary factors:

Lack of confidence and uncertainty over their own expertise. Many respondents noted that people in the department, especially students, had a tendency to avoid learning things on their own and instead prefer to learn things quickly and orally. Many staff members approached the researcher during a discussion with a staff member to ask questions regarding information that should have ideally been available in digital or printed versions. Rather, they learnt this information by taking notes during spoken conversations. The researcher then tried to explain the idea of KM to some of the ministry team members. To discuss different aspects of program management and enhancement from both perspectives, the researcher meets with ministry representatives. viewpoint of management.

Since it helps to eliminate recurring queries and concerns about the course, it is evident how important it is to give staff members a thorough course overview and its effects at the start of their courses. Following the discussion, the following were identified as the essential elements of any course outline: general information about the course in both Sesotho and English (such as the course title, code, and number); the course's objectives; instructional strategies and activities; decision-making procedures; a projected timeline; evaluation techniques; the course assessment; references; ministry personnel's contact information for additional questions from scheduled practitioners; and the availability of office hours for ministry staff. Create a club for the human resources department's staff.

Regarding the ministry component, employees met the following goals. creating procedural standards to improve communication within the ministry, especially when it comes to matters involving part-time workers under the deanship of human resource management. putting together a report on the department that includes details about its program, mission, vision, and goals, as well as information about ministry members and the department's overall staff size. gathering data, information, and perspectives from a range of institutions, committees, deanships, vice presidents, centres, and colleges.

Creating a variety of administrative files, such as a department-wide achievements file and separate files for ministry members and subordinates. Although some scholars contend that the organisational setting is ideal for applying the concepts and methods of knowledge management (KM), this study identifies a number of gaps in the department's comprehension and use of this crucial idea. Participants understand that the core of knowledge management (KM) is keeping data in a digital format, but only those who take the time to study the topic completely understand its wider ramifications. This realisation might therefore highlight how crucial the KM idea is to the ministry.

The findings show that knowledge management is effectively applied in the department's research division, although its application is limited in areas like program development and administration. According to the literature now in publication, a process of implementing knowledge management (KM) is underway; nevertheless, department participants have a limited understanding of KM. As a result, they had difficulty defining a precise implementation process and instead merely said that they could access departmental data online. The significant ramifications of KM are not adequately conveyed by this perspective.

Implicit knowledge seems to be untranslatable into explicit knowledge. The researcher noticed during the interview process that the majority of the information exchanged between academics, staff, and students was verbal. As a result, knowledge does not follow a clear structure

that would make it easier to organise and retrieve. Because of this, the department's knowledge management implementation is more like a jigsaw, with each member trying to gather crucial information on their own rather than working together to manage knowledge for the department as a whole.

The findings show that the implementation of knowledge management is significantly impacted by a number of issues. According to this study, organisational culture and administrative concerns are the main obstacles to KM implementation in the department. In particular, the biggest administrative obstacle to KM adoption is the absence of training and recognition initiatives combined with a high workload. The results make clear that culture has a significant impact on how knowledge management is carried out.

Consequently, an investigator has come to the conclusion that culture affects every aspect of the department's operations, including leadership practices that might not align with knowledge management principles and possibly other ideas. Senior management support is essential for a knowledge management endeavour to succeed; without it, the program is unlikely to succeed. Sadly, management frequently lags behind in implementing new technologies, and when staff members observe a lack of the required behaviours being displayed, they often follow the lead. When leaders fail to share information, team members often withhold their own knowledge, believing this to be the correct approach. Senior leadership bears the responsibility for fostering a culture of knowledge sharing, yet they may consider knowledge to be outside their scope of duties or departmental responsibilities.

As was already said, employees who are currently using their own systems and methods for sharing knowledge—even if they are not the best for efficient knowledge management—may oppose organisational change. Employee resistance to change inside the company might make it difficult to persuade them to embrace new approaches, especially if they have seen unsuccessful attempts at previous efforts. Maintaining current procedures, even if they are ineffective, frequently seems easier

than switching to a new approach, which might require a lot of work. Team members may doubt the benefits of the company's new knowledge management system if they believe their present procedures are working well.

Ultimately, since people devote a large portion of their lives to their careers, it is critical to recognise the importance of knowledge management (KM). It may significantly help with (1) creating an effective work atmosphere, (2) fostering innovation, (3) saving time, and (4) cutting costs while raising employee awareness in their particular departments. The purpose of this study is to highlight the department's importance and raise policymakers' and decision-makers' understanding of the difficulties in knowledge management on a local and national level. Furthermore, this study hopes to encourage further research on this idea, especially in the area of ministry culture. Therefore, in order to gain a comprehensive understanding of this concept and its significance in furthering the field of higher education, academics might want to look at other KM instances.

Considering all the details provided, along with the aspects mentioned earlier, the elements leading to the unsuccessful implementation of the types of knowledge management systems: Insufficient technical and managerial assistance during the launch and operation stages. assuming that technology serves as knowledge management's only solution. Insufficient comprehension of the dynamics of knowledge and the challenges of conveying implicit knowledge via IT-centred systems (see the section on implicit knowledge in knowledge sharing). the lack of a distinct budget. The interviewees' comments revealed several recurrent themes that warrant further investigation. To answer the research questions, the data collected from the closed-ended questionnaire was manually examined. Based on the research questions, the participant results were categorised into three major themes, each of which included multiple sub-themes.

Theme/ Subtopic

The fourth major theme: Effects of HRM on KM

Five subthemes emerged from this main theme, which was based on interviewee responses:

(1) HRM recruiting practices, (2) reward understanding, (3) performance management (control), (4) training, and (5) desired behavioural outcomes.

At the heart of the HR function lies the development of employees in sync with the business strategy, the selection and recruitment of talent, the training and growth of personnel, the assessment of their performance, rewarding efforts, and fostering an environment of continuous learning. The subsequent section will delve into these topics, emphasizing their significance in advancing knowledge management (KM).

Generally speaking, personalisation and codification are the two primary methods of knowledge management. The first method deals with the objective, formal codification of explicit knowledge that can be expressed in a variety of ways, including words, numbers, or specifications. This type of knowledge is typically archived in databases, making it easily accessible to all individuals within the organization. Such companies heavily invest in information and communication technology (ICT) for initiatives like intranets, knowledge mapping (locating knowledge within a company), data warehousing, data mining, and electronic archives. The ability to reuse knowledge streamlines work processes, cuts communication expenses, and enables a company to undertake larger projects. Because exploitative learning tends to improve current skills and technologies, it is directly related to this. It promotes standardisation and routinisation while keeping a low-risk strategy.

Conversely, personalisation entails the creation of implicit knowledge based on perceptions, intuition, and individual abilities for addressing complex problems. The majority of this type of knowledge is shared directly between people. To promote the sharing of tacit knowledge, strategies including dialogues, learning histories, and communities of practice are crucial. This method, which

has its roots in "expert economics," is mostly used in strategic consulting to address particular problems that call for deep, implicit human insights. Exploratory learning, which includes intricate searches, foundational research, creativity, risk-taking, and laxer control mechanisms, is directly linked to personalisation. Thus, at least two knowledge management techniques have a big impact on HR procedures. We will then discuss hiring and selection practices in relation to knowledge management techniques.

Considering that knowledge management (KM) is often adopted by organizations that operate within intricate and unpredictable environments, traditional recruitment and selection techniques often require modification. In such circumstances, it may be incredibly tough to explicitly define the essential knowledge and skill set in advance. Conventional recruitment methods may obstruct the flow of knowledge among various groups or departments within ministries that are organized based on functional structures. When assessment centers focus on particular functions, they may inadvertently bolster subcultures within those functions, obstructing knowledge sharing between them. The management of the ministry stresses the importance of aligning new recruits with the organization's knowledge culture, highlighting the need to integrate organizational culture with the hiring of suitable individuals, along with their assimilation into the ministry's cultural framework.

Professionals and knowledge workers are considered to require ongoing education and skill development. People need to stay up-to-date on the latest advancements in their fields of expertise and actively engage in programs that support their professional development if they want to continue to hold their position as leaders in such disciplines. When implementing codification initiatives, the ministry usually recruits undergraduates and teaches them in teams to serve as implementers, emphasising the procedures for gathering, organising, and preserving knowledge, especially in the area of technology.

In order to use their analytical and creative skills to address particular business difficulties and spread knowledge, the ministry hires graduates as innovators who focus on personalisation. After they join the team, seasoned consultants serve as mentors and facilitate their primary training. The personalisation method places more emphasis on double-loop learning than the codification strategy does on single-loop learning. Objectives are also frequently short-term and primarily measurable. The performance management strategy, which emphasises long-term development, is typically very different in many knowledge-driven businesses.

Since the many goals outlined in employees' performance agreements may lead to a great deal of conflict between various functions, performance management systems might impede the flow of knowledge. Different KM techniques have different perspectives on efforts, metrics, and rewards. Contributions related to systems and technologies are therefore more likely to be recognised and rewarded within the codification strategy. This framework links technology, data volume, and technology utilisation to important performance. The personalisation paradigm places a strong emphasis on people, and it links data quality, humans, and tacit forms of knowledge to key performance indicators.

. An attempt was made to incorporate HRM practices into KM systems in the previous section. HRM practices and KM strategy are summarised in Table 2.4.1, which provides a perfect example of how to group them. In particular, it pinpoints the abstract elements of reality that appear in many situations. We can describe and understand real economic things thanks to concepts. Table 2.4.1 illustrates the connection between HRM practices and the organisation's knowledge management strategy, reflecting a likely trend in the modern economy. Staff selection, training, and performance are all in line with the codification method, which mainly targets explicit information intended to be successful and efficient. Personnel selection, training, and performance criteria are all geared towards the personalisation approach, which is primarily concerned with the creation of tacit knowledge to promote creativity. The previous page's bottom could not accommodate the table. As a result, the entire table was shifted to the following page.

Table 2.4. 1: Strategies and HRM practices

KM strategy	Codification of explicit knowledge	Personalisation of tacit knowledge
HRM practices	Recruitment	Psychometric testing, job Fit into knowledge sharing
	descriptions electronic culture, personal recruitment recruitment	
ard sharing knowledge	Varied rewards for people, ed rewards to people for sharing	
	for documenting knowledge, developing new knowledge following ideas, creative failures, quality standard routines, using of data.	
	technology, volume of data.	Developmental objectives
ormance management, (control)	Hard objectives, result-oriented,short-term, functionally specific goals.	360% evaluation, group-orientation, long-term
ning	ing, broad skills, inventor	
	start, specific skills implementer mentality. Single loop learning.	
red behavioural Outcomes	Documenting knowledge, low risk-taking, specialisation, effectiveness.	-taking, exchange of ideas, co-operation, innovation

[Source: Developed for the Research Purpose]

The quest for understanding motivates individuals to document their observations into databases for future reference, follow standardized protocols, and engage in low-risk activities (maintaining established practices). Additionally, there's a division of labor crafted to enhance efficiency and minimize costs. Ultimately, documenting a knowledge framework aims to systematize knowledge within the organization. Conversely, the personalization approach encourages risk-taking (venturing into new territories and testing), collaboration, and idea exchange among individuals to

stimulate innovation in products and services, thereby improving work methodologies.

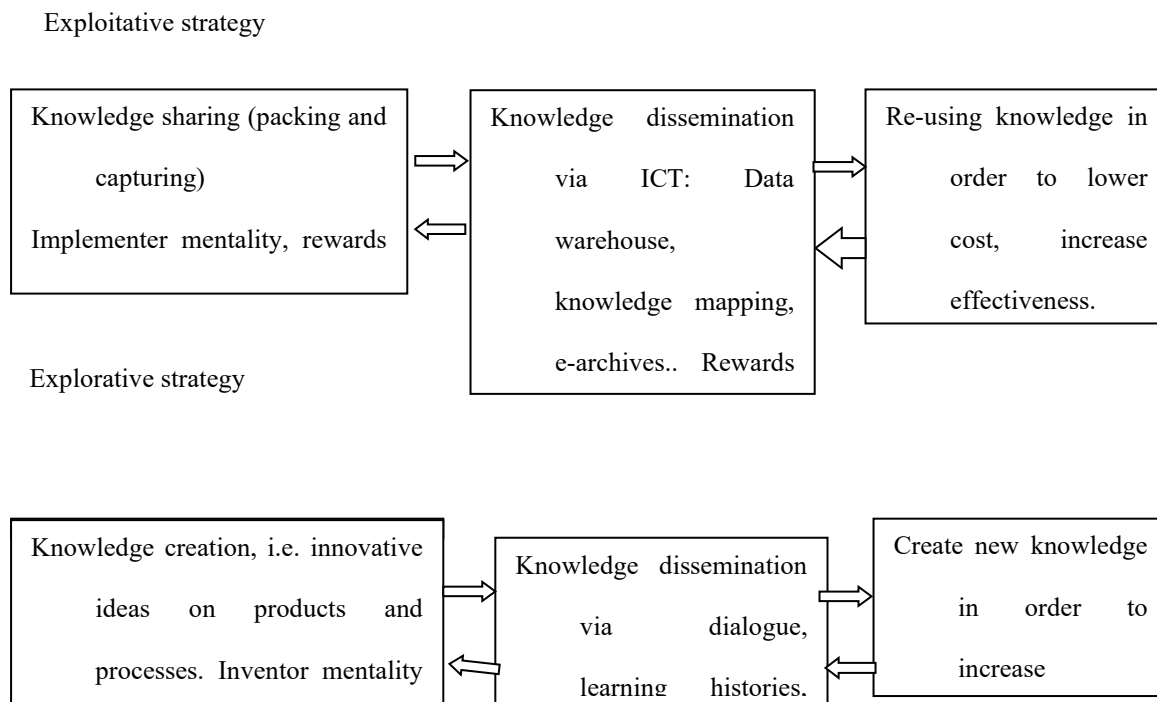
The primary focus of this study has been on how HRM procedures might encourage knowledge reuse and sharing. Management procedures are not isolated from the larger organisation and do not function in a vacuum. Instead, they are interconnected and necessitate careful coordination and a certain amount of alignment. Therefore, a company's overall KM strategy is made up of its HRM strategy and overarching strategy. There are several similarities between the KM and HRM techniques mentioned above. For example, the cost-cutting and codification strategies both emphasise standardisation, cost-cutting, and efficiency. The alignment of knowledge management and overarching strategy is referred to as an exploitative strategy in this context. Conversely, the innovative HRM and personalisation strategy concentrate on fostering innovation, finding new approaches, and building new competencies. This categorisation of knowledge management and overall approach is known as an exploratory strategy. The KM process as a whole is greatly impacted by these tactics. Therefore, it is hypothesised that an exploitative strategy focuses primarily on information retention (collecting and packaging knowledge), with the expected behavioural results of documenting knowledge, minimising risk, specialisation, and efficiency.

This also includes leveraging current knowledge to save expenses while improving efficiency and standardisation, as well as disseminating knowledge through cutting-edge IT solutions. There seems to be little focus on generating new information. On the other hand, it is suggested that an exploratory approach will prioritise knowledge generation (new concepts for products, procedures, HRM, and knowledge management), promote interpersonal communication to transfer implicit knowledge, and use knowledge to produce new viewpoints, all of which will further spur innovation and change work practices. In the end, comprehensive knowledge management procedures can be defined using the company's overarching strategy. Both the HRM and KM techniques examined in this research are encompassed under the words exploitative and explorative (Figure 2.4.1). These tactics have a significant impact on how organisations operate over the long run.

The exploitative strategy underscores technical abilities and process improvements, where learning revolves around rapid responses to challenges and prompt fault identification. However, these processes do not encourage causal analysis. Ironically, intelligent organizations can develop less competent individuals who depend on processes rather than intuitive insights. If such intuitive insights cannot be standardized, codified, or abstracted, then the knowledge acquired by more intelligent individuals will not be universally applicable. Intelligent organizations lack the awareness to recognize everything they need; thus, they necessitate individuals who are perceptive enough to understand that they must pursue knowledge beyond their current scope.

The ministries employing an exploratory approach excel at engaging in causal analysis and employing capable individuals, leading to advancements in production methods and innovation. Nevertheless, they often suffer from a lack of organization and systems to translate these potentials into competitive edges, as the autonomy and freedom of personnel may lead to pushback against directive policy execution. The challenge lies in developing a knowledge strategy that can establish functional structures and processes while the ministry seeks future uncharted applications. This table did not fit on the bottom of the previous page. Therefore, the entire table was moved to the next page.

Figure 2.4.1: KM strategies and behavioural outcomes



[Source: Ingi Runar Edvardsson, 2008]

In light of the escalating significance of knowledge management (KM), this research seeks to merge human resource (HR) strategies with KM frameworks by exploring the various HR strategies to implement and analyzing their behavioral repercussions. The relationship between HRM strategies and an organization's overarching strategy forms the foundation of the broader KM strategies. The exploitative approach and the explorative strategy were the two main tactics discovered in this study. The KM process is generally impacted by behaviour, which is influenced by each of these tactics. It was proposed that in addition to using technology to spread explicit knowledge, the exploitative method would put more of an emphasis on knowledge retention (i.e., capturing and organising knowledge). Conversely, the explorative strategy emphasizes knowledge generation and fostering interpersonal interactions to convey tacit knowledge and leverage existing knowledge for innovation and the development of new work methods.

These two strategies could significantly impact organizational operations. The exploitative strategy prioritizes technical expertise and process enhancements over causal examination, thereby increasing the likelihood of becoming entrenched in outdated designs and missing out on future opportunities. In contrast, the explorative strategy champions innovation and continuous learning but often lacks the framework and methodologies to convert these into competitive gains. To further our comprehension of this topic, additional empirical research is paramount for validating these concepts.

As was already established, the ministry's overall strategy has a significant impact on both KM and HRM methodologies. It's clear that there are at least two KM strategies, even though conflicts and divergent viewpoints may occur over how the overall strategy fits in with both KM and HRM strategies. Companies may use a combination of approaches; for example, research and development departments may be more likely to use an exploratory learning approach, whereas production departments may be more likely to use an exploitative one. Generally, one method becomes more common in the company as a result of investments in workforce recruiting, training, information and communication technology (ICT), and job design. Firms that provide standardized and established products and services tend to adopt the exploitative strategy, while those offering tailored and innovative products favor the explorative strategy.

Because people tend to feel more at ease in these settings, there is a tendency to employ an exploitative tactic. This method offers more clarity and accuracy when handling explicit knowledge as opposed to tacit knowledge. Nonetheless, other KM studies reveal a contrasting viewpoint: that the effective use of both documentation and personalization strategies yields the highest benefits for the ministry. Traditional organizational studies also suggest that knowledge strategies and the overall organization of work are influenced by national culture, industry sector, professional standards, unemployment rates, management practices, as well as labor unions and class dynamics. The intersection of KM and HRM's role within KM remains in its nascent stages. Much of the existing research stems from case studies and interviews, rendering broad generalizations

difficult. Consequently, future studies would greatly benefit from longitudinal analyses, international comparisons, and exploration of industry sector variations. Furthermore, foundational concepts of the discourse must be clarified, and theoretical frameworks need development. Future research should focus on addressing these gaps, and in this investigation, I have endeavored to advance the theoretical framework further. There is an urgent need for empirical validation of the theoretical model proposed herein.

Knowledge relies on individuals, and human resource management (HRM) matters—such as hiring and selection, education and growth, performance assessment, compensation and benefits, along with fostering a culture of learning—are essential for effectively managing knowledge within organizations. HRM is instrumental in knowledge management (KM) as a critical success factor. Recently, KM has emerged as a prominent area of research; however, few investigations have assessed how HRM practices influence the various processes inherent in KM. Most prior studies have taken a limited perspective on the influence of HRM on KM. Several have narrowed their focus to a single HRM practice (or a specific KM process, primarily knowledge sharing), lacking a comprehensive understanding of the matter. Furthermore, while KM has attracted significant interest in developed nations, there has been minimal scholarly focus on it within the Lesotho Ministry of Foreign Affairs and International Relations.

Although training and development has not been given much emphasis as a critical aspect of knowledge management (KM) in the context of the ministry, the management team nevertheless sees KM in relation to other management ideas. To address this research gap, this study intends to examine the effects of training and development on knowledge management in a few South and North regions. This study's purpose is to discover how training and development affect knowledge management in these particular ministry regions. HRM is crucial to management and business globally since it can affect a broad range of organisational and human outcomes.

As a result, during the past few decades, HRM has become a prominent topic in management and business study. HRM is the effective and efficient involvement of employees to accomplish an organisation's strategic business goals, according to a number of researchers. It focuses on managing people in the workplace, represents the human element of business administration, and includes policies, procedures, rules, and systems that have an impact on employees within the organisation. It also entails the best possible use of human resources to accomplish organisational goals. The process of building, maintaining, and fostering relationships among people inside an organisation in order to achieve its core goals is known as human resource management, or HRM.

According to the definitions and discussions given, human resource management (HRM) includes a wide range of tasks pertaining to an organisation's human aspect. Human resource management (HRM) includes the systems, procedures, and policies that influence employee behaviour, attitudes, and performance; HR planning; recruiting; selection; training and development; incentivising employees to fulfil their roles and prepare them for the future; rewarding employees (compensation); performance management; and cultivating a positive work culture (employee relations).

The three primary dimensions of HRM practices are opportunity-enhancing HRM practices, motivation-boosting HRM procedures, and skill-enhancing HRM approaches. According to the researcher, employee empowerment is an HRM technique that enhances opportunities, performance appraisal and compensation/benefit practices are HRM practices that enhance motivation, and recruiting and selection are HRM practices that enhance skills (connected to ability).

The success of the ministry hinges on effective management of HR knowledge. By deploying the appropriate solutions, the ministry can easily catalog employee guidelines, welfare regulations, payroll information, recruitment methodologies, and much more. This organized method not only improves the organization's hiring and onboarding processes but also facilitates real-time updates of information. When the ministry adopts HRM, it is crucial to document and streamline procedures

for employees, managers, administrative staff, and HR teams.

Because a knowledge management system streamlines HR tasks by answering employee questions about policies like absenteeism, compensation, and KPIs, the ministry's HR professionals are more productive. By relieving HR of repetitive enquiries, this self-service platform increases productivity and frees up HR staff to focus on administrative duties. The ministry uses HR knowledge management, which enables staff members to look up answers to policy-related questions in a self-service database, in order to reduce the number of repetitive responses. By using documentation tools like Document369, users may use a useful search bar to get answers to commonly asked queries. This search bar is located on the homepage as well as throughout the repository's articles. Should users have further inquiries, they can enter relevant search terms to locate answers. There is also an option for advanced searches aimed at specific inquiries. The ministry includes filters like categories or tags to expedite the discovery of pertinent information. Consequently, this system saves time for both HR personnel and employees.

Below are the ministry's practices for enhancing knowledge management's function within HRM. Sustain a comprehensive knowledge management system by consistently updating information, ensuring employees are kept abreast of new or amended policies, nurturing trust, and bolstering loyalty. Furthermore, capture the expectations of team managers for every role to ensure that employees are aligned with their responsibilities. Additionally, as HR professionals, integrate the most up-to-date employee information into the knowledge management system for smooth transitions and continuity in workflow.

Theme/ Subtopic

The fifth major theme: Training and development of KM

Five sub-themes can be extracted from this main subject based on the interviewee's response.

(1) Evaluate oneself; (2) Evaluate one's situation; (3) Determine a new career objective; (4) Determine growth activities; and (5) Put into action.

Training is a developmental process in the ministry where employees acquire the knowledge, abilities, experiences, and attitudes they need to perform better on the job and achieve organisational goals. On the other hand, development is a continuous process that enables people to go from their present comprehension and ability level to a future state that requires more sophisticated abilities, competencies, and knowledge. Organisational training is a wide range of organised exercises designed to improve and alter workers' job-related abilities, knowledge, or attitudes in order to meet the objectives and aspirations of the business. Organisational training now serves a wider purpose of encouraging "learning" and the production and sharing of information rather than concentrating only on the technical skills required for particular activities.

According to this framework, ministry learning refers to the assimilation of knowledge by teams or individual employees who are willing to apply that knowledge in their roles, supporting the organisation's decision-making and task completion. In addition to the information that individuals or employee groups hold, the term "knowledge" also refers to the organisational policies, procedures, instruments, and practices. Knowledge may be tacit (personal insights derived from one's own experience that are difficult to express to others) or explicit (formalised, codified, and communicable). The following crucial competencies must exist for the organisational training initiative to successfully apply learning strategies:

Alignment of learning objectives with business aspirations; evaluation of the overall impact of the learning function on the business; extending learning beyond the organization to embrace customers, vendors, and suppliers; emphasis on cultivating competencies for the most vital positions; integration of learning with other HR functions like knowledge management, performance support, and talent management; training delivery methods that incorporate both classroom instruction and e-learning; and development and delivery of leadership training programs.

Enhanced job satisfaction and morale among employees, increased employee motivation, improved operational efficiencies that result in financial benefits, increased capacity to adopt new technologies and methodologies, increased innovation in strategies and offerings, decreased employee turnover, and improved corporate image are just a few of the many benefits that organisations can reap from properly executed employee training and development initiatives. A clear statement of the corporation's goals should be included in every training program, which pursues a variety of objectives. For example, training can focus on improving an employee's performance in their present position or preparing them for a new post.

As another possibility, training was employed to equip chosen employees to take on different roles and responsibilities at elevated tiers within the company's organizational framework. Training also facilitates the execution of job flexibility initiatives, and research has demonstrated that high-performing small businesses prioritize cross-training, especially concerning non-managerial positions that lack the specialization typically linked to managerial roles. Training and development within a ministry for an individual or a group of employees is triggered when performance evaluations reveal the need for improvement; this serves as a way to 'benchmark' the progress made thus far in an ongoing performance enhancement endeavor, integrates into a broader professional development strategy, aids in succession planning to prepare an employee for a forthcoming role change within the organization, tests the application of a new performance management system, and/or provides training on specific topics relevant to their job performance.

Another important justification for starting and maintaining a training and development program in the ministry is to promote employee loyalty, support their career advancement, and stimulate their desire to take on more responsibility and make a bigger contribution to the business. Given that many workers believe they are not receiving enough crucial coaching, mentoring, and training, both empirical and anecdotal evidence point to dissatisfaction with training and development programs as a major contributing cause to employee turnover. In any case, it is imperative that both trainers and trainees constantly work to accurately and concisely state the

knowledge and skills that need to be learnt. Furthermore, other positive outcomes of successful training programs, such as enhanced attitudes and work habits, are more challenging to quantify; however, they should indeed be recognized as key objectives for the training initiative.

The most important work skills

The ministry begins by recognising six key drivers of disruptive change: extreme longevity (i.e., "people are living longer"); the development of intelligent machines and systems that can augment and expand human potential while automating work-related tasks, thus eliminating repetitive jobs; the growth of the "computational realm"; a new media environment based on the development of cutting-edge communication tools that require media literacy beyond text; "superstructured" organisations that use social technologies and tools to support new forms of production and value generation on a grand scale; and the emergence of a "globally interconnected world" where Western countries are no longer the exclusive source of innovation, job creation, and political influence. These transformative drivers suggest that in order to succeed, employees should invest their time and energy in developing the following abilities:

In order to manage the emergence of intelligent machines and systems, interpretative understanding—the ability to discern the significance or underlying meaning of what is communicated—is necessary. The ability to perceive and inspire responses and desired interactions, to negotiate the advent of intelligent technologies and systems, to govern effectively in a globally networked society, and to connect with others in a genuine and authentic way are all examples of emotional intelligence.

Inventive and adaptable thought—proficiency in imaginative thinking and crafting solutions and reactions that extend beyond simple memorization or adherence to regulations to navigate the emergence of intelligent machines and systems. Cultural adeptness—the skill to function across diverse cultural environments to engage proficiently in a globally interconnected world and within superstructured organizations. Algorithmic reasoning—the capacity to transform extensive data into conceptual abstractions and grasp data-driven

reasoning to thrive in the new media landscape and the computational realm.

New media proficiency—the capability to critically evaluate and create content utilizing modern media forms and to harness these media for impactful communication in order to manage extreme longevity, new media surroundings, and superstructured entities.

Transdisciplinary skills—literacy in and ability to understand concepts across multiple disciplines in order to cope with extreme longevity and the computational world.

Design mindset—the ability to represent and develop tasks and work processes for desired outcomes in order to prosper in superstructured organizations and a computational world.

Cognitive load management—the ability to discriminate and filter information for importance and to understand how to maximize cognitive functions in order to cope with superstructured organizations, a computational world, and new media ecology.

Virtual collaboration—the ability to work productively, engagement of drive, and demonstrate presence as a member of a virtual team in order to survive and prosper in a globally connected world and in superstructured organizations.

The connection between training initiatives and organisational strategy

Major organisational characteristics in the ministry included the degree of integration of the company's units or businesses, global presence, business conditions, HRM practices (i.e., management activities related to investments, staffing performance management, training, and compensation and benefits), staffing strategy (i.e., decisions regarding recruitment and selection strategies and the mix of employee skills and statuses), HR planning (i.e., identification, analysis, forecasting, and planning of changes needed in the HR area to help the company meet changing business conditions), unionisation, and staff participation in training and development initiatives. For instance, staff involvement ensures that managers and employees will be more likely to participate and that training is more pertinent to entity needs.

Every organisation has, or should have, a strategy that integrates its goals, rules, and operations. The way the organisation values and uses its people as well as its financial, technological, and physical resources will be impacted by the strategy decisions made:

A list of potential strategic training and development programs and an overview of how they might impact the company, its managers, executives, employees, and clients is provided, despite the fact that it has been observed that strategy influences the execution, content, and support of employee training and development initiatives. Increase the diversity of the learning portfolio: Encourage casual learning, offer more individualised learning chances, and train using relatively new technology like the Internet. Boost the quantity of trainees: Educate suppliers and consumers and provide extra learning opportunities for non-managerial employees.

Employee learning can be accelerated by identifying needs quickly, offering a high-quality learning solution, cutting down on the time needed to build training programmes, and facilitating "as-needed" access to learning materials. Enhance Customer Service: Make sure staff members are knowledgeable about products and services, possess the abilities necessary to communicate with clients, and are aware of their responsibilities and decision-making power in the client relationship. Offer chances for growth and Inform Workers: Make sure staff members have access to and comprehend chances for professional and personal development and that training and development initiatives take into account their requirements in the workplace as well as their prospects for advancement. Gather and Disseminate Knowledge: Gather information and insights from knowledgeable staff members; rationally arrange and preserve the material; and offer ways to make it accessible to other employees (e.g., resource guides, websites, etc.). A training and development program's framework.

Thinking strategically about training and development initiatives necessitates considering the ministry's needs at three separate levels. First, an assessment must be conducted at the organisational level to ascertain whether training is necessary and, if so, what kind of training is needed. Second, the entity has to decide what the training curriculum's proper content should be at the operational level. Lastly, the business must determine which employees need training and what kind of training is appropriate and required for each employee on an individual basis. The following stages should be followed while building the framework for a training program:

The specific skill and knowledge requirements for the job or task should be identified, including the order in which each task is to be performed. Different types of training may be required for tasks that involve analytic, as opposed to motor, skills. The learning objectives and performance expectations should be defined based on the specific jobs or tasks involved. Instruments should be developed to test and evaluate the performance of participants and the effectiveness of the training program. Instructional strategies should be developed, including the instructional materials that are best suited to communicating the necessary knowledge and information.

Before the full launch of the program, tests should be run with smaller groups to determine if the content is appropriate and effective. Based on diagnostic results, necessary changes in the program can be made without substantial expense. Program evaluation should be conducted on a regular basis following launch through the use of interviews with participants, questionnaires, testing of participants to determine if the desired knowledge and skills have been transferred, and observation of the training activities.

The entity's primary role as the employer is to train employees to perform their daily job duties; management and each employee share responsibility for employee development, which focuses on meeting each employee's long-term growth and development needs; the entity's primary role is to provide the necessary resources and a supportive environment.

The institution should ideally be proactive in identifying and meeting training needs before urgent difficulties or concerns need to be addressed. To prevent obsolescence, HR should, for instance, regularly review each employee's individual training and educational background to find out where they might need to update their knowledge and abilities. Companies ought to think about incorporating personal growth and training into their performance review process. Following this, management and staff assess the worker's performance-based strengths, determine suitable career pathways for the future, and determine the training and development required to enable the worker to take on new tasks and responsibilities. One of the main responsibilities of managers in organisations that employ high-performance work practices is to promote ongoing learning. Managers should also actively assist the team in identifying training needs, developing their "on-the-job" training skills, and fostering a learning environment.

Managers and supervisors shouldn't be the only ones who invest in training and development. In fact, it has long been understood that in order to prevent becoming overwhelmed by the typical quick rate of change, all employees in technology-based sectors need ongoing training to achieve and maintain a minimal level of competence with regard to the pertinent technology. This is especially true given that new talents are typically needed every two or three years and that high-tech companies typically have a relatively short life cycle for new products.

Training programs that focus on leadership development (i.e., managing change, conflict resolution and management, positive communication skills, time management and delegation skills, conducting effective meetings, and tools for enhancing employee motivation) and supervisory skills (i.e., delegation, coaching and counselling, disciplining and documenting employees, interview skills, and conducting performance reviews) may be offered to personnel involved in leadership and supervisory activities as well as "up-and-coming" employees who have been identified as targets for managerial development. Corporate wellness training, employee orientation training, and employee wellness training are additional subjects that span various topics. A must have and knowledge

given the training resources available and the needs for carrying out the entity's business plan, an assessment should be carried out to determine which topics demand immediate attention.

A good individual development plan is one that is engaging, attainable, realistic, and practical, according to the technical managers, who also recommended that plans be made and carried out by following these five fundamental steps:

Perform a Self-Assessment: The employee must first determine his or her own unique set of skills, abilities, values, strengths, and limitations. Employees use online self-assessment tools; review previous performance evaluations; ask supervisors and other people who have actually observed them perform "on the job" for feedback; and compare their knowledge, skills, and abilities to those listed in their current job description and in job descriptions for other positions they might be interested in pursuing.

Perform a Position Assessment: After comparing skills and abilities to the current job description, the employee should evaluate the performance expectations and job requirements of their current position as well as any potential future changes to the organisation and/or those requirements and expectations. At this stage, the worker should concentrate on determining the knowledge, skills, and abilities that will improve his or her performance in the worker's current role. However, the worker should also think about how the position and its requirements may be affected by anticipated changes in the workplace (e.g., changes in clients, programmes, services, and technology).

Establish New Career Goals: The employee establishes priorities for his or her professional growth and chooses two or three personal objectives that will benefit both the company and the employee. This is done by using the data acquired from the position assessment and individual self-assessment processes, especially the information on anticipated changes. The worker determined the precise knowledge, skills, and abilities and established a timeline for completing each of these objectives something must be acquired or developed in order to fulfil each of the objectives.

Determine the Development Activities: The focus should shift to determining the most effective means of accomplishing the employee's most significant professional goals after they have been clearly defined and outlined, along with the timeline for doing so. The employee makes a preliminary

draft of his or her personal development plan, which contains developmental goals, and lists the resources that will be required (such as time, money, and help from others in the organisation), as well as the most effective learning techniques and other activities for the upcoming year; how an employee's personal objectives relate to those of the company; what knowledge, skills, and abilities need to be improved; what resources and developmental activities are needed; and due dates for each goal's completion.

Implementation: After completing a preliminary draft of their individual development plan, employees should present it to their supervisor and other relevant stakeholders within the company to get their feedback and approval. Following approval of the plan, the employee should start putting it into action, regularly assess its progress, and make any necessary modifications. In order to offer support and encouragement, it is crucial to elicit the involvement of the employee's supervisor and other relevant parties in the implementation process.

The effectiveness of employee training and development initiatives obviously depends on selecting the instructional and training methods that are most appropriate for the organization and the kinds of skills and competencies necessary for the business to be successful. Trainers choose from among a wide range of instructional and training methods, including lectures, demonstrations, discussions, case studies, role-playing, presentations, and exercises. Instructional aids include audio and video presentations, “pre-packaged” training programs, and online courses. Outside consultants, as well as instructors from local colleges and universities, were brought in to lead training programs, or the organization set up in-house training programs with permanent trainers on the payroll. Some elements of the instructional and training program were carried out while employees were actually performing their jobs. For example, on-the-job training techniques can include orientations, job instruction training, apprenticeships, internships, job rotation programs, and informal coaching and mentoring by others working closely with the employee.

Theoretical/ Conceptual framework

This study investigated three theories and models: the technology acceptance model (TAM), the theory of reasoned action (TRA), and the system integration theory (SIT). It was crucial to take into account every theory and how it applied to electronic resources within organizations. Understanding knowledge frameworks of prospective researchers in the digital space is crucial for enhancing archive services according to their perspectives. The central question is, what drives the intense focus on developing theories? We recognize that the goal of creating a theory is to clarify, foresee, and comprehend various phenomena, as well as to enhance the current theoretical understanding. A theoretical framework is an analytical instrument that provides a variety of possibilities and contexts for various kinds of work that require a holistic viewpoint. A good theoretical framework makes things easier to understand and mirrors reality. The theoretical framework describes the theory that explains the logic underlying the problem's inquiry, claim An and colleagues (2016a, 2016b).

Similar to that, a theoretical framework has been built for this study, which takes into consideration the previously published work in order to conduct a quantitative investigation and establish a trustworthy model based on the concepts. In order to do this, we have thoroughly examined prior behavioral intentions (Yzer, 2017). Fundamental control assumptions about opportunities, resources, prior experiences, and knowledge about other people's experiences are the foundation of perceived behavioral control. Behavior is determined by behavioral purpose, and when an instantaneous consequence happens, observed behavioral control assesses the direct and indirect impacts on behavior (Chang et al., 2009). Similar to that, a theoretical framework has been built for this study, which takes into consideration the previously published work in order to conduct a

quantitative investigation and establish a trustworthy model based on the concepts. In order to do this, we have thoroughly examined prior behavioral intentions (Yzer, 2017). Fundamental control assumptions about opportunities, resources, prior experiences, and knowledge about other people's experiences are the foundation of perceived behavioral control. Behavior is determined by behavioral purpose, and when an instantaneous consequence happens, observed behavioral control assesses the direct and indirect impacts on behavior (Chang et al., 2009). The TRA idea aids in the theoretical control of any model in order to accurately determine and depict the integration of its components. People can't always do what they desire, and TRA can't explain why (Bagozzi and Yi, 1988). Due to the fact that attitudes are one-dimensional structures that rely on the belief that produces particular results as well as the individual's rating of those results (Ajzen and Fishbein, 1980).

The conditions in which a person wants to connect with other important people are assessed using subjective standards that are based on how people perceive actions, such as those of friends, relatives, or coworkers (Ajzen and Fishbein, 1980). The sum of an individual's motives and views about all relevant circumstances is known as subjective norms. Similarly, the ideas of perceived behavioral control and self-efficacy are used to describe intentional conduct, representing a person's perception of how simple or complex a certain action is to perform (Ajzen, 1985). The technology adoption model (TAM) (Scherer et al., 2019) and the unified theory of adoption and application of technology as it advances (Venkatesh and Davis, 2000) are two examples of alternative models that have been built around the theory of reasoned action (TRA).

User pleasure has been acknowledged to have significantly increased as a result of interaction with communication technologies. More trust and technology utilization result from higher levels of satisfaction, which raises user satisfaction. On the other hand, the TAM displays elements that affect people's views and adoption of a specific technology (Ajzen, 1985; Ajzen & Fishbein, 1980; Venkatesh & Davis, 2000). Perceived practicability and perceived ease of use are terms used to describe these elements. Consequently, it encompasses all studies in the fields of information science and archives, including those that are outside the purview of archive science, such as digital archive

skills and electronic resources. Archivists have been drawn to adopt TAM in information centers due to its adaptability in a technologically driven culture. The TAM is also extremely important for the utilization of technology in different companies because of the advancement of communication technologies in a technology-centered era. Based on the factors that positively influence attitudes and intents and determine consciously approved conduct, the TAM is extensively employed in a variety of academic fields (An, 2015; An et al., 2016a, 2016b). Given that the attitude toward the system dictates and generates the actual behavior when utilized, it guarantees that usability and practicality are the most crucial factors in determining the provision of IT in the company (Atiquil Islam, 2016; An et al., 2014a).

According to the TAM, the introduction of IT into businesses has always depended heavily on its usefulness and ease of use in order to ascertain how it will behave in practice. Perceived utility was found to be a significant predictor of perceived ease of use when assessing user acceptability of IT (Islam et al., 2015; Atiquil Islam, 2016). The literature on TAM makes clear how crucial it is to take into account outside factors in order to explain how a user reacts to the system and how intended use, practical usage, and estimated use relate to usability. Following a thorough analysis of these models, we discovered that the TAM, with its flexibility and dynamism, accepts (Anderson, 1973), which assists management of archives in an entity of information resources. System integration combines various computer systems and software applications.

In order to work as a whole and guarantee the cooperative operation of subsystems as a system in IT, it is functionally connected. Because it calls for both a single component and variables that involve the aggregate of individual pieces over two dimensions (function and thread), a system integration theory is especially pertinent to information centers. The SIT explains how individuals combine data from several sources to form a final opinion. According to Anderson (1971), this theory is applicable to social judgments and attitudes that are founded on the principles of information integration. For quantitative analysis, the flexible algebraic-based assessment model is employed, in which each informative input is defined by two parameters: weight and scale value. By combining

new information with preexisting knowledge or concepts, the SIT investigates how attitudes are formed and altered. Icek Ajzen and Martin Fishbein created the TRA in 1975 based on this idea (SIT) (Carroll and Anderson, 1982).

This idea is advantageous and is supported by a growing number of pertinent organizations or, undoubtedly, a variety of advancements made with the help of people (such as databases, software, and applications for multi-social and educational parties). This theory holds that a person's attitude toward a particular action produces particular outcomes and that digital archives and electronic resources have theoretical significance for the practice's outcome (Carroll and Anderson, 1982; Blank et al., 2012; Hudson & Thai, 2013). People will plan to participate in a certain action if the impact appears to be beneficial to them. The belief, judgmental authority, and social norms that comprise normative belief and the drive to follow them comprise personal attitudes.

Additionally, it makes it easier to encourage reflection on the relationship between ICT principles and their uptake and use. When considering the application of particular enhancements, such as software, TRA offers additional relevance and applicability to individuals or groups. Every ICT encounter raises user pleasure to a certain degree and is thus acknowledged. More comfort encourages recurrent ICT use, which raises user pleasure. It enhances the real performance of digital technology abilities since individual actions are based on the perceived consequence of the task (Figure 2.5.1).The TRA provides a useful framework for analyzing model components in digital archives (Slocombe, 1999; Ajzen, 1985; Ajzen & Fishbein, 1980). It is often adopted to predict a wide range of behaviors and behavioral intentions related to subjective norms, human attitudes, and behavioral intentions. The table did not fit on the bottom of the previous page. Therefore, the entire table was moved to the next page.

Figure 2.5.1: Theory of reasoned



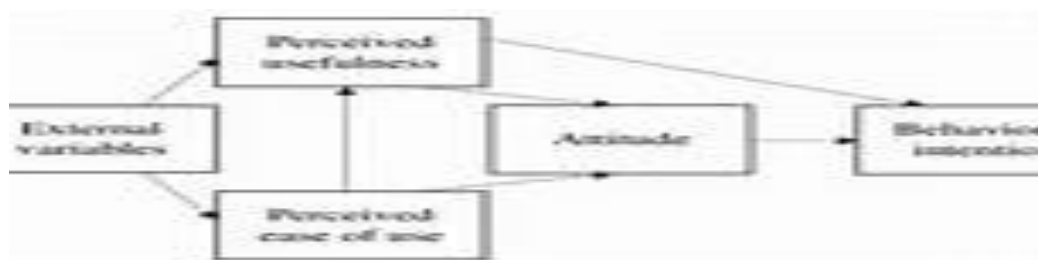
NOTE: Theory of Reasoned Action, 1975 Martin Fishbein and Icek Ajzen.

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Through the use of the TAM, the KMM facilitates information resource organizations' integration of digital resources into the technological revolution. After completing extensive literature reviews, consulting with academics, and working with professionals, we created a survey to examine the intricacy of integrating resources and putting knowledge management into practice in an organization's archive (Bai, 2015; Bustelo, 2015; Chen & Liang, 2010). We attempted to incorporate the various integration components into the TAM framework based on the assumptions in our resource integration study with the TAM (Figure 2.5.2). The TAM approach is user-friendly, adaptable, and entirely focused on technology. TAM further piques users' curiosity since they want to embrace the newest technologies.

Considering the TAM model, tacit knowledge was seen as a direct, significant external variable in the research that aids in forecasting and suggesting improvements to the internal variables. It is possible to transform an expert's implicit knowledge into explicit knowledge through social interactions like interviews, conversations, public debates, or personal friendships. It is helpful when socialization converts implicit knowledge into explicit knowledge. For the entire system to develop in quality, the unique expertise of project managers, IT specialists, and leading archive administrators is extremely valuable (Islam et al., 2015; Bai, 2015; An et al., 2014c). Furthermore, we linked our model's elements—like IT—to perceived usability, digital resources to perceived utility, and financial goals to attitude. Furthermore, we linked our model's elements—like IT—to perceived usability, digital resources to perceived utility, and financial goals to attitude. Furthermore, the TAM model's performance, which reflects actual use, was linked to digital resources' perceived usefulness. According to Dai (2010) and Espino & Alcazar (2015), knowledge management was viewed as an intention to use that ultimately affects performance, which symbolises the actual usage in TAM. Similarly, digital resources, IT, and financial plans were tied to KMM to integrate. In order to arrive at the intended integrated model, the gathered data was subjected to a thorough statistical analysis based on this theory.

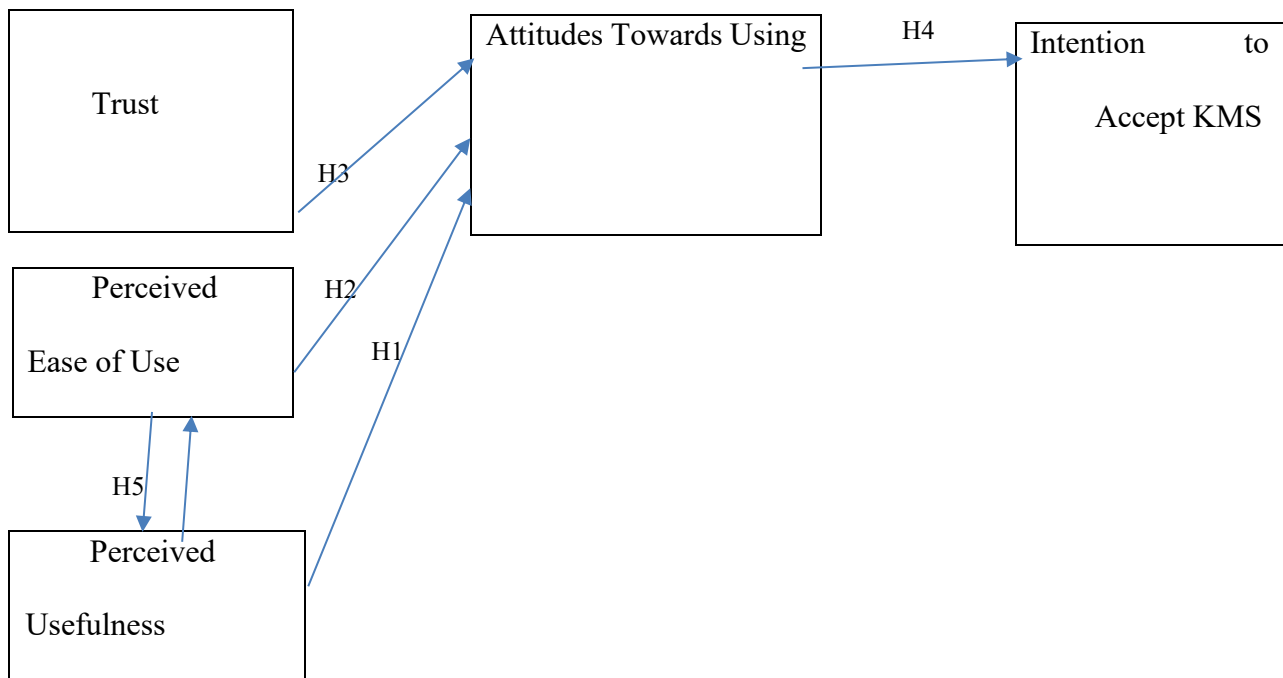
Figure 2.5.2: Davis tam model 1989



[Source for the purpose of the study]

Research conceptual model

Figure 2.5 3: Research model for this study



Note: Own Presentation

Research model and research hypotheses

The framework of research is depicted in Figure 4. It aligns with the distinct goal of this study to evaluate the connections between the two fundamental belief regarding users' attitude TAM constructs perceived easiness and perceived utility toward usage and their willingness to adopt KMS. This research framework is analogous to Davis' original TAM (Figure 3). This corresponds with the findings of Davis et al. (1989), who determined that the attitude toward usage serves at best as a partial mediator of an influence of perceived usefulness on the intention to embrace KMS and contributes minimally to explanatory power. The constructs of 'external variables' indicate that there is currently no intention to explore the precursors to actual ease of use.

Perceived utility is described as the advantage or worth of employing technology in conjunction with work output. In research on KMS acceptance, utility has been recognized as a factor influencing individuals' decisions regarding the use or non-use of the KMS (Wicaksono & Maharani, 2020). Earlier investigations that utilized TAM to clarify the usage of KMS present evidence that the more beneficial and user-friendly individuals regard a KMS, the higher their intention to adopt the KMS (King & Marks, 2008; Wicaksono & Maharani, 2020). Perceived utility pertains to the extent to which a person believes that interacting with a specific technology will be advantageous or enhance their work performance. Thus, it was posited that.

The research hypotheses are:

H1: Perceived usefulness exhibit a significant positive direct relationship with attitude towards using KMS.

Leadership shapes the caliber of knowledge content, which in turn impacts the perceived value of knowledge management systems (KMS) and affects how they are used for retrieval and sharing. Furthermore, the relationship between leadership and the use of KMS for sharing and retrieval is mediated by the perceived value of KMS and the calibre of the knowledge content. System quality, according to Wu & Wang (2006), is the degree to which the KMS performs its functional duties. All system operations have been optimised as a result of the importance of system quality in the context of KMS. Advanced storage and retrieval mechanisms can greatly improve organisational memory and the overall repository of KMS (Alavi & Leider, 2001; Jahmani et al., 2018; Seufert et al., 2020). A system architecture that supports faster and easier knowledge codification is necessary for efficient knowledge sharing and codification in KMS (Alavi & Leider, 2001; Davenport & Prusak, 1998). Organisational memory and the KMS repository as a whole can be greatly improved by sophisticated storage and retrieval systems (Alavi & Leider, 2001; Jahmani et al., 2018; Seufert et al., 2020).

Additionally, according to Goodman & Darr (1998), people may be encouraged to enter their knowledge into the system by the ease with which it may be stored and retrieved. Similarly, Al-Busaidi et al. (2010) found that encouraging knowledge-sharing behaviour requires a system that is of high quality, which is defined by its speed, integrated features, and ease of use. The benefits of information sharing have been shown to be essential in helping companies make quick decisions and react skilfully to changes in the market. A system that is thought to be user-friendly is probably of excellent quality. According to Wu and Wang (2006), a KMS with excellent system quality would reduce users' negative emotions, such as impatience, when they interacted with the system. Therefore, the following theory was put out.

H2: The effects of perceived ease of use have a significant positive direct relationship with attitude towards using KMS.

Accordingly, user happiness is greatly impacted by system quality, which is crucial for effectively supporting knowledge exchange inside Knowledge Management Systems (KMS) (Wu and Wang, 2006). Additionally, a number of studies—including Jennex and Olfman (2003), Halawi et al. (2007), Nattapol et al. (2010), Jahmani et al. (2018), and He (2018)—have found a favourable relationship between increased system quality and user happiness. The belief about how easy it is to learn and utilise the technology is known as perceived ease of use.

The provision of services that meet the requirements, expectations, and satisfaction levels of clients is referred to as service quality (Parasuraman et al., 1985; Jahmani et al., 2018). How well subject-matter experts and KMS administrators support KMS functions is referred to as service quality in the context of KMS (Jennex and Olfman, 2005; Al-Busaidi et al., 2010; Jahmani et al., 2018). In addition to incorporating knowledge capture and reuse into standard business procedures, this assistance includes providing users with direction and training on how to query and use knowledge. In order to emphasise the significance of service quality, Delone and McLean (2003) also proposed including it in the conceptual framework of KMS success.

Furthermore, in their analysis of information technology, Brady et al. (2012) discovered that service quality is crucial in promoting positive attitudes and user satisfaction. In conclusion, a number of prior studies have demonstrated positive correlations between service quality and user satisfaction levels. Based on the literature, the following hypothesis was put forth. Additionally, service quality has been identified as the most important factor contributing to user satisfaction with the system and the overall success of KMS initiatives (Al-Busaidi et al., 2010; Delone and McLean, 2004; Halawi et al., 2007; Kettinger & Lee, 2005; Nattapol et al., 2010; Tsai & Chen, 2007).

H3: Trust towards use the system exhibit a significant positive direct relationship with attitude towards using KMS.

Trust is a concept highlighted in the KM literature that facilitates the sharing of knowledge (Huotari & Livonen, 2004) and the mechanisms of transfer. Trust serves as a "silent cornerstone for relationships" and has been extensively examined within organizational frameworks and ethical agreements (Baumard, 1999). It is characterized both as a potential precursor and a result of knowledge acquisition, knowledge creation, knowledge sharing, knowledge transfer, knowledge absorption, and innovation (Dale, 2012; Huotari & Livonen, 2004; Joanne & Inder Jit Singh, 2010; Kharabsheh, 2007; Lin, 2011; Mayer et al., 1995; Parra et al., 2011). Specifically regarding AC, references can be made to Joanne and Inder Jit Singh, 2010; Kharabsheh, 2007; and Noblet et al., 2011. Moreover, trust is recognized as a precursor to knowledge sharing that, along with additional enablers, promotes knowledge sharing and transfer to gain a competitive edge (Joanne & Inder Jit Singh, 2010; Kharabsheh, 2007).

According to Thatcher et al. (2007), user trust in the context of information technology refers to the beliefs that people have about a specific system. According to Thatcher et al. (2007), users may decide to stop using a system if they lack confidence in it, leading them to believe that it is not as reliable or functional as they would like. Trust in KMS is similar to trust in IS, where high-performance, dependable, and consistent systems are essential markers of confidence (Malhotra,

2004; He, 2009; Lunden et al., 2017). One important factor that improves efficient information sharing and creates a collaborative environment is user trust (Adler, 2001; Tsai & Ghoshal, 1998).

Research by Levin & Cross (2004) indicates that user trust influences the perceived usefulness that individuals assign to the system. Additionally, it has been observed that KMS users feel more assured and at ease with using the system for their tasks when they trust that it will serve them well; such trust enhances their belief in the system's usefulness and value. Thus, trust is deemed a critical factor of user satisfaction.(Al-Busaidi et al., 2010; Nattapol et al., 2010; Lunden et al., 2017). For the system to serve its intended purpose, users and the system must have trust in one another ultimately leading to user satisfaction.

Malhotra et al. (2007) highlighted trust as a vital variable within workplaces, extensively discussed in previous studies (Han & Harms, 2012; Huotari & Livonen, 2004; Malhotra et al., 2007). Denton (2012) posits that trust is fundamental to all forms of relationships, including those in organizations, and is rooted in communication — the how, when, and what of that communication. Cognition-based trust offers an objective viewpoint linked with skills, capacities, obligations, trustworthiness, validity, reliability, and dependability. On the other hand, influence-based trust conveys more profound meanings associated with generosity, altruism, duty, mutual appreciation, and other factors (Huotari & Livonen, 2004) to accept KMS:

Promoting open exchange of information and knowledge and learning, enabling interactions between people and between organizations, reducing transaction costs.Facilitating economic activities and information technological solutions, and enabling work and collaboration both within and among organizations (p, 29).

Wittek (1999) suggests that the probability of knowledge dissemination is significantly greater when advisory connections are grounded in reciprocal trust (Sijtsema & Rispens, 2003). Mayer et al. (1995) characterized trust as the inclination to expose oneself to the actions of others

(Khalil et al., 2010). Furthermore, trust fosters enhanced and superior quality knowledge sharing, communication, and collaboration within organizations (Dirks & Ferrin, 2001; Huotari & Livonen, 2004; Levin & Cross, 2004; Lunden et al., 2017).

In this research, management support pertains to the actions undertaken by upper management to elucidate the objectives and vision of the knowledge management system (KMS) to users, as well as to motivate them to engage with the system directly (Gold et al., 2001). Numerous Research has shown that managerial support or leadership is important for knowledge management (KM) activities (Massey et al., 2002; Pan et al., 2001). Venkatesh and Bala (2008) argued that consumers will surely adopt a technology if they have a strong belief that organisational resources and technical and management assistance are available. Furthermore, a number of information systems (IS) experts agree that the success of IS deployment is largely dependent on top management support (Masrek et al., 2007; Lunden et al., 2017).

By creating a supportive environment for individuals immediately interacting with the system, top management support has been demonstrated to have a major impact on the success of executive ISs (Ragu-Nathan et al., 2004; Lunden et al., 2017). Furthermore, previous studies have demonstrated a strong relationship between user satisfaction with a particular system or technology and management support (Al-Busaidi et al., 2010; Jennex & Olfman, 2005; Vanhala, 2020). The relationship between user happiness and KMS success is also examined, in line with the body of research on the connection between management support and IS efforts.

In this research, KMS success is seen as the users' evaluation of the system's advantages (Halawi et al., 2007), while user satisfaction with KMS is defined as an overall assessment of the system (McGill et al., 2003). According to earlier research, the success rate of KMS is directly impacted by user satisfaction (Alavi & Leider, 2001; Jennex, 2005; Lunden et al., 2017).

Put simply, users who are pleased with the KMS they utilize will acknowledge the system's success in terms of the overall advantages it provides. The advantages linked to KMS success encompass effective knowledge management and storage, support for learning new information, the capability to accomplish user tasks, enhancements in the decision-making process, and improvements in users' quality of working life (Halawi et al., 2007; Jennex, 2005). Other research has identified a favorable relationship between user satisfaction and KM success (Halawi et al., 2007; Kwahk and Oh, 2009; Ragab and Arisha, 2013). Therefore, it may be concluded that there is a favourable correlation between KMS success and user pleasure.

Nevertheless, prior studies have also uncovered inverse relationships where KMS success can influence user satisfaction levels (Alavi & Leider, 2001; Jennex, 2005). In other words, users who recognize the advantages provided by KMS tend to be satisfied with the overall system (Wu & Wang, 2006). Based on the bidirectional relationship between user satisfaction and KMS success, we assert that KMS success is a broader concept that includes aspects such as information quality, system functionality, and the overall impact on the organization, while user satisfaction specifically concerns how content and fulfilled users feel regarding their interaction with the KMS, effectively serving as a key indicator of its success on a personal level. Consequently, the following hypothesis was established.

H4: Attitude towards using exhibit a significant positive relationship with intention to accept KMS.

In the era of the Fourth Industrial Revolution, advanced technology is proliferating across numerous sectors, including economics and everyday living (Schwab, 2015). While its integration into business paradigms is relatively seamless, various indicators suggest that human involvement may pose challenges (Agarwal, 2022; Pillai & Sivathanu, 2020). Despite the thorough research regarding the effectiveness of AI-driven software in human resources (cf. Kaur & Kaur, 2022; Tewari & Pant, 2020) and the abundance of appropriate tools (cf. Albert, 2019; Michel, 2022), its

actual deployment appears to be falling behind (Jansen et al., 2020; Seufert et al., 2020).

When novel technologies are created or rolled out, it's crucial to examine the human factor and their specific requirements (Nielsen, 1994). Psychology was one of the pioneering disciplines to explore the vast domain of technology acceptance, probing into the principles that underlie the acceptance of a technology for use (Marangunić & Granić, 2015). Consequently, various foundational frameworks in contemporary research, such as the Technology Acceptance Model (TAM; Davis, 1985), have been profoundly influenced by psychological theories.

It underscores the model's insufficient emphasis on attitude, asserting that in instances of intricate technology, in addition to attitude towards the system, attitude regarding the application of the system is significant for technology acceptance. Similarly, these systems can experience both direct and indirect usage. Direct use refers to the hands-on engagement with technology, while indirect use pertains to the outcomes arising from the technology's use. Accordingly, this thesis introduces the Attitude Towards Use Technology Acceptance Model (ATTU-TAM), incorporating Attitude Towards Use as a factor. This model is based on the foundational TAM (Venkatesh & Davis, 1996), serving as an expansion in the core framework of technology acceptance research where attitudes toward the system and its use are measured independently.

Moreover, both direct and indirect usage can be adjusted. The uptake of innovation within a company is guided by external influences (market rivalry and regulations) and internal drivers categorized into technological and organizational assets (Ghobakhloo et al., 2012). Research in technology deployment primarily focuses on two key aspects: first, analyzing the correlation between technology efficacy and the responsibilities it serves, and second, deciphering the elements that shape individuals' attitudes and beliefs towards technology (Lai, 2017).

It is beneficial to delve into the existing literature on technology adoption and pinpoint the most prevalent theoretical models (Gangwar et al., 2014). Existing approaches include the Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003), the Technology Organisation Environment (TOE; Tornatzky et al., 1990), the Task Technology Fit (TTF; Goodhue & Thompson, 1995), and the Technology Acceptance Model (TAM; Davis, 1985).

Human-computer interaction (HCI) concentrates on technology with an emphasis on the human factor, investigating how individuals engage with and utilize technology. It posits that success or failure can be influenced by usability, user experience, or user-centric design to construct technology that is intuitive to use (Nielsen, 1994). At the core of understanding HCI is technology acceptance, which denotes an individual's readiness to adopt and employ a particular technology, scrutinizing the interplay between attitudes, beliefs, and technology usage (Hornbæk & Hertzum, 2017; Papagiannidis, 2022). The Technology Acceptance Framework is the predominant model applied across various technology types, elucidating human behavior in relation to technology acceptance (Lee et al., 2003).

As posited by Fishbein and Ajzen (1975), one's attitude can sway behavior both positively and negatively, thus altering the probability of engaging in a specific action. Attitude denotes the extent of an individual's evaluative feelings towards the target action (Fishbein & Ajzen, 1975, p. 216). This notion holds significant importance within the realm of technology acceptance, as it can determine the triumph or downfall of technological implementations. Attitude consists of two primary facets: affective attitude, reflecting emotional responses towards a behavior, and cognitive attitude, which pertains to the cognitive assessments regarding the practical benefits and potential risks associated with a given action. The influence of these attitudes on a person's actions and behaviors can be referred to as the behavioral component.

Moreover, attitude can be categorized into explicit and implicit attitudes; while explicit attitudes are easily accessible through introspection, implicit attitudes represent unrecognized perceptions. (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1977; Greenwald & Banaji, 1995). Venkatesh and Davis (1996) argue that removing the ATT from TAM elucidates the impact of PEU on actual behavior. Any unaccounted influence between system features (PU, PEU) and the ATT is dismissed. Furthermore, the method for integrating additional variables that might alter belief pressures toward the system remains ambiguous (Venkatesh & Davis, 1996). With a favorable attitude, employees tend to show interest in their tasks and contributions. As a result, they produce work of higher quality with fewer errors, enhancing their overall output and productivity.

Conversely, previous investigations posit that attitude plays a supportive role in the foundational TAM (c.f. Angela Lee Siew et al., 2017; Djamasbi et al., 2009; Lau & Woods, 2008; Teo, 2008; Yang et al., 2021). Nonetheless, this varies based on the technology in use (c.f. López-Bonilla & López-Bonilla, 2011; Teo, 2009; Ursavas, 2013) and the understanding of attitude, advocating for the inclusion of both affective and cognitive attitudes (c.f. Kim et al., 2009; Yang & Yoo, 2004). Similarly, the relationship between implicit and explicit attitudes is evident. A positive workplace attitude enables employees to complete tasks more efficiently and effectively. The performance of employees is largely influenced by the healthy relationships they maintain with their co-workers.

Nonetheless, being part of an organization revolves around navigating a varied workforce (Ringle et al., 2015; Halimi et al., 2022; Kasri et al., 2023). Certain employees command respect effortlessly, often leading others and gaining their attention. This is achievable through the constructive demeanor exhibited by leaders (Ringle et al., 2015; Halimi et al., 2022). Strong relationships among staff foster the creation of efficient teams, where all members are aligned and strive for a shared goal. A constructive outlook encourages employees to value each other's strengths and collaborate as a cohesive unit to realize shared objectives rather than being unduly stressed by the shortcomings of teammates (Ringle et al., 2015; Halimi et al., 2022; Kasri et al., 2023).

Cultivating a constructive outlook is instrumental in inspiring employees to navigate challenges that they encounter in their roles (Tan et al., 2017; Ringle et al., 2015; Halimi et al., 2022). The inclusion of attitude constructs influences how employees perceive their surroundings. Once they manage to surmount difficulties, they feel encouraged to progress further. In this research, we assert that attitude is pivotal in exchanging knowledge and the implementation of knowledge management systems (KMS). Attitude reflects a person's thoughts or feelings about something and is often evident in their actions. Figure 4 below illustrates the research model for this study.

H5: The effects of perceived ease of use have significant and positively mediated by attitude towards using KMS with perceived usefulness.

The perceived simplicity of a technology, which is influenced by one's attitude towards its use, intertwines with perceived utility. This signifies that the connection between how accessible an individual perceives a technology ("perceived simplicity") and its perceived benefits ("perceived utility") is shaped by their general outlook on utilizing KMS (Seufert et al., 2020; Kumar, 2020; Michel, 2020). In essence, if an individual deems technology to be user-friendly, this favorable outlook will likely foster a more optimistic attitude towards its usage, subsequently boosting their assessment of its utility.

In light of this, a dual-level analysis was conducted. The initial level examined if employee attitudes act as a mediator in the connection between perceived utility, simplicity, and employee adaptation. The subsequent level explored both direct and mediated interactions between employees' perceived utility, simplicity, and adaptation, with employee attitudes serving as the mediating element to derive causal relationships among the variables examined (Seufert et al., 2020). This demonstrated that perceived utility positively and significantly influences attitudes towards utilizing KMS.

Conversely, research by Nofridasari (2019) indicated that perceived utility did not impact employees' willingness to use KMS. The perceived simplicity of technology-driven products plays a crucial role in heightening the interest in KMS utilization (Sagitarini & Sari, 2020). This construct of ease-of-use is also tied to decision-making; if someone is confident that the information system is user-friendly, they are likely to employ it, and the same holds true (Nofridasari, 2019). Perceived ease of use reflects a belief regarding the decision-making process associated with information technology usage—whether the technology facilitates the accomplishment of tasks or not (Isma et al., 2021).

Perceived ease of use indicates The extent to which a person confidence allows for straightforward understanding and use, ensuring that users do not feel overwhelmed upon the introduction of new technology (Maharani et al., 2021). Given the deficiencies in prior studies, a mediating variable is essential to bridge the relationship between perceived utility and perceived simplicity with attitudes towards using KMS. This mediating variable can be the attitude towards usage of KMS itself. Here, attitude pertains to employees' inclination towards engaging with a technology system (Driediger & Veera, 2019).

Attitudes towards usage denote the analysis of user approval or disapproval regarding the implementation of an information system in their tasks (Irawan & Hadi, 2021). The attitude towards usage signifies users' evaluations of their interest in adopting technology (Firdaus et al., 2022). This attitude is characterized as a user's emotional response, whether positive or negative, when faced with the necessity to undertake the desired actions, influenced by psychological factors, as indicated in the research (Fatmawati & Ali, 2021). Figure 4 below illustrates the research model pertinent to this study.

This study uncovers several noteworthy findings. To begin with, perceived utility in an era where technology pervades our lives and individuals are adept at navigating the latest applications and gadgets leads them to believe they possess a profound understanding of IT. However, merely

knowing how to operate a device—which buttons to press—is neither the sole requirement nor the most crucial expertise we need in our modern tech-saturated environment (Elmorshidy, 2017; James et al., 2017; Shujahat et al., 2017; Geisler & Wickramasinghe, 2015; Asrar-il-Haq et al., 2016). In reality, mastering the basics of technology may be the simpler aspect. The more complex and often overlooked issue is grasping how our lives are influenced, for better or worse, by how we and those in our vicinity engage with IT (Karlinsky & Zviran, 2015; Elmorshidy, 2017; James et al., 2017; Shujahat et al., 2017). This understanding—knowing how to critically consider IT—is vital for anyone wishing to thrive or even persist in the high-tech landscape of the 21st century. This assessment of findings proposes a series of foundational principles for contemplating IT and their practical implications for selecting and utilizing IT artifact's.

KMS developers can acquire valuable insights for creating adaptive knowledge management systems, as the research revealed a positive correlation among perceived usefulness and KMS utilization impact. For the knowledge management realm, this research advocates for optimal ways that KMS can facilitate the extraction, use, and sharing of knowledge by end-users, contributing to innovation and success (Karlinsky Shichor & Zviran, 2016, 2015; Elmorshidy, 2017; James et al., 2017; Shujahat et al., 2017). Recently, Karlinsky-Shichor & Zviran (2016) characterized it as familiarity, awareness, or understanding of someone or something—including facts, details, descriptions, or abilities—obtained by education or experiences derived from seeing, studying, or discovering. As indicated by the reviewed literature, several authors, including Shujahat et al. (2017), Geisler & Wickramasinghe, 2015; Asrar-il-Haq et al. (2016), have addressed the emergence and key factors prompting organizations' heightened interest in applying KMS. Interestingly, these authors highlight similar factors (Asrar-il-Haq et al., 2016; Dalkir, 2011).

A primary responsibility of system administration is to monitor reports to ensure high-quality knowledge within the system. Knowledge quality is regarded as a crucial indicator of an effective KMS (Jennex & Olfman, 2006; Karlinsky-Shichor & Zviran, 2016; Wang & Yang, 2016),

as the knowledge within the repository must be relevant, accurate, and reliable to encourage user engagement with the system. Otherwise, users may face time-consuming and inefficient knowledge retrieval when utilizing the system.

There is a significant association between knowledge quality and user contentment. This discovery indicates that the level of expertise within an organization's KMS positively influences user satisfaction. Specifically, high knowledge quality will offer reliable and additional dependable information sources for KMS users in this study, resulting in their satisfaction with its use. Furthermore, the analysis aligns with findings from prior research (DeLone & McLean, 2003; Jennex & Olfman, 2003; Kulkarni et al., 2007). Hence, it is imperative for the organization's management team must put tactics like formal review procedures and knowledge refinement into practice in order to guarantee that the knowledge quality in their management system is reliable and helpful to their employees.

In In this study, we found that user happiness is positively impacted by the system quality within the ministry's KMS. This data shows that users' pleasure with the KMS will suffer from poor quality, which can be caused by antiquated technologies, complex user interfaces, unreliable functionality, etc. Furthermore, the results of this study are consistent with previous research showing that user satisfaction is strongly influenced by system quality (Jennex & Olfman, 2003; Halawi et al., 2007; Nattapol et al., 2010). In order to decrease errors and increase user productivity—both of which will contribute to system satisfaction—the ministry must concentrate on improving the system quality for their KMS. This can be achieved by combining their database, making sure that the system is integrated, using modern computers, offering high-speed broadband, and utilising faster business servers. This is crucial because reliable system quality significantly influences KMS processes regarding user-friendliness, response times, and accuracy of codified organizational information, thereby positively impacting overall organizational performance (King & Marks, 2008; Karlinsky-Shichor & Zviran, 2016; Wang & Yang, 2016).

The quality of service provided by the ministry's Knowledge Management System (KMS) was found to significantly enhance user satisfaction. This notable correlation indicates that service quality is a vital component, reflecting the experiences of the end users (employees of the ministry) with the system. Consequently, it emphasizes that these end users are consumers who require a system that offers sufficient technical support and prompt resolution of issues. It is posited that a system addressing user needs will enhance their satisfaction (Kettinger & Lee, 2005; Karlinsky-Shichor & Zviran, 2016; Wang & Yang, 2016). Additionally, various studies on KMS have corroborated the connection among service quality and user satisfaction (Al-Busaidi et al., 2010; DeLone & McLean, 2004; Halawi et al., 2007; Nattapol et al., 2010; Karlinsky-Shichor & Zviran, 2016; Wang & Yang, 2016). Considering the significance of service quality for the KMS, it is advised that the ministry allocate adequate resources to establish a support team dedicated to assisting ministry employees with technical difficulties. This initiative will undoubtedly encourage the use of the KMS, enabling employees to excel in their tasks. Furthermore, integrating 'Help' and 'Frequently Asked Questions' sections into the system would also greatly benefit the workforce overall.

Moreover, the social dimensions in this study mirror the outcomes of the technical dimensions, revealing similar findings that both support from management and user trust significantly contribute to user satisfaction with the ministry's KMS in government ministries. Specifically, the level of trust between employees in the ministry's KMS positively influences their satisfaction with the system's usage. This situation clearly indicates that user trust in the KMS encourages its adoption, resulting in increased satisfaction. It has also been noted that trust from users is crucial for KMS deployment and can facilitate knowledge utilization (Chua & Lam, 2005; Karlinsky-Shichor & Zviran, 2016; Wang & Yang, 2016). This highlights the essential role of user trust in the KMS within government ministries. In light of this, It's imperative for the management team to establish an efficient knowledge base operation to foster trust among employees in the system, ultimately enhancing their satisfaction levels (Nattapol et al., 2010; Karlinsky-Shichor &

Zviran, 2016; Wang & Yang, 2016). Knowledge supervisors should exert extra effort to influence or shape user perceptions of trust, as it is subjective. For instance, managers can build user trust in the KMS by emphasizing reliable and credible features within the KMS infrastructure.

In order to assist management findings from the study confirm that the assistance provided by the ministry's management positively impacts user contentment with the KMS. This suggests that management support facilitates KMS adoption among ministry employees and boosts their overall satisfaction with the system. Additionally, managerial assistance within the context of KMS is deemed significant, as it can foster positive user experiences and attitudes towards the entire system (Al-Busaidi & Olfman, 2005; Kulkarni et al., 2007; Karlinsky-Shichor & Zviran, 2016; Wang & Yang, 2016). Given this, the management team must provide adequate support, both financial and non-financial, through guidance, emotional backing, teamwork promotion, and incentive implementation. For example, it is advisable for the ministry's management team to consistently consider and respond to user feedback to demonstrate that they value their employees' input. Such an approach is crucial, as it enables the management team to develop operational strategies while simultaneously enhancing the KMS as it stands now to motivate users to engage with the system, thereby elevating their satisfaction levels.

Furthermore, the results from this study have shown that user satisfaction significantly impacts the efficacy of KMS and vice versa, as suggested by DeLone & McLean's (2003) research. This result supports the idea that content consumers believe the KMS they use is beneficial to their work and successful in its operations. Moreover, the findings also indicated that the advantages produced by KMS in government ministries directly affect users' satisfaction. Other previous studies that have observed similar outcomes comprise (Jennex & Olfman, 2003; McGill et al., 2003; Jennex, 2005; Halawi et al., 2007; and Nattapol et al., 2010). These noteworthy interconnections suggest that KM managers should place a high priority on user satisfaction. Increased user happiness would improve how they view the system's advantages. On the other hand, it can also be suggested that users' satisfaction could be boosted by emphasizing the advantages that a KMS provides to the end

users as well. A highly advantageous and efficient KMS that meets user needs would positively influence their perceptions of the system's usage. Consequently, it is essential for organizations to deploy an effective KMS that supports users in their productivity and work tasks, which in turn would profoundly impact their level of satisfaction.

User attitudes were assessed, and ultimately, the pathway from user attitude to user adaptation was also reviewed. When employing TAM for this research, ATT is seldom included, though the comprehensive effect sizes support the variable (cf. Chap. Clarifying Effect Sizes). A comparative model analysis of various frameworks, including ATT versus TAM (excluding ATT), demonstrates that those comprising the variable tend to perform better, typically influencing BI (cf. chap. A Model Comparison). Particularly within the realm of highly intricate technology, attitudes are essential. They reflect the system attributes (e.g., computer playfulness) and system usage (e.g., fairness; cf. Chap. The Impact of Highly Complex Technology). A detailed examination of literature concerning KMS acceptance in HR illustrates that several variables associated with attitude hold particular significance. Trust, recognition, equity, and perceived risks, along with various barriers and catalysts for technology acceptance, are all relevant. Some of these aspects are complex (e.g., trust), while others are perceived in relation to the system (e.g., bias burden). Furthermore, KMS-based HR tools can experience both active (HR) and passive utilization (non-HR). (cf. Chap. The Acceptance of KMS in HR).

Based on these insights, this thesis infers. When individuals assess their technology acceptance regarding a highly intricate technology, they consider various factors about the system itself, including its usefulness and user-friendliness, alongside several variables linked to attitudes, reflecting both emotions and cognitions. These factors are complex concerning the system itself as well as its application. It is acknowledged that attitudes towards technology can shape behavioral intentions, even if they don't directly affect the usability or usefulness of a system. Even when a system is deemed useful and user-friendly, concerns regarding its application can influence the intention to use. It's not just the system's perception that matters, but also how we use it. Furthermore,

highly complex technology entails both active and passive usage. Active use refers to engaging with the system, while passive use pertains to the effects stemming from system usage; these aspects entail distinct perceptions concerning attitudes. However, this concept should not be viewed as a simplistic model but as a continuum. Therefore, an active user may also concurrently engage in passive usage.

The Attitude-Technology Acceptance Model (ATT-TAM) marks a substantial advancement in the fundamental framework of technology acceptance research and innovation, distinctly differentiating between perceptions of the system and views on utilizing that system. This innovative distinction enables the assessment of both elements, offering a valuable concept and clarifying the notion of attitude within the TAM, especially in relation to intricate systems. Additionally, the model supports the modulation of both active and passive technology engagement, thereby facilitating a comparison and analysis between these distinct forms of usage. As a result, the ATT-TAM addresses the broader limitations encountered in the TAM, rectifies misunderstandings concerning attitudes toward the TAM's implementation and evolution, and enhances comprehension of the implications of advanced complex technologies.

This recognizes research findings that highlight the crucial importance of attitudes in technology acceptance. Furthermore, ATT can be examined in relation to external influences. Moreover, evidence is deemed necessary to support the assertion that the explanatory power of attitude is most significant in influencing behavioral intention (BI). Furthermore, evidence is required to substantiate the claim that the explanatory capacity of attitude is paramount in affecting behavioral intention (BI). In conclusion, the ATT-TAM tackles essential aspects of the TAM discourse by clarifying misconceptions surrounding attitudes and emphasizing the repercussions of technology utilization. In relation to system attitudes, barriers and facilitators in the context of attitudes affect technology acceptance (Laurim et al. System attitudes, along with barriers and facilitators, influence technology acceptance (Laurim et al.). , 2021). This aligns with the perspective of the technology readiness concept. According to Parasuraman, trust (TR) is a trait-like factor that encapsulates individuals' general stance towards new technologies, influenced by their levels of

optimism, inventiveness, discomfort, and insecurity, and can serve as a precursor to attitude (Blut & Wang, 2020; Venkatesh et al. Parasuraman posits that trust (TR) is a trait-like characteristic that embodies individuals' overall disposition towards emerging technologies, shaped by their degrees of optimism, creativity, discomfort, and insecurity, and may act as a precursor to attitude (Blut & Wang, 2020; Venkatesh et al.). Parasuraman posits that trust (TR) is a trait-like characteristic that embodies individuals' overall disposition towards emerging technologies, shaped by their degrees of optimism, creativity, discomfort, and insecurity, and may act as a precursor to attitude (Blut & Wang, 2020; Venkatesh et al., 2012).

Concerning attitude towards use and its influencing elements, two specific nuances emerge. Given that the system is characterized by active and passive engagement, which yield varying impacts on users, the perception through the two modalities may differ. It's significant to acknowledge that attitude can be assessed as explicit and implicit (Greenwald & Banaji, 1995). Implicit attitude refers to an inaccessible perception that diverges from explicit attitudes and should function similarly to ATT (Hofmann et al., 2005; Karlinisky Shichor & Zviran, 2016; Wang & Yang, 2016).

However, a substantial limitation of this investigation lies in its study environment. This study is confined to a government ministry solely in Lesotho. It brings forth the concern of generalization, implying that the outcomes of this study may not extend to other sectors operating under different conditions. Future investigations should encompass additional sectors where knowledge management systems (KMS) play a vital role in organizational activities. Additionally, upcoming research could scrutinize certain KMS kinds and their corresponding success factors.

In conclusion, it's clear that constructing a dependable Knowledge Management System (KMS) has proven to be a significant asset in boosting user satisfaction while simultaneously maintaining a competitive edge for any organizations that have embraced the system. Hence, the endeavor of creating and keeping up an effective KMS has evolved into a pivotal component of the

organization's strategic framework. Although the technical elements are vital in elucidating user contentment and the system's triumph, the interpersonal aspect cannot be overlooked, particularly since both elements wield considerable influence on the effectiveness of a KMS implementation within the organization and the research landscape.

The development of research hypotheses based on the conceptual model came after the study's theoretical framework. Creating precise, changeable hypotheses is arguably the most challenging and fascinating part of research. Researchers might limit the formulation of a causal relationship in a given context for review-based research by making predictions based on a credible hypothesis on statistical analysis (Minur, 2015; Lister, 2017; Senthil & Sarawanakumar, 2016). In accordance with systematic research, both models, which were developed on the basis of related models and literature, attempt to test the model for statistical reasons.

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knowledge, which advances a person's experience, interaction skills, and social practice—all of which are challenging without social engagement (Ganguly et al., 2019; Islam et al., 2015; Li & Bernoff, 2008; Anderson, 2007).

As a result, tacit knowledge was considered an external variable in this research model that facilitates resource integration as well as the adoption and deployment of the newest technology across various organisations. We think that the basis for any organisation's efficient operation is knowledge. In order to improve an individual's experience, interaction skills, and social practice—all of which are challenging without social engagement—tacit knowledge starts with socialisation (Hayat & Amichai-Hamburger, 2017; Ganguly et al., 2019; Filges et al., 2019).

The integration of resources for organisational reform and authorisation is enhanced by implicit knowledge derived from the socialisation of senior managers, project specialists, and IT professionals. In order to improve organisational performance, it assists in focusing reviews on areas that are good and represent human behaviour, attitudes, perspectives, commitments, and motivation (Pathirage et al., 2007; Islam et al., 2015). It is a capability element that may be utilised to deploy technology for the organisation of digital sources in digital archives, as well as to increase and control human resources and training costs. Apart from decision-making, tacit understanding allows for the management of time, penalties, and competition—all of which can be managed differently than explicit understanding. The spread of tacit knowledge is better supported by a variety of strategies, such as direct interaction, hands-on training, networking, and personal social connection (Haldin-Herrgard, 2000; Islam et al., 2015).

While explicit information can be acquired directly within the organisation, implicit knowledge is a resource that is kept for the person. It is crucial to the growth of information exchange in archives. It is challenging to communicate implicit knowledge acquired via training through firsthand experiences, which might be helpful for socialisation and integration (Agarwal and Islam, 2015). Considering the growing significance of tacit knowledge in information centres and the examined

literature.

A digital archive is made up of various electronic resources that are gathered, arranged, and shared by trained staff members using technology. Explicit knowledge and digital archives are thought to be technology-based platforms that let researchers receive services in an efficient manner (An et al., 2010, 2015). Technology is a crucial strategic component for the efficient execution of the project, resource allocation, and transfer of knowledge in archives. IT is the locomotive of many institutions, including archives, which invest in service innovations. Technology and explicit knowledge are interconnected in the latest system deployment and contribute to the knowledge-based economy (An et al., 2013; An, 2015).

Furthermore, for statistical reasons, the third hypothesis also looks at how digital resources affect knowledge management, performance, and financial planning/budgeting. The proliferation of global literature and the development of communication technologies have made it necessary to subscribe to database resources from multiple publishers in order to further academic study. Consequently, the ministry budget and the ability of policymakers were called into doubt by these computerised tools. Additionally, earlier studies demonstrated that database resources significantly influence researchers at higher education institutions' ability to generate new ideas and improve their learning performance (An et al., 2010; An, 2015). When there are no electronic resources available, an archive's knowledge model, acquisition, organisation, preservation, and dissemination—including learning services—is meaningless. Because of electronic resources, knowledge models continue to be environmentally friendly, allowing users and researchers to access resources and enhance performance both on and off campus. Transparent investment and budgeting in the learning area are necessary to promote employee-learning engagement and the learning performance of advanced research.

The digital revolution highlighted that learning about archives invests a significant portion of their money in purchasing printed materials and primarily uses database resources and technologies (Pandita and Singh, 2016). According to Devi et al. (2013), effective budgeting and carefully thought-out financial parameters enhance project execution, technology delivery, service orientation, performance, and user happiness. Knowledge management, as previously said, is a technologically advanced system that depends on technology for the collection, organisation, preservation, and sharing of knowledge. Therefore, researchers can conduct scientific studies with scientifically organised resources more easily thanks to integrated KMMs. Strict regulations and system-wide financial transactions offer risk management over how available resources are used.

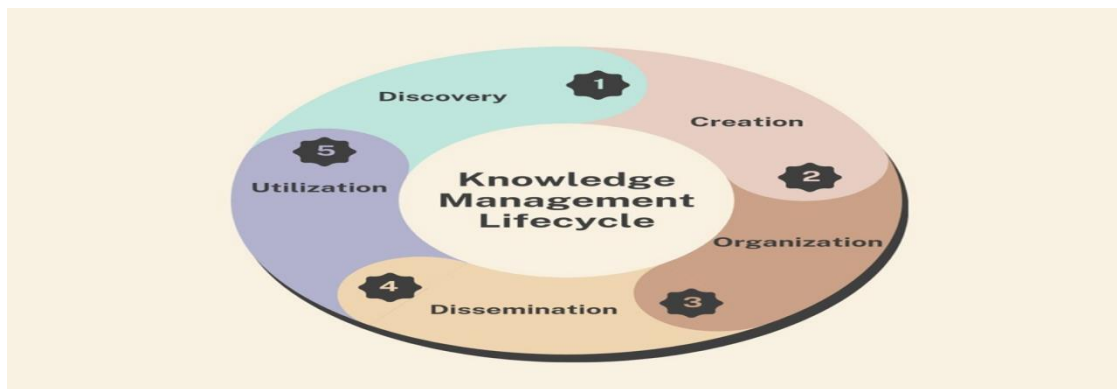
Investing in modern archives entails adding technology, training employees to be more productive, subscribing to new databases, and helping readers with sophisticated searches. Without an efficient budget policy, technology implementation, resource procurement, and staff training, all of the model's integration process components are worthless for enhanced academic services and performance (Lendzion, 2015; Al-Hawary, 2015; Garfield, 2021). The growth of academic activities, resource use, and the creation of a research culture are all guaranteed by a permanent guideline that is founded on collaboration with university and library administration. Knowledge has a significant impact on the effectiveness of the organisation and influences its processes in a number of ways. Through resource integration, the KMM aids in achieving organisational performance and goals in terms of productivity (Garfield, 2019). An effective KMM enhances employees' performance and services at organisations, according to a literary argument.

A KM model is a structured way to look at the process of KM used by the ministry in order to investigate its properties and tailor it to the ministry's specific needs. All models basically have four parts: information capturing, storage, customization, and use. Each organization has its own unique knowledge management strategy (KM) and modeling. Knowledge itself is the ability to apply the tacit and explicit information in problem-solving, decision-making, or effecting an improvement

within the core values of an organization. Some models, like the Nonaka Model, elaborate more on the “use” and “creation” parts, while the Zack Model concentrates more on the refinement of the information.

At first, the information captured needs to be processed to distill only the business-critical knowledge, also called strategic knowledge, which has to be verified and validated by key stakeholders. This information stored in usable formats has to be distributed to the user to solve problems, for example. This process of converting information into knowledge that can be used is called the Knowledge Management Cycle. Below is a figure of knowledge management lifecycle models.

Figure 2.5.4 : Knowledge management lifecycle models



[Source for the purpose of the Study]

Here are some common stages in the KM lifecycle:

Discovery: Identify knowledge that is worth preserving, as well as areas for knowledge creation. **Creation:** Generate new knowledge through research, development, brainstorming, or other means. **Capture:** Represent new knowledge in a reasonable way. **Organization:** Structure data **Dissemination:** Share knowledge, and **Utilization:** Apply knowledge in organizational processes and routines (Evans, 2014; Laskovic, 2024).

Summary

Our goal in this study is to present a thorough theoretical evaluation and analysis of knowledge management. We started by summarising and examining the conceptual underpinnings. The second is KM's theoretical concepts, which encompass stages and conception. Next, we looked at some important KM system design strategies from a variety of angles, such as information exchange, knowledge representation and organisation, and KM performance monitoring. Most people consider knowledge management to be a process that includes various activities, including the creation, application, storage, dissemination, and use of the knowledge in an organization.

However, to achieve this, the organization should actively involve the collaboration of various activities through the effective application of KMS to improve knowledge management activities. Despite the challenges associated with using KMS in an organization, the report shows that it can lead to greater breadth and depth of knowledge generation, application, storage, and dissemination in the organization. This will lead to greater utilization of available knowledge, ultimately improving decision-making, organizational efficiency, and productivity. Creating new knowledge is an important goal for most organizations. However it is not easy to accomplish. using the other types of knowledge flows—connection, connection, boundary crossing, and discovery—and adding explicit processes for using these flows to create knowledge, innovation can best The dimensions of KM are defined by previous authors as follows:

Knowledge creation refers to the degree that people engage in activities that create new knowledge (Ahmadi et al., 2012). Knowledge acquisition refers to the extent to which individuals engage in activities that capture their knowledge (Ahmadi et al., 2012). Knowledge sharing is the extent to which individuals engage in activities that share their knowledge with others (Ahmadi et al., 2012). Knowledge storage is the identification and codification of existing knowledge and know-how in organizational memory (Shongwe, 2016). Knowledge application refers to the extent to which individuals perform activities by applying the knowledge they use to complete their jobs (Ahmadi et al., 2012).

The aim of this research was to find out whether there are effects of the knowledge management system and training and development on KM in selected ministries in the northern and southern regions. According to the study's findings, training and development in selected services in the Northern and Southern regions had a significant positive impact on knowledge transfer. These results help fill this empirical research gap by considering training and development that predict KM. Ultimately, the theoretical implication of the study contributes to the body of knowledge by filling the gaps in the management literature and corroborating the findings of previous research, while the study generates significant insights and stimulates creative ideas.

The outcomes of this research also provided several crucial implications for managers and decision makers of selected ministries to create an effective KMS and design training and development. HRM practices should be carefully designed to create an effective KM system in the ministry. The ministry should provide knowledge workers with free time to work on knowledge-building projects, attend conferences, or engage in interesting projects, and provide appropriate increase the level of knowledge and expertise of employees.

Chapter 3: Research methods

Introduction

The strategies or techniques utilized to gather, select, enhance, and analyze data are known as the methodology of the research. Assess data on a particular topic. A research's methodology segment allows the audience to inspect in detail the approach of the research. Assess the overall credibility and dependability of the research.

Statement of the problem

The investigator acknowledges that this research is confined to the development of a conceptual framework aimed at integrating national archival resources at the highest echelons. Future empirical investigations will be conducted to authenticate the efficiency and possible implementation of such a framework. Specific metrics and indicators will be formulated to gauge the significance of this framework in practical scenarios. Conversely, the corporation automates knowledge management, relying on subordinates to disseminate information via traditional means (Alavi & Leidner, 2001; Mohammad et al., 2024; Ewrierhurhoma et al., 2020). Hence, further emphasis on flawed techniques or attempting to pursue both simultaneously can quickly undermine their ministry.

In identifying key factors that impact the adoption and utilization of modern technology, individuals play a vital role in creating frameworks, enforcing support, and maintaining behaviors (Drucker, 2014; Nocera et al., 2007). Their findings highlight that despite the necessity for awareness regarding technological advancement, only a few organizations achieve widespread adoption of ICT tools, which challenges the attributes of institutional culture. Iansiti and Lakhani (2017) considered how educational institutions may substantially contribute to accelerating technology proliferation, largely based on understanding processes. Nevertheless, Scomavacca and Za (2015) argued that cultural metrics and organizations are insufficient for employing competitive advantage strategies concerning technology. The application of designed technological propositions

is more likely to stimulate and facilitate knowledge acquisition processes when adopting pervasive technology (Lakhani and Iansiti, 2014). Heppermana and Porter (2014) indicated how a researcher uncovers integrated outcomes of capabilities aimed at optimizing, monitoring, automating, and controlling transformative technology that empowers knowledge management resources.

Kirby and Davenport (2016) illustrated how professional skills are augmented and gradually supported through complex retrieval methods. For instance, McKinsey's projections of the potential economic impact of automation by 2025 suggest that the value of knowledge labor could reach five to seven trillion dollars (Manyika et al., 2013), presenting challenges for organizations to implement knowledge management and adapt their systems for institutional knowledge processes. Consequently, technology knowledge groups or technology transformation teams adopt various perspectives and pursue distinct objectives (North et al., 2018). They focus on product processes, transformation, business models, and the institutional aspects of owning new technology from a corporate viewpoint (North et al., 2018; Manyika et al., 2013). Knowledge management emphasizes collections from a human-centric perspective, recorded knowledge that extends to include interactions among employees (Pawlowski et al., 2014; Kaschg et al., 2016) while also nurturing social relationships supported by relevant technology, termed community knowledge contexts (North et al., 2018; Pawlowski et al., 2014). This investigation examines the role of knowledge management as a mediator in the relations among institutional culture, organizational effectiveness, and strategies.

This study presents comprehensive methods for handover processes, incorporating aspects that include social-psychological motivations, socio-demographic characteristics, and economic elements. Consequently, it is crucial for senior leaders to appreciate the importance of knowledge sharing among employees, and how the execution of their knowledge management frameworks and practices may also influence organizational effectiveness (Morten et al., 2013; Drucker, 2014; Aiello et al., 2014; Shields & Twycross, 2008; Schagen, 2000). The education conducted within an organization and the perspectives of staff regarding social networks and online community

guidelines during their long-term sustainability within the organization are significant. Van Dyk and Erasmus (1999) alongside Noel et al. (2010) emphasize that the primary focus of training should be to enhance the performance of subordinates in their current roles. Training can be defined as the organized activities of a group of individuals within entities, aimed at preventing subordinates from learning about task-related matters. The skills and competencies encompass abilities, established skills, or behavioral patterns that are necessary for successful job performance (Filipezak, 1996; Gordon & Zemke, 2000; Noe et al., 2010).

Managers should elevate the standards on performance-effort expectations by aiding subordinates in pursuing their specific goals of engaging with social networks and online communities. Specifically, managers need to provide guidance for instructing subordinates on performance. This is essential. Motivated employees are those who are eager to work diligently and wholeheartedly achieve their institutional objectives. Numerous theoretical frameworks exist to comprehend employee performance and work behaviors. Management must also take into account the background of employees, as they will consistently become significant future members of the workforce (Canning & Harackiewicz, 2015; Alberecht, 2016; Weinstein & Acee, 2010). The developmental interventions are within side destiny aligned and help within side the improvement of team of workers' competencies, in an effort to permit the development of jobs that, in all likelihood, now no longer (Kaplan & Hartwell, 2014; Noel et al., 2010, 2002; Hashim, 2008).

Purpose of the study, research aims, and objectives

The goal of this analysis is to explore the prospective integration of social media and online communities within a comprehensive framework for knowledge management within the ministry. Furthermore, it seeks to identify and evaluate the significant institutional elements and their connections that influence knowledge management, while also contributing to the domain of information management to reconcile the gap between evolving practices and theoretical frameworks. The principles and strategies regarding knowledge management are articulated.

This examination provides a synopsis of knowledge management (KM) and how it influences organisational processes, which can be made easier by using KM systems. Additionally, the study emphasizes various types of KMS commonly employed by organizations. It investigates different facets of knowledge management systems and their influence on the generation, preservation, and transfer of knowledge within an organization (Ibrahim & Cln, 2023; Evwierhurhoma et al., 2020; Mohammad et al., 2016). A practical demonstration of KMS regarding knowledge generation, preservation, and transfer is showcased to enhance the accessibility and circulation of knowledge both internally and externally within the organization.

This research adopts a quantitative approach to analyze factors surrounding the issues and practices of knowledge management within online communities and social media, focusing on their impact on individuals' intentions and behaviors (first variable) in terms of actions (second variable). Online communities are organized (suburban, rural, and urban), whereas personal usage behavior on platforms like Twitter, Google+, LinkedIn, and Facebook exemplifies social networks (Robertson et al., 1996; Levine & Preetula, 2012; Alavi & Leidner, 2001; Hoong, 2012). The questions included in the questionnaires will follow a systematic arrangement, aligning with the researcher's inquiries and objectives.

In this study, the researcher examined the methodologies within knowledge management capability enhancement research areas that provide the methodology used in these inquiries. The ethical considerations were delineated, along with the data collection and evaluation process, and the questionnaire design was outlined.

Research approach and design

Research methodology adopted for this research

An online and paper-based self-administered survey strategy involving a comprehensive literature review, site visits, document evaluation, and dialogues with technical managers and industry experts is employed to effectively address the research inquiries presented in Appendices A

and B. The researcher sought to validate assumptions concerning population values through the application of inferential statistics (Claybaugh, 2020; Wright et al., 2017; Tobi et al., 2018; Creswell, 2014). Fundamentally, the methodology followed is where the researcher navigates through their work to assess, forecast, and elucidate phenomena. It involves selecting appropriate scientific tools, approaches, materials, and techniques pertinent to resolving the issue. Quantitative research methods often hinge on the quantification of collection and data analysis (Shaw, 2016; Kosso, 2011; Bryman, 2012; Aghazadeh, 2016; Sammut-Bonnice & Galea, 2015; Shimizu et al., 2014).

Thus, the objective of quantitative investigation is to formulate and evaluate hypotheses, ideas, and mathematical frameworks related to a specific phenomenon, systematically guided by positivist and empiricist ideologies, emphasizing principle validation. It also provides essential insights into the relationships between mathematical representation and the empirical observation of quantitative associations, where measurement stands at the core of quantitative research (Mersly, 2015; Goertzen, 2017; French & Ross, 2015; Corrine, 2012). Observation may also entail utilizing scientific instruments for data collection and recording. The terms also refer to any information gathered during a systematic endeavor.

The research methods applied in this study will be quantitative. To gather data, an online questionnaire will be conducted using stratified random sampling. The 330 valid responses will be scrutinized using the Amos SPSS software. There will be analyses performed to develop a conceptual model that will be compared against the survey instrument's results to determine its applicability (Mukherji & Albon, 2010; Kumar, 2010; Lederman & Lederman, 2015; Mohajan, 2017). Closed-ended questions are included in the design of the survey, enabling the researcher to acquire quantitative data.

Additionally, the researcher will outline the study framework utilized and analyze paradigms in data generation research, namely positivism and interpretivism (Juran, 1974; Hislop, 2013; Ahenkan et al., 2020; Mutongi & Chiwanza, 2016, 2017). In this scenario, the researcher adopted a descriptive survey method. Typically, the survey technique is characterized by addressing a study that allows for significant attention on a broad population scope. Based primarily on the nature of the issue, the investigator was compelled to choose among other options, the descriptive survey approach (Zhou, 2011; Ormrod, 2012; Sonnenberg & Erasmus, 2013; Grant & Osanloo, 2014). In forming this approach, an investigator examined opinions and sentiments of various individuals located across vast areas regarding the successful adoption and proliferation of online communities and social networks within the Ministry.

This current research is situated within the positivist framework. According to Hutter, Hennink, and Bailey (2011; 14), studies grounded in positivism generate hypotheses based on theoretical foundations for empirical validation. This approach necessitates extensive empirical data, which is meticulously assessed to determine whether the evidence supports the hypotheses. Consequently, this model is generally perceived as a structured methodology, focusing on objective measures and data. As a result, it is directed by quantitative research methods.

In this research, a quantitative strategy was utilized to gather data through a cross-sectional survey. The target population consisted of heads of households aged between 18 and 70, using quota sampling facilitated by the Lesotho Ministry of Foreign Affairs and International Relations. To gather this information, a self-administered survey was employed in both paper and online formats. A total of 330 heads of households were included in the sample. Structural Equation Top of Form Modeling (SEM), exploratory factor analysis, and descriptive analysis were employed to examine the data. For data analysis, the information was processed using SEM, and the SPSS (Statistical Package for the Social Sciences) software was utilized for most other statistical evaluations. Table 3.1 presents various characteristics of this quantitative investigation related to data collection,

sampling, and population, along with data processing which will be explored in the subsequent sections.

Table 3.1: Research design summary

Description	Elements
Heads of household in the Ministry of Foreign affairs and International Relations.	Target population and Random sampling method.
Self-administered questionnaire: online and paper-based version.	Data collection method
331 heads of household.	Sample size achieved
Descriptive analysis, exploratory factor analysis and SmartPLS-SEM.	Data analysis

This investigation presents and investigates a theoretical structure that integrates various elements of variables from existing literature to elucidate data management practices and issues, in addition to the connections between effective sharing, data manipulation applications, and security (Holbeche, 2018; Munir, 2015; Wang & Noe, 2010; Smith, 2010; Granitz, 2011). The empirical analysis, on the other hand, validated the proposed models. The primary data analysis techniques employed in this research are SEM, exploratory factor analysis, and descriptive statistics (Wikie et al., 2015; Grant & Osanloo, 2014; Helms et al., 2015; Telxexira et al., 2012). Descriptive statistics are utilized to delineate the key properties of data within a study, providing concise summaries of the sample and the measurements. They form the basis for all quantitative analysis, data evaluation, and primary graphical analysis. In descriptive statistics, the researcher merely portrays what the data suggests or entails, subsequently offering quantitative descriptions in a format that can be applied, or measures a large variety of individuals on any measure (Minur, 2015; Minton & Khahle, 2014; Muqddas et al., 2017; Ghatal, 2019; Arora & Sanni, 2018).

Consequently, descriptive statistics assist the researcher in condensing extensive amounts of information in a brief period. A practical approach is where each descriptive statistic distills a vast quantity of data into an succinct summary. Exploratory factor analysis is a method engaged to investigate a phenomenon that is not clearly defined. The researchers conducted it to acquire further insights about the issue at hand, although it will not yield definitive results (Brown, 2016; Kim & Park, 2015; Swedberg, 2018; Bohari et al., 2019). In this study, the researcher used these findings as a launching pad and a broad idea of a framework for identifying issues that may be the focus of future research. The researcher's willingness to pivot if new data or insights become available is a crucial trait to consider (Kim & Park, 2015; Swedberg, 2018). Such studies are typically carried out while the problem is still in its nascent stages.

Survey research is the most vital tool in any quantitative outcomes research and methodologies. The researcher employs surveys utilizing various formats to pose inquiries to a sample of respondents, including online surveys, paper questionnaires, and web intercept surveys. Prior to conducting a survey study, the researcher formulates diverse survey questions, collects data from a pool of participants, and analyzes the amassed data to generate numerical results. Traditionally, surveys are carried out in person or over the phone, with advancements made through online means. Survey research has transitioned to internet resources like emails and social media as well (Check & Schutt, 2012; Avedian, 2014). The researcher administers a survey to a sample or segments of the population, or to the entire populace, to depict the opinions, behaviors, and attitudes. This design boasts the advantage of assessing current attitudes or practices.

The survey represents an advantageous research design where a sample of the population is selected and examined. Questionnaires are typically employed to ascertain the preferences, opinions, inclinations, and perceptions of individuals being studied to infer assumptions about the broader population. It is feasible to employ statistical methods to evaluate the relevance and the research' applicability to a broader population in a well-structured survey, wherein the sample has been carefully chosen to ensure its representativeness of the wider community (Tugwell, 2020; Murad,

2018; Burchett, 2018; Kamil, 2004; Russell, 2005). Statistical methodologies may be employed to discern when the sample has been properly selected to ensure it accurately reflects the demographic in a well-designed survey community, thereby facilitating the relevance and generalizability of the results to the encompassing populace (Tugwell, 2020; Murad, 2018; Burchett et al., 2018; Kamil, 2004; Russell, 2005). The research was conducted to ensure enhanced reliability and validity. To affirm that the researcher's findings possess a greater degree of dependability and validity, it is also paramount to ensure that the manner in which the items and questions are formulated does not lead to bias.

The investigator employed correlation to assess relationships among entities to effectively execute this quantitative research approach. At a minimum, distinct organizations must present evidence of naturally occurring connections. Without taking into account various factors, a set of entities had been established in a judicial setting. Researchers utilized a quantitative framework to compare two or more variables through mathematical analytical methods. Patterns and relationships emerged naturally as the elements existed in their original states. (Weber et al., 2011; Hoe & Hoare, 2013; Norkett, 2013). They exert influence on one another.

Conversely, variables are understood in terms of how they affect relationships. The researcher tends to manipulate one variable to achieve the desired results. To alter one of the variables to produce the intended outcomes, the primary statistical tool for testing the hypothesis was equation modeling, hypothesizing that the proposed relationships were structured in a specific conceptual model. The model's fit was evaluated using various fitting indices (Katunga, 2019; Spiliotopoulou, 2019; Williams et al., 2018; Paulin et al., 2016). The statements were adapted to be relevant to this study concerning knowledge management. Data from surveys was collected in Excel and imported into SPSS and SmartPLS software for statistical analysis (Islam et al., 2015; Agarwal & Islam, 2015; Yzer, 2017; Pandita & Singh, 2016; Fornell & Larcker, 1981). For data consistency and completeness, when employees omitted some specific parts of the questionnaire, we found it appropriate to remove those questions from the analysis but retained responses from others.

Visual aids such as graphs and tables serve as clear representations of data. They are instrumental in organizing statistics to reveal patterns and connections. A graph represents a visual display or illustration that indicates the relationships between numbers or quantities (Eddy, 2014, 2020; Gracia, 2013). Consequently, desk charts present a way to arrange statistics in structured columns and rows. The application of tables is extensively prevalent across various forms of communication, research, and statistical analysis (Milosevic et al., 2016, 2019; Ashman et al., 2018). In this study, the researcher employs tables and graphs to document the outcomes of the research.

This study provides insights into the closed-ended inquiries regarding strategies to reduce the aim-behavior gap. Within the context of socio-demographic and economic variables acting as moderators, the moderation analyses conducted in this research identify potential moderating factors that might enhance or mitigate the influence of intention on actual behavior.

This research enhances social marketing practices within the Lesotho Ministry of Foreign Affairs and International Relations. Social marketing benefits had been criticized for lacking comprehensive patron studies to assist in strategy development (Baumeister et al., 1994; Porter, 1998; Kennedy, 2010; Donovan, 2011; Lefebvre, 2012; American Advertising Association, 2013; Farris et al., 2015; Slyter, 2019). This contributes valuable research upon the elements of knowledge management potential growth, tracing the achievements of knowledge management implementations from an organizational perspective and promoting knowledge and behavioral safety among institutions (Schwartz & Howard, 1981; Abrahamse & Steg, 2009; Yakel, 2006; Forrester, 2007; McKinsey, 2007). This investigation will enhance social marketing skills and educational knowledge quality, expand methodologies, and even develop new research designs and approaches for this study.

In relation to this topic, marketing professionals have encountered unintentional resolutions. Numerous links have been established between management, social marketing, and information technology. Based on the findings of this research, the researchers concur that multiple connections

may exist with subordinate elements within pre-existing theoretical frameworks concerning subordinate behavior (Barry, 1991; Field et al., 1993; Porter, 2000; Leddick & Provost, 1993; Payne & Payne, 1995; Anderson & Narus, 1999). The application of these theories in diverse contexts supports the distinct evolution of knowledge.

Some scholars have examined concepts of information and sequences of facts (Milosevic et al., 2016, 2019; Ashman et al., 2018). The researcher cites Amin & Cohendet, 2004; Takeuchi & Nonaka, 1995; Laudon & Laudon, 2006; Davenport and Prusak, 1998, who define knowledge management as "The growing practice of knowledge management is evident in various approaches, one of which originates from data management and perceives knowledge as a higher-order form of data, often depicted as a triangle progressing from data, through information, to the pinnacle of wisdom. Knowledge here is regarded as a component that can be controlled and disseminated using technology" (Davenport & Prusak, 1998). Recently, Maasdorp & Muller (2011) highlighted the prevalence of the data-information-knowledge management model (DIK) in information science. Their insights closely align with this research. The researcher hypothesizes several conjectures. "The first possible reason regarding the predominance of the data-information-knowledge management model stems from the historical background in principles or communication theories of the practitioner or author. The second conjecture is that simplicity plays a crucial role in management, which tends to prioritize concepts directly related to an operating and efficient legacy in fact systems" (Maasdorp & Muller, 2011; Metaxioti et al., 2005; Steg & De Groot, 2010; Puin et al., 2016; Williams et al., 2018).

As previously mentioned, an assessment has identified the elements of knowledge governance or organizational aspects (Lewis, 2002; Natarajan & Shekhar, 2000; Nissen et al., 2000; Remus & Schub, 2003; Sveiby, 2011). The potential of knowledge management consists of organizational mechanisms that systematically and consistently cultivate understanding within organizations (Von Krogh et al., 2001). Moreover, Gold et al. (2001) suggested that the infrastructural and procedural capabilities of knowledge management are key factors influencing the

effectiveness of knowledge. They stressed that teams should leverage existing resources. To remain competitive, companies must enhance their knowledge management skills and monitor their operations' learning. Knowledge management refers to the control of information flow within an organization (Hislop, 2013; Maurer et al., 2006; Boll, 2007).

Companies should adopt and implement knowledge management strategies to bolster their competitiveness. Natarajan and Shekhar (2000) focused on the technological aspects of knowledge management, while Nissen et al. (2000) examined it from an organizational standpoint. Additionally, the vital and significant relationships among various organizational components are overlooked. Therefore, there appears to be a necessity to investigate the human aspect in accordance with emerging trends and theories that link different institutional elements. This exploration is crucial, as it can uncover how individual behaviors and interactions influence the overall effectiveness of knowledge management practices. By integrating insights from psychology and sociology, companies can develop a more holistic approach that not only leverages technology but also fosters a culture of collaboration and continuous learning among employees. There is also a need to integrate strategies, theories, approaches, and propositions regarding knowledge management into management literature (Thosen et al., 2000; Zack, 1999; Norkett, 2013; Hoe & Hoare, 2013; Tuomi, 2002; Bouthillier & Shearer, 2002; Susman & Majchrzak, 2003).

As a result, in contemporary times, the management of information is crucial for achieving business value. To devise and execute their strategies, practitioners and managers within firms require certain theories and comprehensive knowledge management frameworks that encompass all institutional dimensions. Organizations well-versed in knowledge management regard knowledge as a human resource and strive to enhance it to develop values and policies that encourage knowledge sharing and creation (Meyer et al., 2002; Metaxiotis et al., 2005). Data collected from participants were subjected to statistical analysis among variables utilized within the research model. Based on the findings, it can be in light of the results, it can be inferred that the outcomes of these studies align

with the proposed conceptual framework. This study's results reaffirm that the focus is on the knowledge capabilities that enable a review of institutional knowledge from the subordinates of the organization.

Population and sample of the research study

The target demographic for this research may include top executives, specialized staff, and service providers from the Lesotho Ministry of Foreign Affairs and International Relations, as their investigation aims to address essential queries regarding the integration of online communities and social networks concerning technical education and management practices offered by these organizations. During the survey, the total number of Ministry personnel, management technical staff, and practitioners was 450. The sample size consisted of 331 participants aged between 18 and 70 years. A sample comprises a set of readily available representative subjects that are closely linked to the target demographic. This approach was also preferable as it enabled the researcher to analyze the data using inferential statistics. The researcher ensured assumptions regarding population values when employing inferential statistics.

This research investigates data primarily gathered through sets of questionnaires. One questionnaire was designed for employees of the Ministry of Foreign Affairs and International Relations in both the South and North, while the other was tailored for Ministry Technical and Management alongside practitioners. Consequently, the data was segmented into distinct sections for analysis. The first section is dedicated to Ministry employees from the South and North, while the second part focuses on technical and managerial staff and practitioners within the Ministry. A total of 331 respondents completed the surveys, comprising 185 from the South and 136 from the North. The questionnaires were filled out by all four practitioners, as well as six technical and management professionals from the Ministry.

In this research, descriptive statistics, exploratory factor analysis, and SEM were employed as the main data analysis methods. The principal statistical approach used to evaluate the proposed relationships in the structural equation modeling was the suggested model. Questionnaires were utilized to gather the required data for the study. The questionnaires consisted of sections A and B. Section A collected demographic information such as age group, gender, race, and computer/mobile questions. A reliability test was performed to assess data accuracy (Hair et al., 2017, 2006; Richter, 2016; Ringle, 2016). The data was statistically examined using SEM in alignment with the study's objectives. Initially, descriptive statistics were applied. The term 'demographics' was used to define the participants' demographic details (Table 3.2). The data was further verified for consistency and validity. Ultimately, the analysis of moment structures was applied to align with the research model. Finally, the results of the hypothesis were reported.

EFA, or exploratory factor analysis, is a method for determining the factor structure of a measurement and evaluating the internal reliability of the constructs by analyzing the model's fit. Individuals' responses to inquiries about their income, education, and profession, which are all related to the underlying variable of socioeconomic status, may show similar patterns. The count of factors in each factor analysis corresponds to the number of variables. In order to determine whether the observable variables and their corresponding latent variables are significantly correlated, the model fit must be evaluated (Hair et al., 2017, 2006; Richter et al., 2016; Pringle et al., 2014; Ritter, 2012). Relationships between observable and latent variables are theorized using existing measurement scales derived from the literature.

Sample characteristics

The construction of knowledge management, encompassing the generation, dissemination, and application of knowledge through digital means, along with tacit insights, information technology, KM framework, financial strategy, and organizational effectiveness will establish the theoretical basis for this research, which will include a survey of 331 employees, specifically technical staff and professionals. The ministry's employees total 200, with 60.6% identified as male and 39.4% as female, utilizing innovative methods, aged between 18 and 70 years. Organizations were randomly chosen based on the overall sample size. To maintain adequate representation and broader applicability, we categorized the population into geographically distinct groups using robust statistical techniques. Participants were randomly selected from each stratum according to demographic factors such as gender, age, and years of service.

The investigator utilized random sampling, incorporating various methodologies, including simple random sampling. This approach was selected due to its ability to identify a subgroup of individuals who are particularly pertinent to the study. Initially, personnel from the Ministry will be chosen through random sampling techniques to engage in the surveys. The random sampling method is enhanced to eliminate any potential biases or, at the very least, to minimize them (Nicolas, 2021; Hayes, 2021). The selection process was strictly based on random criteria, ensuring that there is an equal chance for inclusion for every member of the population. in the probability sampling (Cameron et al., 2015; Galway et al., 2012; Meng, 2013). Consequently, a sample is constructed using simple random sampling. Ministry Technical staff and Trainers accountable for execution and training will be selected via simple random sampling methods. Random sampling, characterized as a subset taken from a larger collection where individuals are selected randomly, allows researchers to choose

participants from the general population for surveys, giving them all an equal chance of being included.

Data for this study may be gathered using self-administered questionnaires. Email invitations may be employed since they represent a cost-effective, convenient, and eco-friendly means for participants to share their thoughts on the queries and responses. An online survey is an exceptional and efficient method to reach individuals who have access and are technologically savvy (Quinlan, 2011). The email aligns with the requirements for the online survey and facilitates the recipients' involvement. An email with a link to the Lesotho Ministry of Foreign Affairs and International Relations may be sent to contributors, providing access to the survey via an integrated link to Survey Monkey. The questionnaire will be designed for completion in approximately 5 minutes. A tool for data collection, the questionnaire will be accompanied by an email invitation. Appendices A and B will include the respective covering email and survey instrument. The study's rationale will be outlined in the email, which will also provide the researcher's contact information.

A SEM multi-group framework can be utilized to meet the crucial objectives under examination. The inquiry into whether parameter estimates vary across organizations (usage category rates) is addressed through a SEM multi-group analysis (Kline, 1998). Is the Rate of Use, in other words, a moderating factor in the model's relationships? Cluster analysis can segment internet users into three similar groups based on the Rate of Use variable. The influence of inter-group differences on a model parameter or a collection of parameters can be evaluated by applying cross-group equality constraints. Metric invariance must be established prior to any structural modifications. Weights can be assessed by examining invariance (Hair et al., 2006: 875). Metric invariance is vital as it facilitates meaningful comparisons among groups regarding the strength of

correlations between constructs (Hair et al., 2006: 823). To determine metric invariance, one should evaluate equivalency of factor loadings, requiring uniformity in the factor loading estimates across all groups. Next, the unconstrained model needs to be contrasted with the constrained parameter weight model, using the chi-square difference test. The constrained model is not statistically different from the unconstrained model, as indicated by the non-significant chi-square differences. Thus, metric invariance is established.

Consequently, should the chi-squared variations test be significant, then prior to examining the correlations among constructs across different groups, partial metric invariance must be established. To achieve at least partial metric invariance, the loading estimates for each construct must remain consistent across all groups (Hair et al., 2006:823). To establish Partial metric invariance, one must first constrain a single factor loading across the entire dataset, subsequently comparing the fit of this constrained model against that of the unconstrained model using the chi-squared difference test. Invariance is demonstrated by a non-significant outcome. This procedure is repeated for each factor until identical loading estimates in accordance with the theory are obtained.

Further restrictions can be placed on the structural weights across groups to assess whether invariance holds within the evaluation of these weights between groups. Invariance is signified by the comparison of constrained and unconstrained models, where a non-significant chi-squared difference test is conducted. If the chi-squared difference test reveals a significant difference, then each structural weight must be further constrained across the groups, while the remaining weights remain unbound. To determine the invariance of the structural weights, the chi-squared difference test is again employed. This phase allows for the identification of the structural weights that are non-invariant across groups. In this survey, we adopt a quantitative approach to collect data from a cohort

of respondents by posing various survey questions. Subjects are recruited, data is gathered, and it is analyzed to portray the community's views, opinions, behaviors, or characteristics. For example, survey research sheds light on respondents' actions and preferences, which is invaluable in any methodical examination; frequently, survey research is shaped interactively, facilitating respondents in expressing their thoughts and experiences, while enabling investigators to gather critical data that demonstrates the functionality of online communities and social networks, particularly in market research. The practice of directly interviewing potential clients is referred to as market research to ascertain the feasibility of a new service or product. Market research allows an organization to pinpoint its target market and obtain comments and other input from customers regarding their interest in a product or service. This survey will be broken down into three sections:

Age, gender, schooling level, and online organizations and social networks experience are all demographic variables; Constructs of the conceptual framework depicts what a researcher hopes to discover as a quit end result of his or her inquiry. It identifies the relevant factors for the researcher's inquiry and shows how they may be related. Before starting to build up data, the researcher needs to create a conceptual framework. Intentional behavioural constructs a pilot research with 24 participants is probably achieved to guarantee the validity and reliability of the instrument. Information Experts and an enterprise of Ministry personnel have been used to conduct a pre-test of the questionnaire.

Of the questionnaire to assess the appropriateness of the objectives, relevance of the questions, and clarity of the wording. The pretest participants found the survey questions to be sufficient in the relevancy and coverage of the construct. Therefore, the face validity of the scales

was confirmed. Furthermore, this study integrates both internal and external validity. The degree to which the study's design and implementation are objective is known as internal validity. The degree to which a study's conclusions can be applied to a larger population is known as external validity.

Materials/ Instrumentation of research tools

To collect data for this initiative, a self-guided questionnaire may be employed, available both on paper and digitally. Email invitations could be utilized as they are a budget-friendly, effective, and convenient method for participants to consider the questions and their responses. An online survey represents a significant and impactful strategy for reaching individuals who have access to and comprehend how to utilize technology (Quinlan, 2011). The email fulfills the requirements for the online survey and the desire of recipients to take part. A paper-based questionnaire would be distributed to the Ministry departments, Practitioners, and Technical management. The researcher would leave the questionnaires and retrieve them the following day. This data collection was intentionally structured to provide participants ample time to address the questions. Conversely, all individuals within the Lesotho Ministry of Foreign Affairs and International Relations will receive an email with a link to the survey, designed to be accessible through an integrated link to Survey Monkey. The surveys are intended to take around five minutes to finish. A survey will be developed alongside an email invitation. It was created as a collection tool. Appendices A and B will contain the cover email and survey tool, respectively. The email will provide information regarding the study's purpose and how questionnaires are typically utilized to gauge the opinions, attitudes, preferences, and perceptions of individuals relevant to the researcher. This survey might be broken down into three sections:

Age, gender, education level, and mobile phone experience are all demographic variables,

constructs of the conceptual framework, and intention constructs based on behavior. A pilot research with 24 participants will be done to guarantee the validity and dependability of the instrument.

Consequently, a fundamental aspect of ethical study lies in obtaining informed consent. In simple terms, the informed consent process necessitates that participants comprehend (a) that they might be involved in research and (b) what the research requires from them. The observer's objective is one example of such data. The methodologies employed assess the studies' potential outcomes, along with the expectations and discomfort that pertain to the annoyances and risks the participants might face. The investigator must avoid omitting any relevant information, which refers to data that the investigator believes might influence whether consent is provided. Another facet of informed consent involves the stipulation that participants are volunteers, willing to engage without being coerced or deceived (Lantos, 2016; Kincaid, 2016). How can participants become aware that they could be part of a study and what the study entails if they are being misled? Thus, the researcher must abstain from deceptive practices in most situations. When acquiring informed consent is not feasible the researcher needs to explain why (Jose et al., 2017; Chen et al., 2020).

Moreover, the researcher must be mindful that there are circumstances in which informed consent is not obligatory or can be relaxed. The principles of beneficence, respect for dignity, and fidelity are all connected to the issue of confidentiality and anonymity (Jose et al., 2017; Nasir, 2015; Pringle et al., 2014). Sosin et al. (2018) suggested that when a subject's identity cannot be linked to individual responses, anonymity is recommended. If the researcher cannot guarantee anonymity, he or she should address confidentiality, which involves the researcher's management of private information to protect the subject's identity. Stephenson (2010) asserted that individuals are allowed to share and withhold as much information as they wish with the individual they select, according to

advocates. The researcher is in fee of "maintaining confidentiality that is going past everyday loyalty" (Stephenson, 2010). Clark (2008) addressed the researcher's moral predicament while secrecy ought to be violated that allows you to protect society. The confidentiality certificates are an important tool for shielding the privateness and confidentiality of study participants' data. When study certificates are secured, they ought to be shared with capacity participants.

Before distributing the questionnaire to study participants, the researcher must pilot test it on a smaller sample. The assessment of the pilot survey will only require several questions. Feedback for improvement and various alternative responses for closed-ended questions is encouraged. The pilot survey enables the researcher to implement any necessary adjustments to enhance response rate and minimize closed-ended questions. Evaluate the pilot sample to a reasonable extent and assess all computational methods, as well as formulate some preliminary hypotheses and evaluate their alignment with the research goals.

The usage rate can be determined by asking about the total instances of online actions in a month and the frequency with which they performed certain activities. Table 3.2 illustrates how the Usage Rate can be calculated. In Table 3.2, the utilization of online communities and social networks is presented, while respondents indicated the overall frequency of three hypothetical potential internet engagement activities, alongside the effective use of web management for each task. The probabilities of individuals utilizing online platforms and social networks for each engagement activity are computed using this data. Subsequently, the average percentage for each respondent is calculated using the derived average probabilities. This method has the advantage of determining the usage rate for each individual, considering the variety and frequency of digital engagement activities in which the individual participates. Respondent B engages in only two out of the three digital

activities, so their Usage Rate is based entirely on activities A and B. The social network usage rate of Respondent B is higher than that of Respondent A, as demonstrated in Table 3.2.

A preliminary version of this research involved 24 participants, as illustrated in the figure, which was arranged to validate the consistency and credibility of the tools used. Table 3.2 displays the distribution of sample sizes based on those who engage with online communities and social networks compared to those who are resistant to embracing social networks and online groups

Table 3.2: Illustration of how rate of use will be calculated

Respondents				Respondents B		
	Overall N	Online CommunitiesN	Percentage	Overall N	Social NetworksN	Percentage
Activity A	10	5	50	4	2	40
Activity B	12	8	67	8	7	88
Activity C	5	2	40	Not applicable	Not applicable	
Average			52			69

[Source: Own Illustration]

The participants in this analysis were picked using a method of non-probability sampling known as random sampling. Random sampling is a subset of sampling methods where every sample has an equal chance of being selected (Malhotra, 2010:380). Through random sampling, a randomly chosen sample aims to be an unbiased reflection of the entire population. Sampling serves as a technique for categorizing individuals within a demographic (Malhotra, 2010:380).

Quantitative techniques are employed to achieve set objectives. This approach is guided by inquiries and topics that seek evidence to either support or challenge the understanding claim and the research topic, utilizing a naturalistic hypothetical deductive approach (Quinlan, 2011; Hair et al., 2017, 2006). Consequently, the researcher aimed to ensure that the outcomes of testing the stated study topic were accurate. The instrument was separated into two parts. The initial segment included general instructions and personal information, while the second half consisted of items designed to provide information on variables identified from each predetermined question. Participants were expected to express how much they agree or disagree with statements by marking the corresponding or appropriate column. The options varied from strongly agree, agree, disagree, to strongly disagree and neutral. Before commencing data collection, the instrument was assessed by the study manager for thoroughness and clarity.

Quantitative methods were implemented in this study's methodology. Random sampling provides opportunity sampling, which will be present within a specific demographic group, and the overall study will collect data from both online and paper surveys. In this analysis, descriptive statistics, exploratory factor analysis, and structural equation modeling (SEM) were utilized as data analysis techniques. Structural equation modeling served as the primary statistical tool to examine how effectively the proposed conceptual model works with hypothesized relationships.

Questionnaires were employed to gather the essential data for the research. Data from the questionnaires were captured in Microsoft Excel and imported into SPSS, while PLS-SEM software packages were utilized for most of the other statistical analyses to evaluate the 331 valid responses. Tests will be conducted to establish a conceptual model that will be compared to the findings of the survey instruments to determine its suitability for the intended purpose. Close-ended questions are included in the survey design, enabling the researcher to gather quantitative data. Moreover, the researcher will outline the study framework utilized and analyze ideologies in information technology research, including positivism and interpretivism.

EFA stands for exploratory factor analysis, which is a technique for uncovering the factor structure of a measure and assessing the internal reliability of constructs by examining the fit of the measurement model. For instance, individuals may respond to questions regarding their education, income, and occupation, all of which are associated with the latent variable of socioeconomic status. Each factor analysis consists of as many factors as there are variables. Examining whether observable variables and their corresponding latent variables are highly correlated is part of the model fit analysis process (Hair et al., 2017, 2006; Richter, 2016; Pringle et al., 2014; Ritter, 2012). The connections between the identified and latent components are the main focus of this study. Relationships between observable and latent variables are hypothesised using measurement scales that have already been developed and modified from the literature. Hair et al. (2007) state that the criteria used in the evaluation of model fit included the justification for absolute fit measures, incremental fit measures, and parsimonious fit indices, such as the comparative fit index. In this context, exploratory factor analysis techniques were developed as a supportive framework. The researcher utilized the descriptive survey approach. Generally, a survey method is defined by

addressing a study that focuses on a broad population. The researcher was compelled to adopt the descriptive survey approach, among other methods, due to the nature of the issue.

The investigator employed this method to examine the feelings and perspectives of individuals globally throughout the study concerning the success and growth of the organizations. For causal research, a descriptive analysis can illustrate the features of the variables of interest in a scenario, such as those related to a group of personnel within an organization. In correlational research, a distinction is made between causal and correlational studies. In this study, the investigator aims to identify the primary variable associated with the issue, followed by a correlational analysis.

To address the research objectives, the preferred statistical analysis technique is structural equation modeling (SEM). SEM comprises a range of statistical methods that assess one or more independent variables (IVs), which can be continuous or discrete, alongside one or more dependent variables (DVs), which may also be continuous or discrete. Both IVs and DVs can involve either measured or unmeasured variables (Sekaran, 2000; Hardy & Bryman, 2004). A comprehensive structural equation model represents the most advanced end of a continuum of general linear model complexity, with a simple bivariate correlation study as the most basic form and several regressions situated in the middle (Hardy & Bryman, 2004). Within the same model, dependent variables can also function as predictor variables, which is a notable advantage of SEM over the basic general linear model.

The information gathered for the measurement model must be evaluated for reliability and construct validity since the DVs and IVs may be latent variables. The degree to which a measure is devoid of bias (error) and thus provides consistent outcomes is determined by its reliability, as

various items within the instrument are measured over time (Sekaran, 2000). Due to the presence of multiple types of random error, different facets of a measure's reliability should frequently be assessed (Kline, 1998). Inter-item consistency is utilized in this research. The term "reliability" is particularly suitable. Internal consistency pertains to the uniformity of the items in a measure that taps the construct, while inter-item consistency measures the stability of the respondents' answers when the questions are unbiased assessments of the same concept (Sekaran, 2000). Cronbach's coefficient alpha is the preferred reliability measure since the items that constitute the beliefs within the conceptual model will be evaluated on a Likert scale. While dependability is focused on the consistency of study outcomes, validity relates to how these outcomes should be generally interpreted (Kline, 1998). Construct validity indicates the extent to which the study's results support the research's theory or constructs, and whether the theory backed by the findings provides the most suitable theoretical explanation for the results (Graziano & Raulin, 2000).

Convergent and discriminant validity were utilized to evaluate construct validity. When the scores from excellent instruments measuring the same construct are significantly correlated, this is referred to as validity of convergence. However, discriminant validity is different. established when it is anticipated that variables will be uncorrelated, and the scores obtained through their measurement are empirically validated to be so (Sekaran, 2000). An exploratory factor analysis (EFA), a multivariate technique that can validate the operationally defined dimensions of the construct and determine which items are best suited for each dimension, can be used to confirm construct validity (Sekaran, 2000).

A SEM multi-group analysis was conducted to address the primary aim. The inquiry of whether model parameter estimates differ across groups (rate of usage categories) is answered through a SEM multi-group analysis (Kline, 1998). In other words, does Rate of Use illuminate the model's specific associations? Based on the Rate of usage variate, cluster analysis can be applied to categorize respondents who utilize online communities and social networks into three homogeneous groups. The significance of group differences on a model parameter or a series of parameters can be explored by imposing cross-group equality constraints. Before the structural weights can be compared, it is essential to establish invariance and metric equivalence (invariance) (Hair et al., 2006). Metric invariance is crucial because it enables meaningful comparisons of effect sizes from one group to another regarding relationships among constructs (Hair et al., 2006).

On the other hand, metric invariance can be established by testing the equivalence of factor loadings, which involves imposing the same factor loading estimates across all groups. The fit of the unconstrained model must then be compared to the fit of the constrained model using the chi-square difference test. If the constrained model is not statistically different from the unconstrained model according to a non-significant chi-square difference test, metric invariance is validated. Before comparisons between constructs can be made across groups, the basic requirements of partial metric invariance must be satisfied if the chi-square difference test is significant. To achieve partial metric invariance, at least some loading estimates for each construct must be equivalent across groups (Hair et al., 2006). The difference in chi-square test is employed to assess the fit of the constrained model against the fit of the unconstrained model to establish partial metric invariance. Invariance is indicated by a non-significant outcome. This process is repeated for each factor until matching factor loading estimates consistent with theoretical expectations are found the questionnaires changed into

331, of which 185 had been from South and 136 had been from North. All 4 practitioners and 6 Ministry technical and control body of workers additionally crammed the questionnaires. These questionnaires had been connected as annexure A and B.

The extent to which survey questions consistently yield the same type of information every time they are posed is referred to as reliability. Conversely, validity concerns the accuracy of the survey. Ultimately, it comes down to crafting inquiries that genuinely measure the intended variables. By establishing face validity, conducting a pilot study, entering pilot data into a spreadsheet, employing factor analysis, assessing the internal consistency of items aligning with the same factors, and refining the questionnaire based on outcomes from factor and item analysis, the researcher evaluates the reliability and validity of a survey. Well-constructed surveys produce trustworthy data and critical insights, allowing audiences to delve deeply into the core of the issue at hand. Poorly designed surveys, in contrast, result in flawed information. In other terms, unreliable, irreproducible, or erroneous data leads to false conclusions and actions (Mohajan, 2017; Oktavia, 2018; Azraii, 2020; Ali et al., 2019). When developing and testing any survey instrument or data collection method, the concepts of validity and reliability are crucial considerations. Focusing on these aspects can help ensure that the survey instrument and the data gathered for analysis and application are of high quality.

The degree to which a test is perceived as accurately reflecting the concept it aims to measure is termed face validity in this context. It relates to the test's clarity or significance in terms of how it appears to test subjects (Gravetter & Forzano, 2012; Ali et al., 2019). In simpler terms, if a test 'appears to' measure something, it is said to possess face validity. Face validity is frequently contrasted with content and construct validity. The term "construct validity" describes "the extent"

that a test assesses what it asserts to measure, whereas content validity concerns the degree to which a measure encompasses all facets of a specific construct (Melendez et al., 2018; Schuch et al., 2018; Minton & Khale, 2014; Polit, 2012; Bateson, 2017).

As stated by Ary, Jacobs, and Razavieh (2002), reliability assessments are been out to assess the reliability of the instruments used for data collection and to measure the internal consistency of the data. Cronbach's alpha is the method we used to confirm the data's internal consistency. which is suited for tools like the 5-point Likert scale (Ary et al., 2002). We achieved a score of 0.735, indicating that the scale employed demonstrates commendable internal consistency (reliability).

In this context, a survey instrument's ability to measure what we intend to quantify is referred to as validity. An investigation that aims to explore employee engagement but inadvertently assesses customer satisfaction, for instance, would not be deemed valid, as various factors influence the determination of reliability. This pertains to how consistently a survey tool's questions yield the same responses whenever it is administered. The validity of the survey instrument is evaluated in this analysis to ascertain how effectively it measures our intended constructs. A study aimed at examining employee engagement must ensure it is genuinely valid. The degree to which the questions employed in a survey instrument consistently provoke the same responses whenever they are presented in the survey is termed reliability (Busschaert, 2016; Ali et al., 2019). Reliability constitutes a statistical indication of how reproducible the data from the survey instrument is (Oktavia, 2018; Azraii, 2020; Ali et al., 2019). Results arising from a survey instrument's reliability serve as a statistical measure of its repeatability.

A survey tool is considered highly reliable if it consistently produces identical results under the same conditions, with any variation being attributed to a genuine change in attitude rather than a fluctuation in interpretation (i.e., a measurement error). Evidence of validity and reliability is essential to confirm that a survey instrument's integrity and quality are preserved. This is parallel to how we derive conclusions from survey data for accurate application. Hence, it is essential to distinguish between the two concepts (Demir, 2020; Wilson, 2011; Taherdoost, 2016). The objective of this study was to devise and compile a tool intended to assess employees' knowledge, attitudes, and behaviors within online communities and social networking platforms.

The increasing engagement of public and private organizations, as well as individuals, with online communities and social media networks, has led to a rise in the use of online petitions for various purposes. For instance, online petitions are frequently employed today to garner support for a cause. Awareness of both general and specialized literature, along with knowledge of the petition's subject, is crucial for the optimal and most accurate utilization of petition data (Briassoulis, 2012), as is the seriousness and quality of the content (Garber, 2013; Panagiotopoulos et al., 2012). Others contend that online petitions are playing an increasingly significant role in political frameworks and collective action, suggesting that petitions directed at governmental entities are experiencing notable public attention (Dumas et al., 2015; Lindner & Reihm, 2012; Chen et al., 2019). Indeed, numerous instances exist of e-government utilizing online petitions to bolster trust and transparency by fostering government-citizen engagement (Alathur et al., 2012; Lindner & Riehm, 2012; Berg, 2017; Robinson, 2010).

A survey is an incredibly vital tool for research. Decision-makers and scholars across various academic and business fields employ surveys and questionnaires to uncover answers to specific, pressing inquiries. Indeed, surveys and questionnaires can serve as valuable instruments for gathering data for research and analytical objectives (Taherdoost, 2017b, 2018; Finstad, 2010; Kulas & Stachowski, 2013). In order to design a survey or questionnaire, the researcher must first determine the method for acquiring the necessary data. Scaling is the branch of measurement that deals with formulating a system in this context. Attitude scales are among the most commonly utilized scaling techniques for measurement tools, and the Likert scale stands out as one of the most significant and widely adopted psychometric tools in sociology, psychology, statistical systems, politics, and economics, among other disciplines (Taherdoost, 2018, 2016b, 2017a, 2017b; Vietnam, 2015).

Using a range from strongly agree to strongly disagree, interviewees are asked to score how much they agree with the assertions. Although the original Likert scale featured five balanced and symmetrical points, it has since been adapted with varying measurement levels, spanning from two to eleven response options (Simms et al., 2019; Alhadeff-Jones, 2013; Churchill et al., 2010: 37; Burns and Bush, 2010: 51; Hair et al., 2010: 31; Khan, 2018; Gray, 2013).

The first step requires decision-makers to formulate a problem statement before engaging in the research process. Next, the researcher must distill the issue into a more manageable and investigable question. A crucial aspect of the research methodology is ensuring clarity in its definition. The essential phase is one that has been explicitly articulated. Furthermore, a literature review must be conducted (Hair et al., 2010:34) to provide context regarding related issues, along

with discussing the primary causes of the problem. The first basis is rooted in the discrepancies between what is expected to occur and what is actually happening, while the second is founded on the differences between current occurrences and what ideally should have taken place.

Finally, the researcher needs to ascertain what information is necessary (Hair et al., 2010:35; Gray, 2013; Alhadeff-Jones, 2013; Dingwall & McDonnell, 2016; Yiu et al., 2020). The problem statement should be structured to clarify the objectives of the study. Once this is accomplished, it is essential to provide the data required to address the issue (Burns & Bush), including detailing the specific information to be collected along with the format (Burns & Bush, 2010:56; Dingwall & McDonnell, 2016; Yiu et al., 2020). Ultimately, the researcher, alongside decision-makers, ought to evaluate the anticipated value of the data. For instance, inquiries regarding the collected information, such as whether the data might reveal insights previously unknown to the decision-maker, could represent significant advantages in addressing management questions (Hair et al., 2010:36; Gray, 2013; Alhadeff-Jones, 2013; Burns & Bush, 2010:56).

A research design for the study examines its structure or approach, complete with all the pertinent information strategies that provide the insights needed to address or resolve research issues (Malhotra, 2010:102; Lin & Wang, 2016). An appropriate research design defines the quality of research objectives and data needs. There are three categories of research designs, each requiring a mix of methods to achieve the research aims (Yiu et al., 2020; Hair et al., 2010:36; Malhotra, 2010:102). However, when conducting primary research, one must consider the sampling design (Churchill et al., 2010:327; Cooper & Schindler, 2013:179). A sample of population factors is established, which may differ from the original. The sampling frame is a defined population (Zikmund & Babin, 2010b:417; Churchill et al., 2010:39). The researcher's responsibilities pertain

to sampling design, framing the sample, and compiling a list of participants.

When determining the study's concepts and variable measures associated with the research issue, the researcher needs to outline the phase. For evaluating scales and measurement considerations, both primary and secondary research metrics are crucial. For example, a researcher employing data mining must understand and apply techniques for creating a database and mitigating measurement biases (Hair et al., 2010:38). In a systematic approach, the measurement systems used represent or quantify information about occurrences, participants, plans, or designs (Hair et al., 2010:150; HackerNoon, 2020). Reliability and validity must be incorporated into the researcher's measurements. Consequently, reliability is a measure of measurement consistency. Malhotra (2010:318) suggests that reliability can gauge steady measurement with free random error, and that reliability and validity are employed to assess all measurement scales. Test-retest is one of the most commonly applied methods for enhancing options and internal consistency (Malhotra, 2010:319; Hair et al., 2010:38; Ben & Kai, 2014; Lin & Wang, 2016; Wyse, 2011; Liaputtong, 2011).

The researchers must also organize the data and convert it into actionable insights, providing a resource for decision-makers that highlights the significance of the raw data gathered after preliminary assessments have taken place. Ranging from straightforward frequency distributions to probabilities in summarization, the analytical techniques can vary in complexity, encompassing multivariate statistical analysis and data (Hair et al., 2010:39; Aaker et al., 2011:381).

Moreover, the insights gained from the research must be meticulously interpreted in planning and execution. The final report's structure includes the following components: "executive summary, introduction, problem definition and objectives, methodology, results and findings, and limitations

of the study" (Hair et al., 2010:40; Earl, 2010; Jacob & Furgerson, 2012; Doody & Noonam, 2013). In some instances, the researcher may be required to produce a written document or deliver an oral presentation based on the actual findings (Iacobucci & Churchill, 2010:32; Hair et al., 2010; Aaker et al., 2011:381, 2010:39; Field, 2013; Troncoso & Amaya, 2017; Palinkas et al., 2015), illustrating the importance of the research. The document must be precise and clearly articulated.

Operational definition of variables

This research offers numerous theoretical and practical insights by examining knowledge management strategies and challenges within the realm of information technology knowledge management. Key contributions will be outlined in the subsequent section:

This investigation develops and evaluates a cohesive conceptual framework designed to elucidate knowledge management practices and concerns, along with the interrelations between efficient knowledge management implementations, information dissemination, and knowledge safeguarding. The proposed framework was explicitly corroborated through empirical exploration.

This study addresses the timeless dilemma of reconciling intention with action. To evaluate economic and socio-demographic factors as influencers of the relationship between intention and behavior, moderation tests were applied to identify potential moderating elements that enhance or diminish the impact of intention on actual behavior.

This research bolsters the social marketing initiatives of the Lesotho Ministry of Foreign Affairs and International Relations. A frequent critique of social marketing endeavors has been the absence of comprehensive consumer analysis to aid in strategy formulation. This study aims to leverage social marketing expertise and scholarly insights to advance, enhance, and broaden existing efforts concerning techniques and difficulties in knowledge management, especially when it comes

to IT-driven knowledge management, and the dynamics of effective knowledge management applications from the standpoint of organizational capability, as well as knowledge sharing and safeguarding behaviors among entities. This investigation seeks to further develop, refine, and expand existing knowledge management methodologies and obstacles, while establishing novel research frameworks and methodologies, grounded in social marketing experience and academic wisdom. Marketing experts have indirectly addressed this within the scope of this study. Numerous links have been established between social marketing, information technology, and management. Although established concepts regarding employee behavior already exist, the researcher anticipates that many more connections involving employees will emerge based on the findings of this inquiry. The applicability of these theories across diverse domains or contexts underscores their innovative contributions to knowledge.

This study examined the principles to establish knowledge management strategies grounded in data, information, and knowledge, often depicted as a triangle that transitions from data to knowledge to wisdom, the latter being a superior level of information. Under this view, knowledge is considered a tangible entity that can be managed and disseminated using modern technology. The first point highlights the importance of simplicity in management, which enhances a theoretical perspective directly associated with a practical and effective information system framework. The second aspect reiterates the significance of simplicity in management, reinforcing a theoretical model that is evidently connected to a practical and effective information system legacy. The success of communities and social networks, along with their corresponding theories, is also discussed. Additionally, the hypotheses formulated for this investigation were visually represented at the end of the section in the research model.

Hypotheses development and research model

The research problem

Reflecting on the study inquiry, what are the critical components affecting knowledge management practices and the challenges that exist within the successful framework of the Lesotho Ministry of Foreign Affairs and International Relations? Are there applications available for knowledge management, sharing, and protection? The ensuing sections elaborate on the literature regarding the interplay among technical factors (knowledge quality, system efficacy, and service excellence), user pleasure, the online environment, and social factors (management support and user confidence).

Technical aspects

The caliber of understanding. The quality of knowledge in this research is characterized as the degree to which a knowledge artifact adequately fulfills user requirements (Iskandar, 2017; Gao, 2018). As noted by Pham (2021), knowledge quality has emerged as a vital concern for achieving a competitive edge and navigating swiftly evolving organizational landscapes. When superior knowledge is current, trustworthy, precise, and user-friendly, it can assist organizations in making more informed decisions rapidly (Kordab, 2020; Abbas, 2020). Additionally, previous studies have illustrated that knowledge quality is a precursor and a fundamental component of user satisfaction (Milosevic et al., 2016, 2019; Ashman et al., 2018; Jemal, 2021).

The efficacy of online communities and social networks hinges on the caliber of content contributions. It enables users to view knowledge management systems as more advantageous and to experience greater satisfaction (Pham, 2021). Good knowledge is necessary to promote user knowledge sharing and improve knowledge utilisation inside an organization (Pham, 2021). Users

tend to be more content when they anticipate greater benefits from online communities and social networks, such as high-quality knowledge (Muhammed, 2020; Pham, 2021; Rezaei et al., 2021). These discussions suggest that quality knowledge is crucial in influencing user satisfaction (Taskin & Van Bunnem, 2015; Singh, 2018). This research addresses the fundamental characteristics of Web 2.0 or social media phenomena, which are delineated and analyzed in this study that evaluates the functionalities of Web 2.0 applications as marketing instruments.

The primary categories consist of WebLogs, Online Communities, Social Networks, Forums/Bulletin Boards, and Content Aggregators. Web 2.0 applications are swiftly becoming a larger segment of the online populace's personal and social experiences, merging with both the mainstream commercial realm and the personal interactions of an expanding portion of internet users. Numerous individuals utilize social media platforms to share or broadcast "updates" or insights within their social networks or to other social media participants, as evidenced by various research studies (Ragunathan et al., 2015; Sloka & Puke, 2017; Khoo et al., 2017). Enterprises intending to introduce new goods to the market can leverage social media for self-promotion by garnering numerous likes and comments on their online content, thus capturing people's interest (Ragunathan et al., 2015; Sloka & Puke, 2017; Khoo et al., 2017) to draw in customers.

Application of knowledge management

Based on the aforementioned insights, we propose the following hypotheses regarding the adoption of online communities and social networks: they promote a higher degree of engagement by exploring the interplay between system success and user satisfaction; offer a critical examination of varying concepts, theories, and frameworks; investigate various factors that affect the transfer of implicit expectations and the degree to which Information Technology transfer expectations are met;

and assess the adoption and utilization by individual users, as well as the effects of Information Technology through social media platform courses. Hypothesis one suggests that implicit knowledge significantly influences the resource organisation and structuring, as well as the use of information technology in archiving.

Affordable broadband access has heightened the appeal of online communities and social networks by facilitating the deployment of novel, interactive, and complex applications in a swift and seamless manner. Consequently, social media platforms have emerged as powerful media instruments shaping public opinions (Al-Busaidi et al., 2010; Geschke et al., 2017). Moreover, prior studies indicate that awareness of the negative consequences associated with online communities and social networks is shaped by individual norms concerning the reduction of such platforms (Dolata & Schrape, 2015; Al-Busaidi et al., 2010). This increased awareness can foster the establishment of a coalition of like-minded individuals rallying for action.

The technical infrastructure, alongside the growing number of internet users engaging with Web 2.0, as well as consumer perceptions of Web 2.0 as a means of user empowerment in market dynamics, are pivotal factors accelerating the popularity and swift adoption of social networks and online communities. Additionally, previous research (Kende et al., 2016; Jin et al., 2017; O'Leary, 2010) has highlighted a correlation between managerial support and user satisfaction with specific systems or technologies. In online communication, the nature of user sentiment experienced across various social networks is a vital aspect to consider. Building on the the following theories were developed in this study based on the body of research on the connection between resources and accountability in the usage of technology within online platform systems. According to the second hypothesis, information technology has a major impact on how resources are organised and

integrated as well as how Knowledge Management Mechanisms (KMM) are improved.

Consumer views of Web 2.0 as a tool for user empowerment functioning as market participants, along with the realization that Web 2.0 has transformed into an essential element of the social landscape for a growing number of internet users. Prior studies have indicated a link between the performance of online platforms and the degree of user contentment (Keke, 2019; Vasic, 2019; Tandon, 2017). The capacity of Web 2.0 applications to satisfy individuals' needs for sharing information, insights, and creativity while addressing a plethora of personal requirements such as communicating, earning, and social interaction in novel ways are significant contributors, alongside a rising user base. Various studies indicate that social networks are platforms where individuals exchange their insights in a collaborative online environment (Zhao, 2020; Ali et al., 2019).

Regarding the effects on information dissemination, the research reveals that utilizing social media for professional purposes positively influences knowledge sharing overall. Due to the interactive characteristics of modern technologies, the online community is now actively participating in the creation, enhancement, and modification of information; quite differently from the past eras of the internet where data retrieval was more static. Moreover, earlier research focused on the technological dimensions of the system while evaluating its effectiveness (Nattapol et al., 2010; Ansari, 2020; Natarajan et al., 2017).

The three technological dimensions that are commonly examined comprise system quality, service quality, and knowledge quality. Although there is still a lack of empirical data, the impact of social characteristics like trust and management support on social networks has been examined in relation to the effectiveness of knowledge management systems (Syed, 2021; Asrar-ul-Haq, 2016;

Areekkuzhiyil, 2016, 2019; Chandran, 2020). We offer the following theories in light of the previously mentioned research, adapting these assertions to the knowledge management setting. The financial plan, KMM, and archive performance are all significantly impacted by digital resources, according to hypothesis three.

With the increasing excitement for social media among the public, organizations face fresh realities and challenges. The social propensity to promote the utilization and implementation of knowledge, along with an organizational culture rooted in trust and support (Al-Swidi, 2014; Silk et al., 2017). A culture of trust can enhance knowledge sharing, which is essential for the effective operation of a knowledge-based system. Previous studies have shown that subjective norms exert less influence on intention formation than attitudes (Eckhardt, 2010; Silk et al., 2017). The phrase "subjective norm" refers to an array of expectations derived from various sources.

Web 2.0 was considered a challenge for marketers in the communication landscape, as brand promises became more challenging to articulate and the persuasive strength of mass marketing diminished (Chipperfield, 2012; Reich, 2016). There exists a positive correlation between facilitating conditions and the intention to engage with online platforms (Chipperfield, 2012; Reich, 2016). From these findings, we can deduce that the more favorable the enabling conditions for online platforms, the higher the likelihood of their uptake. Numerous studies indicate that the construct of behavioral control impacts consumer intentions to utilize online platforms (Primmer, 2018; Pitt, 2020; Ali et al., 2019).

Some marketers are adapting to evolving realities, while others have acknowledged that social media platforms can serve as potent marketing instruments (Chung et al., 2015; Ali et al., 2019; Blakeney, 2012). To sum up, the initial discovery, which aimed to pinpoint the factors influencing consumers to embrace online platforms in the organizational market, was successful and affects customer choices, consumer behavior, and the elements driving the adoption of online platforms from the perspective of the organizational market (Al-Swidi et al., 2014; Ali et al., 2019). The desire to conform to others' opinions, along with perceived social pressures to behave in specific ways, significantly shapes an individual's actions.

Offering assistance in knowledge acquisition and retrieval, as well as making the capture and reuse of knowledge an integral part of organizational activities, exemplify how this support can manifest (Griffith, 2014; Demir, 2020). The literature review and hypotheses define the degree to which a website enhances the efficiency and effectiveness of purchasing, shopping, and receiving products and services for online customers (Noorshella et al., 2015; Chung, 2016). The study's conclusions suggest that the internet is a valuable tool clients can access as needed. It has also been shown to enhance service quality aspects like responsiveness, communication, and accessibility. Service quality refers to the extent to which a service meets its clients' needs, expectations, and satisfaction levels. Providing users with guidance and training on technology utilization is also crucial. Based on the preceding discussion, the following hypotheses are proposed. Hypothesis four demonstrates how an effective financial strategy significantly influences improvements in Knowledge Management Methods (KMM).

Investing in a contemporary archive entails equipping personnel with skills and knowledge to boost efficiency, implementing advanced technology, subscribing to modern databases, and guiding staff in sophisticated search techniques. Each element of the integration model is rendered ineffective for progressive learning services and performance without a robust budgeting strategy, technology deployment, resource acquisition, and employee development. A consistent framework, grounded in collaboration with ministry and archive management, fosters the advancement of educational initiatives, resource optimization, and overall organizational efficacy. Regarding productivity, the KMM facilitates the achievement of organizational objectives and performance through resource amalgamation (Oufkir & Kassou, 2019).

In the realm of information technology, trust is characterized as the belief in a system's reliability. Knowledge management systems embody information system trust, with key indicators for establishing trust being reliability, dependability, and high-quality system functionality (Proctor, 2012; Lauren, 2013; Wright, 2012). The organization accentuates the importance of information systems, with senior management articulating the purpose and vision of the knowledge management system to users and motivating their active involvement in the system. Information technology infrastructure encompasses the software, hardware, facilities, business systems, and IT-enabled activities, along with the service elements that support them. Various scholars have described information technology infrastructure as an assembly of both physical and virtual technological components and networks foundational to IT services (Rouse et al., 2017; Laan & Gruber, 2012; Lauren, 2013). Diverse types of technological efforts may require a tailored strategy for the infrastructure (Rouse et al., 2017; Laan, 2012). Traditional, cloud-based, or hyper-converged IT infrastructures can assist in fulfilling these objectives.

The endorsement of senior management is vital for the triumph of an information technology system. Support from upper management for executive information systems has been shown to establish a favorable environment for individuals directly engaged with the system to significantly influence its success (Sabherwal, 2010; Donnelly, 2019). A collection of informational, physical, organizational, and educational components is essential to empower community learning and actions towards a desired result; local cultural and natural resources are collectively defined as community knowledge infrastructure. In conclusion, numerous studies have been conducted. Research has identified knowledge management infrastructure as the facilitators and environment for nurturing knowledge and encouraging the production and dissemination of information inside the organization (Pendey, 2013; Donnelly, 2019). Organizational culture, structure, individuals, and technology all form part of the knowledge management infrastructure.

Users who are satisfied with their knowledge management system assess its success based on the comprehensive benefits it provides, such as task completion, enhanced the effectiveness of a knowledge management system is associated with improvements in decision-making procedures and users' quality of work life (Nattapol et al., 2010; Al-Busaidi et al., 2010). The importance of managerial support or leadership in knowledge management projects has been emphasised in a number of studies (Ho, 2019; Nattapol et al., 2010). Furthermore, prior studies have found a strong link between user happiness and managerial support with specific systems or technologies. Knowledge management systems that consider the impact of social factors, like managerial support and user trust, on the system's success remain rare, and empirical evidence is limited (Ho, 2019; Al-Busaidi et al., 2010).

Individuals who recognize the advantages brought by knowledge management systems are likely to find satisfaction in the overall system. Prior studies have identified a negative correlation between the effectiveness of a knowledge management system and the level of user satisfaction (Ragab and Arisha, 2013; Kwahk and Oh, 2010). Upon conducting an extensive review of existing literature, we concluded that by prioritizing knowledge management infrastructure, processes, and technological advances, our outcomes may improve. This focus could allow the ministry to surpass its rivals. To emerge as a leader in this information-driven age, an organization must embrace, implement, and continually refine knowledge management strategies (Pandey, 2013; Pandey et al., 2018; Vindrola-Padros et al., 2018). The ministry needs to establish a foundation for knowledge management practices by nurturing a conducive culture and promoting the human aspect. Once the framework is established, the capture, storage, and the utilisation of information become integral. In the realm of knowledge management practices, technology is shaping the path toward enhanced performance. Aligned with our study's objectives and informed by this literature review, we aimed to elucidate the links between attitude-related factors and consumer intent to utilize information technologies. Consequently, we put forth the following research hypotheses. The fifth hypothesis suggests that KMM significantly enhances employees' learning services regarding archive creation, acquisition, codification, storage, utilization, and sharing.

In order to promote knowledge sharing among users and directly increase knowledge consumption within an organisation, the quality of the content must be rich. This requires investigating organizational structure metrics related to information sharing rather than focusing solely on activities tied to intellectual capital investment (Muhammed et al., 2020; Mathrani et al., 2013; Bedford et al., 2019). Tools for managing organizational knowledge exist, for instance, where

functional managers oversee technical research within their respective functional groups. This research emphasizes behaviors that necessitate a trust-based corporate environment fostering information exchange, supported by the organization's entire structure; this approach can promote organizational learning and align with a culture of trust and transparency. The results further indicate that organizational structure aids in cultivating a knowledge culture by bolstering and directing activities such as gathering, organizing, clarifying, sharing, and reusing information and knowledge. Users desire greater benefits from knowledge management systems, such as high-quality information, which in turn increases the likelihood of their satisfaction. To gain a competitive edge and manage ever-evolving organizational landscapes, the quality of knowledge has emerged as a pivotal concern (Pandey & Dutta, 2013; Bedford et al., 2019).

Organizations must learn how to harness the information that is already available within their confines, alongside recognizing the value embedded in management systems and the processes maintaining a knowledge-sharing culture (Mathrani et al., 2013; Muhammed et al., 2020). The results also suggest that establishing a knowledge culture is facilitated and directed by the organizational structure. This study will help managers grasp the importance of knowledge infrastructure capabilities in the success of knowledge management initiatives and guide further research to fully unlock the potential of such endeavors.

Definition of key terms

Social norms (interpreted as a descriptive norm in this research): Views on whether the majority of organizations share technical insights (interpreted as a descriptive norm in this research) (Fishbein & Ajzen, 2010). The mutually accepted guidelines for appropriate conduct within a group

are known as social norms. These norms may exist as informal guidelines that shape the actions of societal members or may be established as formal laws (Mann et al., 2020; Young & Peyton, 2015; Legros & Cislighi, 2020; Sandholtz, 2017; Molinari, 2015).

Perceived behavioral control: The simplicity with which individuals can prepare for networking and diverse environments (Fishbein and Ajzen, 2010). The concept of 'perceived behavioral control' relates to the individuals' beliefs about their capability to govern their actions and their own competence to execute a task (Sahni, 2017; Hardin-Fanning, 2017). When perceived behavioral control is combined with intention, it can reliably forecast behavior, reflecting genuine behavioral control (Reich, 2016; Aronson et al., 2010). For instance, individuals may unwittingly yield influence to an authoritative figure, even risking their own safety (Sahni, 2017; Hardin-Fanning, 2017; Reich, 2016; Aronson et al., 2010).

Social media: Platforms and applications that enable users to create, disseminate information, or partake in social networking.

Social marketing: A technique aimed at transforming behavior to benefit both the society and the individual, utilizing marketing principles and strategies.

Tacit knowledge: Denotes the insights, competencies, and abilities acquired through personal experience that are often challenging to articulate or communicate. Tacit knowledge is sometimes referred to by alternative phrases such as experiential knowledge or tribal knowledge. This type of knowledge facilitates employees in learning from others' experiences, enhances communication among staff, encourages appreciation for diverse viewpoints, and helps distinguish their organization from other institutions (Doran, 2016; Kim, 2019; Basic & Verrina, 2021). Ethical obligations necessitate the implementation of a codification strategy focused on repurposing information or establishing a knowledge management strategy (Hansen et al., 2013; Weber & Krupka, 2018;

Griffith, 2014).

Information technology: When the reflective moral capabilities of social actors are engaged to influence actions aimed at achieving a specified goal or behavior set, this is termed blame attribution (Steg & De Groot, 2010; Ariestiningsih, 2020). Hence, information technology serves as a tool that employs computer systems or devices to retrieve information. It plays such a significant role in our workforce, organizational operations, and individual information access that it constitutes a substantial part of our everyday activities. A sense of personal accountability for the adverse effects stemming from an organization's failure to disseminate technological know-how (Steg & De Groot, 2010; Ariestiningsih, 2020; Russell, 2017; Shoemaker, 2017; O'Connor et al., 2020; Rudy-Hiller, 2018; Wallace, 2017) defines moral responsibility as the ethically warranted position arising from either an omission or an action aligning with one's ethical duties, potentially eliciting recognition, reprimand, reward, or penalty.

Digital resources: These can be understood as assets that have been developed and created digitally or through the conversion of analog materials into a digital format. Such automated systems are intended to modernize legacy systems that support organizational operations, thus holding particular significance for pro-environmental initiatives (Baumeister et al., 1994).

Knowledge Management (KM) Assessment: This is the method of acquiring information regarding knowledge management within an organization and pinpointing deficiencies.

Knowledge Management (KM) Analysis: This involves interpreting and recognizing the vital areas within an organization that warrant enhancements.

Knowledge Management (KM) Training: This practical approach aims to elevate an employee's awareness and understanding, preparing them for putting into practice a knowledge management framework.

Knowledge Management (KM) Culture: The ultimate goal is to foster a knowledge management culture within an organization, where employees can freely communicate, learn from one another, and dispel a climate of fear.

KM model: This is a systematic approach to examining the KM process employed by an organization to explore its characteristics and customize it to meet the organization's unique requirements. It considers the degree to which organizations recognize the consequences of not sharing technological expertise (Steg & De Groot, 2010).

Financial plan: This entails evaluating the current fiscal condition of an entity to establish future financial objectives and the means to achieve them (Ali, 2024). It comprises five budgets outlining the minimum necessities for investing in information technologies within an organization, the financial investments required, and the strategy to finance these endeavors.

Study procedures and ethical assurance

In this research endeavor, approval from the Unicaf Research Ethics Committee was secured. Participants indicated their consent by completing and returning the questionnaires. Consent was obtained through the provision of information and by completing the consent section on the web portal or the consent form prior to initiating the study. The dates of informed consent included in the report were sanctioned by the ethical committee of the University. Additionally, we verified whether the name of the ethics commission and the ethical approval reference number were cited. Other metrics reported in relation to informed consent and ethical assurance, including an ethical declaration, served as secondary outcomes of our investigation. For example, we checked if the authors stated compliance with the Helsinki Declaration participants were advised that they might

leave the research at any time without facing reprisals. To facilitate subgroup analyses, we collected supplementary information such as the type of study, resources, and the country of the publishing organization. We also ascertained the nationality of the publishing organization of each study, defined as the country where the research was conducted.

This study will involve ethical considerations. Quinlain (2011) posited that when researchers engage with participants, they should adhere to a code of conduct concerning data collection, retention, analysis, and reporting. Ethical considerations permeate every phase of the research process. Confidentiality and anonymity shall be upheld as paramount principles. Ethical issues will be deliberated with the supervisor. Appendices A and B will include the introductory email and survey tools respectively. The researcher's contact details will be provided in the email, emphasizing that participation is entirely optional. Participants will be informed about the research's nature and goals in addition to the confidentiality of their responses and the anonymity expected of them as participants (Engel et al., 2014; Jeanne, 2011; Lesley, 2012).

The research must not inflict any harm on the participants. When there exists a possibility of participants facing mistreatment or being placed in uncomfortable situations, strong justifications must be presented (Eisinga et al., 2012; Griffith, 2014; Soeters et al., 2014). In such instances, additional planning, informed consent, and thorough debriefing would be necessary to demonstrate how the risk of participant harm or discomfort will be minimized (Griffith, 2014; Eisinga et al., 2012). To mitigate the potential for harm, the researcher should contemplate securing participants' informed consent, protecting participant privacy and confidentiality, avoiding deceptive practices when designing the study, and allowing participants the freedom to withdraw from the study at any moment.

The initial phase of the information assurance process typically involves recognizing and categorizing the data assets that require protection. Information assurance practitioners will subsequently perform a risk assessment of these assets (Sadiku et al., 2017; Richard et al., 2019; Hanna et al., 2017; Hu et al., 2020). This risk evaluation aims to identify vulnerabilities that might be exploited. Following this, the likelihood and ramifications of an adversary taking advantage of a weakness in an asset are assessed, with impacts measured in terms of the asset's expense to the stakeholders (Sosin et al., 2018; Pringle et al., 2014; Chakraborty et al., 2010). The overall risk to the data asset is dictated by the product of the threat's impact and its probability of occurrence.

After the risk assessment concludes, information assurance practitioners develop a risk management strategy to guide further actions. This plan encompasses countermeasures, which may include risk mitigation, elimination, acceptance, or transfer, as well as avoidance, identification, and response to threats. Countermeasures might involve technical solutions such as firewalls and antivirus programs, policies and procedures for routine backups and configuration fortification, along with the involvement of individuals in specialized computer emergency response teams (CSIRT). Once this plan is in place, it undergoes testing and evaluation, generally through formal audits (Sosin et al., 2018; Pringle et al., 2014; Chakraborty et al., 2010). The information assurance process is cyclical, as both the risk assessment and management strategies are subject to regular revisions and refinements based on the evidence gathered regarding their effectiveness and thoroughness (Park et al., 2016; Stephenson, 2010; Sosin et al., 2018). Consequently, an investigator contemplating data collection will require adequate information to make a well-informed choice.

This section outlines key considerations to keep in mind during your data collection efforts. The steps outlined need not be followed in a strict sequence; the provided framework serves purely as a guideline. The context, the issue to be addressed, the objectives of data collection, and the type and scale of the organization all influence how data is gathered and analyzed (Oprime et al., 2015; Shujahat et al., 2017). Previous research has suggested that the optimal data collection incorporates various touchpoints. A paramount concern remains to ensure that any collected information adheres to regulatory codes, as well as privacy and freedom of information laws. It is advisable to focus efforts on collecting data that can illuminate issues. For the sake of efficiency and effectiveness, it is recommended to pursue data that sheds light on challenges or opportunities (Shujahat et al., 2017; Garfield, 2012). To guarantee the data's legitimacy and dependability, it must be gathered via recognized data collection methodologies. Identifying challenges or potential data collection opportunities marks the first step before determining future actions. In this regard, conducting both internal and external evaluations may be crucial to understanding the current circumstances within and outside the organization (Stergious et al., 2018; Devi Juwaheer et al., 2013; Ibrahim et al., 2015).

Numerous studies view Customer Data Platforms as tools to help researchers tackle numerous challenges, including data integrity, adherence to data protection regulations, and beyond (Eger, 2018; Emerson et al., 2018; Farooq & Vij, 2018). A researcher should assess all processes, protocols, and practices relevant to staff, technical experts, practitioners, service users, or any pertinent audience. They examined the organizational culture through the lenses of diversity and equity, human rights, and inclusion. Analyzing the environment and external representation is crucial. Prior to proceeding to step 2, organizations must ascertain if any initial actions, such as training and policy formulation, can be undertaken without data collection to tackle these challenges

and/or prospects. Step 2 involved pinpointing priority issues and/or data collection opportunities, as well as drafting goals and objectives. The researcher evaluated the organization's internal and external challenges and/or opportunities identified in step 1, subsequently selecting one of the prioritized concerns and/or opportunities to initiate the data collection endeavor. For example, a Customer Data Platform infrastructure facilitates linking the gathered data to the appropriate tools for generating insights, evaluating attribution models, and investigating user analytics (Meyer et al., 2002; Richards, 2018; Al-Azawei, 2018; Henseler et al., 2014; Voorhees et al 2016).

When prioritizing a challenge or data gathering opportunity, an investigator should take into account various factors across different touch points. A primary consideration is ensuring that any acquired information aligns with the Code and complies with privacy and freedom of information regulations. It is advisable to strive to gather data that illuminate issues. For the sake of effectiveness and efficiency, efforts should focus on collecting data that reveals insights into problems or opportunities (Shujahat et al., 2017; Hood et al., 2009; Fu, 2015; Nandru & Rentala, 2019).

To guarantee the legality and reliability of the data, it must be collected following established data collection methods. Is there an underlying cause or opportunity for data gathering that seems to present new challenges and/or openings? If an investigator plans to gather data regarding multiple challenges simultaneously, subsequent actions, such as objective-setting, should be customized for each issue and/or opportunity individually. The goals for each issue and/or opportunity may stem from hypotheses about the current situation, which can then be tested through data collection and analytical techniques. For instance, 'Sending push notifications will enhance app downloads' (Richards, 2018). It may be challenging to demonstrate a relationship between strategies, tests, and a simple increase or decrease in app downloads (Fahmi et al., 2017; Kero, 2016). Step 2 could also

involve the researcher formulating a focused set of questions answerable via data collection, which could disadvantage individuals categorized on both Code and non-Code bases. It is vital that individuals and their 'comparison group' share one or more characteristics (Fornell & Lacker, 1981).

In stage 3, a researcher can determine, among other elements, what will be examined, the methods of data collection, which data sources will be utilized, and the duration of the data collection initiative. These choices could involve guidance from an expert. The strategies and techniques will be aligned with the goals articulated in step 2 and will greatly vary based on several factors, including the context, organization size, available resources, as well as the significance and intricacy of the identified issues or opportunities (Choi et al., 2010; Costa & Monteiro, 2016). At this juncture, it is essential to consider who will be the subjects of data collection. Notably, gathering and analyzing data can differ in the fundamental characteristic(s) being investigated. Certain data collection initiatives involve acquiring information from various organizations, sizes, or communities across diverse locations and geographies. Who will be responsible for collecting the data and the comparisons made will be critical when deciding where to gather information (Al-Emran et al., 2018; Afacan et al., 2015). A researcher can structure the data collected by categorizing it. As highlighted in this phase, this can occur either before or after the information is retrieved in Step 5.

Social scientists are frequently invited to spearhead or assist in data gathering efforts related to human rights (Bae et al., 2017; Allen et al., 2015). Some commonly used statistical methods that can be utilized to measure instances or the count of individuals in a study representing a specific demographic include surveys, questionnaires, and statistical analysis (Bae et al., 2017). Participants have the option to choose from a rating scale of 1 Agree, 2 Strongly agree, 3 Disagree, 4 Strongly disagree, 5 Slightly disagree, 6 Slightly agree, on a simple survey statement utilizing a 1-5 rating

system. It was essential to consider the perspectives of respondents while crafting a high-quality survey and making sure that the inquiries are relevant, clear, accessible, and easy to understand. Various practical factors need to be taken into account, such as whether respondents can read, face no language or cultural hindrances, and are easily reachable. Furthermore, data may be collected by trained personnel or specialists, either from within the organization or externally, who observe and record the characteristics and behaviors of study participants (Santos, 1999; Cheng & Liang, 2010).

Data can be collected and analyzed in response to evolving conditions or requirements on either a temporary basis or project-by-project model; a short-term data collection initiative would have defined start and end dates alongside specified deliverables that need to be achieved within a certain timeframe. More research indicates that data collected during a time-restricted study may be less comprehensive than that gathered in a prolonged study over an extended period (Alegre et al., 2013; Chen et al., 2016). This is due to the fact that short-term research does not permit long-term assessment of trends, patterns, or changes. Conversely, short-term studies may represent the optimal choice to achieve objectives and project goals when costs, time, and resources are constrained (Chen et al., 2016; Cheng & Krumwiede, 2017). Additional factors, such as individuals altering their behavior during the data collection process while under scrutiny, may also affect the validity of the data.

As noted by Sosin et al. (2018), anonymity was preserved when the identity of the subject couldn't be connected to their personal responses. In instances where anonymity couldn't be guaranteed, it became essential for the researcher to contemplate confidentiality concerning the management of private information to protect the identity of the subject. According to Stephenson (2010), confidentiality signifies individuals' ability to share and withhold information as they choose.

The researcher had the duty to "uphold confidentiality that transcends conventional loyalty." When the need arose to breach confidentiality for the sake of societal protection, Clark (2008) investigated the ethical quandary faced by researchers.

Emmanuel (2020) remarked that the investigator's skills, precise planning, and anticipated valuable outcomes are the three pivotal elements in research. Any gaps in knowledge within the study domain must be articulated explicitly. Inexperienced investigators should be guided by a qualified expert who has received approval from an ethical committee. Additionally, a comprehensive selection process for data collection must be followed to ensure validity and reliability, a necessity in all research endeavors. Ethical considerations surrounding human subjects must be prioritized accordingly.

Thus, obtaining informed consent stands as a cornerstone of research ethics, intertwined with confidentiality. In essence, informed consent involves making participants aware of (a) their existence in the research and (b) the conditions governing the research. For example, the objectives of the study must be clearly communicated. The methods employed, as well as any responsibilities, discomforts, inconveniences, or risks that participants may encounter, should also be disclosed. The researcher must reveal no significant information that could influence the participants' decision to grant or deny consent. Another requisite of informed consent is that individuals must be willing to partake without any coercion or deception (Lantos, 2016; Kincaid, 2014; Perper et al., 2010). If participants are misled, how can they be cognizant of their involvement in the study and the requirements it entails? Therefore, the researcher should generally eschew deceitful tactics. If the researcher cannot acquire informed consent from subjects, they must clarify the reasons (Jose et al., 2017; Chen et al., 2020; Hanna et al., 2017). Furthermore, the researcher needs to recognize that

there is never a time when informed consent is unnecessary or can be disregarded.

The practice of ensuring data protection and managing the risks linked to its use, processing, storage, and transmission is termed information assurance. Information assurance encompasses the integrity, availability, validity, non-repudiation, and confidentiality of user data (Sosin et al., 2018; Pringle et al., 2015; Chakraborty et al., 2010). It includes security measures for both digital and physical data. These safeguards apply to both physical and electronic data, whether in transit or at rest, forming part of information security—a business outcome derived from information risk management, which is an integral division of information security (Sadiku et al., 2017; Richard et al., 2019; Hanna et al., 2017; Hu et al., 2020). To secure assurances for official consent prior to any data collection for the project, researchers must complete a research ethics package, which comprises the following documents for review:

Application for Ethical Research Approval. Informed Consent Agreement. Participant Debriefing Document or Consent Document for Guardians. Gatekeeper Authorization Form. Surveys as Research Instruments. Research Questions and Hypotheses. The REAP folder houses all essential resources and guidelines for completing the REAP process. Before the application submission, researchers are advised to review the research safety policy and the International Ethical Guidelines for Health-Related Research in Humans (2016), both of which serve as valuable references for researchers and practitioners alike. Students affiliated with Unicaf must comply with the stipulations outlined in the aforementioned documents while conducting research. All the documents listed above will be appended in the annexes.

If a participant opts to partake in the study, the researcher is responsible for ensuring their understanding of the associated risks and benefits, as well as utilizing appropriate designs and data management strategies that uphold participants' rights. The ethical obligations of the researcher encompass obtaining informed consent from participants, safeguarding the interests of vulnerable groups, ensuring participant anonymity where applicable, respecting privacy and minimizing unwarranted intrusion, maintaining transparency in interactions with participants, and ensuring equitable treatment – these are vital considerations (Ahmed et al., 2017). Practitioners within the discipline are encouraged to refer to these norms to guide their conduct and build public confidence in the field. The second principle pertaining to legal adherence emphasizes the importance of data security, establishing ownership through intellectual property rights and copyright, acknowledging the legal and ethical sensitivity of the research issue, and employing research methodologies that adhere to legal standards to mitigate risks of identity theft, hacking, and spamming.

Moreover, the third principle, emphasizing scientific integrity and beneficence, stipulates that researchers must inform the ethics reviewer post-approval of any significant protocol alterations, highlight the significance of their research, possess the required credentials, including qualifications and experience, apply suitable research designs along with fitting strategies and methods, foster honesty and openness with colleagues, and ensure enjoyment in the process. Lastly, the fourth principle, concerning safety, aims to protect participants from any physical or psychological harm or discomfort, while also considering the personal safety of themselves and their collaborators (Korstjens et al., 2017; Vanclay, 2014; McGrath et al., 2018). Adhering to ethical standards in research is crucial for several reasons. Firstly, these standards guide researchers towards knowledge acquisition, integrity, and the avoidance of mistakes, all of which should be aspirational. For

instance, it improves precision and minimizes errors.

Secondly, since research often requires a significant collaborative effort to manage teamwork and coordination within a varied group of individuals, ethical standards promote qualities such as accountability, trustworthiness, fairness, and reciprocal respect, which are vital for cooperative endeavors among professionals from different areas, disciplines, and organizations. Research ethics frameworks like authorship guidelines, copyright and patent laws, data sharing protocols, and peer review confidentiality measures are merely examples of safeguarding intellectual property while facilitating collaboration (Vanclay, 2014; McGrath et al., 2018). The overwhelming majority of researchers prefer not to receive recognition for their contributions and seek to prevent their ideas from being used, appropriated, or shared prematurely. Furthermore, the third tenet, scientific honesty and beneficence, functions under legal frameworks, including the Data Protection Act and equality laws, alongside government directives such as Safeguarding (Sokoh, 2021; Dooly, 2017). We will also employ ethical concepts and principles to assess, develop, and interpret legislation. For instance, an individual investigating ethical norms in medicine may outline ethical standards as strategies, procedures, or viewpoints for determining how to respond when faced with intricate dilemmas and challenges.

Conversely, several ethical principles serve to hold researchers accountable to the public. Government regulations surrounding research misconduct, conflicts of interest, and the protection of human subjects are essential to ensure that publicly-funded researchers are answerable to society. Fourthly, ethical research practices aid in garnering public trust (Brindley, 2012; Parker, 2014; Saiz et al., 2018). When the populace is willing and believes in supporting research of high quality and integrity. Lastly, various studies have shown that other important moral and social objectives, such

as social responsibility, human rights, and compliance with legal standards, significantly influence additional key moral and social aims (Artino et al., 2018; Boumil & Berman, 2017). Unethical research errors can adversely affect individuals, students, and society at large. Given the significance of research ethics, it's unsurprising that numerous professions take an interest in it (Fleming, 2018; Griffith, 2014). For example, a researcher who fabricates data in a clinical trial risks prosecution for jeopardizing or harming patients, whereas a researcher who overlooks safety guidelines regarding radiation or biological hazards endangers not only their own well-being but also that of others. Several governmental organizations have established ethical guidelines for researchers receiving public funding.

Data collection and analysis

The primary research technique employed is a survey, utilizing a quantitative study design. In analyzing data, there is a possibility that one's identity and responses may be revealed through correlations between different variables (i.e., survey inquiries) (Groves et al., 2010; Eisinga et al., 2012; Griffith, 2014; Soeters et al., 2014). For instance, if the researcher examines responses among employees in a specific age group, tables and rules may be established requiring a minimum number of units to be represented before any data or information is publicly shared.

The primary data analysis techniques used in this study were structural equation modelling (SEM), exploratory factor analysis, and descriptive statistics (Hair et al., 2006; Bryman, 2012; Quinlan, 2011). Structural equation modelling was the main statistical method used to assess the proposed conceptual model's hypothesised link. In order to collect the necessary data for the study, questionnaires were distributed. Sections A and B comprised the questionnaires. While Section B

was organised using previously validated questionnaires for multiple constructs, using a 5-point Likert scale, Section A gathered demographic data, including age range, gender, and computer/mobile phone competency.

Data analysis and result

In alignment with the research goals, the data was assessed statistically through PLS-SEM. To commence, descriptive statistics were applied to outline the demographics of the participants. Subsequently, the data was scrutinized for reliability and validity. Following that, SmartPLS could be used to assess the validity (convengent and discriminant). Lastly, the results of the hypotheses were presented. The Questionnaire Items (A) Points were assigned based on each respondent's feedback on the statements in the questionnaire item, as shown in table 3.3.

Table 3.3: Discription of scores regarding statements reactions

Response	Scores for positive worded item	Scores for negative worded item
Stronglly disagree	1	4
Disagree	2	3
Slightly disagree	3	2
Slightly agree	4	1
Agree	1	3
Strongly agree	4	2

Table 3. 2 shows how the responses to each statement in the questionnaire were allocated score. As shown in Table 3.3 the number of respondents, at different locations, who initially adopt online communities and social networks, as well as those who did not use them.

More information from analysis

The tools utilized to assess the variables in this research were developed by the investigators with insights from specialists in the field, relying on the existing measurement techniques found in the literature concerning knowledge management systems. A five-point rating system was used for each item. Likert scale, with "agree" and "uncertain" as the extremes. The attributes of timeliness, relevance, and The tools utilized to assess the variables in this research were developed by the investigators with insights from specialists in the field, relying on the existing measurement techniques found in the literature concerning knowledge management systems. Each item was evaluated using a five-point completeness of information within knowledge management systems were adapted from the work of Charkrabarti et al. (2017). The seven-item scale for system quality, as outlined by Yang, Fang, and Lin (2011), was implemented based on the operationalization by Nattapol et al. (2011) Intrinsic knowledge quality; Contextual knowledge quality, Knowledge that can be used; Appropriate response time; Stability of the system; User-friendliness and An easy-to-use interface (p, 585).

As described by Nattapol et al. (2011), seven criteria were employed to assess service excellence: response time, adequate support tailored to users' distinct requirements, possessing a thorough understanding of user expectations, and embodying empathy when users face challenges with the systems. This study explores how to integrate principles, methods, and practices of knowledge management, alongside a quality management framework, into an operational model that meets the needs of organizations utilizing knowledge management. In the contemporary business landscape, knowledge management has assumed a vital role. On the other hand, quality management is a vital business competency that enhances a company's efficiency and capabilities (Chakrabarti et

al., 2018; Pei-Yi et al., 2013). The primary objectives of knowledge management and quality management are to enhance performance at every tier of the organization. A high standard of knowledge quality bolsters an organization's ability to perform optimally, create innovative and valuable products or services, reduce costs, and elevate sales. It enhances performance by augmenting problem-solving capacity, increasing process efficiency, and strengthening problem-solving skills. The most important of the three categories of knowledge quality is actionable knowledge followed by intrinsic knowledge quality and contextual knowledge quality (Lerner & Lomi, 2018; Kupper et al., 2016).

First, intrinsic knowledge quality denotes the existence of a shared classification system that is essential for generating, transferring, and exchanging information. Knowledge categories are seldom examined in knowledge classification studies as they emerge within hierarchical information systems designed to facilitate knowledge discovery and retrieval (Lerner & Lomi, 2018; Ree, 2019). An online platform for producing and sharing open knowledge. Second, contextual knowledge quality pertains to the act of extracting situation-specific content from a pre-existing knowledge base by adding context. For instance, when agents or practitioners receive adequate training, they develop a comprehensive understanding of the knowledge duration (Coles, 2017, 2020; Ree, 2019). Individuals employ contextual information implicitly while interacting, instinctively inferring and interpreting their current situation. Lastly, actionable knowledge quality refers to knowledge that possesses external validity or relevance that must be applied in practical scenarios. It is suggested that the causation concept, which supports extensive empirical research, makes it challenging to convert high external validity knowledge into actionable knowledge.

The theme of actionable information has been pivotal in management and organizational research on at least two fronts. Initially, actionable knowledge has been conceptualized as a response to an enduring concern regarding its applicability. Actionable knowledge highlights the nexus between theory and practice, emphasizing the significance of management research by showcasing that the insights obtained are actionable, meaning they are applicable by the stakeholders for whom they are intended: businesses, practitioners, policymakers, and researchers (Ochoa-Jimenez, 2021). Furthermore, actionable knowledge seeks to enhance our theoretical comprehension of action as a phenomenon within organizations, as well as the interplay between action and knowledge or ways of knowing (Pritchard & Turri, 2016; Wilson, 2012). The emphasis is on the elements that sway the connection between information and action, along with the potential this interaction holds. Enterprises that adeptly “manage” both their information and their responses to it will face rewards and repercussions.

It can be deduced that managers evaluating the quality of knowledge within their organizations are particularly mindful of the quality of actionable knowledge. An alternative perspective might suggest that managers take task orientation into account regarding the knowledge processes of sharing, storing, and distributing. They remain unfazed by contextual factors. To scrutinize the significance of knowledge quality attributes, weights are assigned to these attributes based on their relative importance concerning their overarching level. Volatility is identified as the most critical attribute weight of actionable knowledge quality, followed closely by usefulness weight. This indicates that the clarity of managers’ knowledge quality holds more weight than responsiveness (Pritchard & Turri, 2016; Wilson, 2012; Ochoa-Jimenez, 2021). Completeness is regarded as more vital to inherent knowledge quality compared to accuracy and correctness.

Likewise, four metrics were employed to assess user trust based on Nattapol et al.'s trust scale (2011). User trust is evaluated through users' confidence in the system's comprehension, in addition to their faith in the system's truthfulness and reliability of knowledge. The backing for this study is grounded in Al-Busaidi et al. (2010), which contends that it was assessed using four items about senior management's role in supporting knowledge management system users and ensuring that the study's aims were achieved. Knowledge management systems have been established with a focus on their significance and promoting knowledge sharing. Users' overall satisfaction, reflecting positive or negative sentiments regarding the use of knowledge management systems, was gauged using four items from Wu and Wang's satisfaction scale (2006). The success of knowledge management is evaluated based on how users perceive the advantages of knowledge management systems, measured by a five-item assessment that aids users in acquiring new knowledge, managing knowledge, making informed decisions, enhancing work-life quality, and accomplishing tasks.

Prior to the main data gathering, a preliminary assessment was carried out to verify the dependability of the survey tools and the clarity of the questions. A group of 24 participants, who either engaged with or refrained from using online communities and social networks for their enterprises, were invited to provide feedback on the structure and substance of the questionnaire. Their insights were crucial in evaluating the sufficiency of the items, the pertinence of the queries, and the lucidity of the wording. The respondents in the pilot test concluded that the survey's questions were sufficiently broad and pertinent to the constructs, confirming the measuring scales' face validity.

Data collection

By conducting a comprehensive review of the available literature, we meticulously devised a specialized research instrument to look into the most important problems in the field of study nowadays. The researchers identified 24 measurement items/observations categorised into six latent dimensions with the help of a comprehensive literature review (see Table 3.1). Trust in usage, perceived ease of use, perceived efficacy, attitudes towards involvement, intent to embrace KMS, IT, digital resources, financial strategy, and archival performance were the six main components of this study. Additionally, both explicit and tacit knowledge were used for resource management through the creation of the other two crucial elements of a knowledge management model (KMM). For data collecting, we chose a survey with a five-point Likert scale, where 1 denotes 'strongly disagree' and 5 denotes 'strongly agree'. By shortening the survey and using Likert scales, participants are more inclined to engage, and the survey is more economical. (Bartikowski et al., 2010; Devi et al., 2013; Fussell & Truong, 2022). The research instruments were crafted to be straightforward, technical, and adequately detailed to fulfill our aims. Before developing these tools, we explored extensive literature and sought guidance from specialists in the ministry of archives in Lesotho.

The investigation was highly technical, specifically concentrating on the two key areas of KMM and resource integration to collect information from archive officials. Additionally, we provided the link to the research questionnaire after obtaining the email addresses for the administrative archives indicated on each ministry's website. Professionals with publicly accessible email addresses were also given printed copies of the research questionnaire. Due to the country's expansive nature, the data collection span extended over four months, from July 2024 to September 2024. We collected 331 responses from personnel across the South, North, technical managers, and

practitioners. Utilizing the gathered data, the feasibility of integrating digital resources into ministry archives using the KMM framework was evaluated.

Table 3.4: Survey items on knowledge management systems

Resource Integration	For convenient access, we have combined resources from multiple internal sources into a database or portal. These resources may be vast, disorganised, or rapidly evolving. Combine internal and external resources to encourage in-depth examination of our archival environment.
Perceived Ease of Use	We have created or implemented parallel computing techniques for processing digital resources. There are numerous digital visualisation technologies that we have created or used. Cloud-based digital resource integration, processing, and operation services are something we have created or implemented. We have created or implemented open source resource integration software. Not Only SQL (NoSQL) is one of the new database types that we have created or implemented to store data and resources.
Trust	Our endeavour to integrate digital resources has adequate funding. There is still plenty of time for our digital resource integration project to finish the task.
Attitude	We can pick up fresh, pertinent knowledge and abilities. We are able to comprehend the pertinent absorbing information and abilities. We can use our pertinent information and abilities. Together, we have decided to focus on developing new knowledge and skills as well as utilising our current talents.
Perceived Usefulness	Compared to our rivals, we utilise more resources. We spend more on database ordering than our competitors do.

Feedback on our service is better than that of our rivals.

Our services are of higher quality than those of our competitors.

When it comes to service delivery, we are implementing new digitalization more quickly than our rivals.

Tacit Knowledge

We think that the system of organisational archives as a whole is enhanced by the socialisation of tacit knowledge.

We look for information, ideas, and opinions from one another while integrating resources and technologies.

Understanding other people's perspectives, repeating what they say, and asking, "Do you mean that?" are all beneficial practices.

All participating officials contribute their formal or informal experiences during the conversation in the ministry archive.

To ensure innovation, management encourages all staff members to share ideas with specialists and with one another.

Source: (Gupta and George, 2016; Ganguly et al., 2019; Lee et al., 2020)

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Sample characteristics

Table 3.5: Profile of the respondents

Measures	Items	Frequency	%
Gender	Male	200*	60.6**
	Female	130	39.4
	Total	330	100%
Institutions	South	185*	56.1**
	North	135	40.9
	Technical	6	1.8
	Practitioners	4	1.2
	Total	330	100%
Qualifications	Bachelor	315 *	95.5**
	Masters	12	3.6
	Phd	3	0.9
	Total	330	100%
Service Experience	<5 years	67	19.9
	5–10	97	28.4
	11–15	101	27.7
	16–20	38	17.1
	>20	27	6.9
	Total	331	100.0%

Notes: The frequency is shown by a single bold asterisk (*), and the percentage of people with more than 20 years of work experience in related sectors is shown by a double asterisk (**).

Result analysis

In Table 3.5 the demographic characteristics of the participants indicate that 60.6% are men, while the remaining 39.4 % are women. A significant portion of the participants (71.7%) is drawn from public universities, with 28.3% representing private sector institutions. In terms of educational background, 95.57% of participants hold Bachelor's degrees, 3.6% have completed M.Phil. or MS programs, and a mere 0.9% possess PhD qualifications. Furthermore, 19.9% of the participants possess less than five years of professional experience, whereas 28.4% have between 5 to 10 years of experience. Over 27.7% have accumulated 11 to 15 years of service, 17.1% bring 16 to 20 years of experience, while the final 6.9% are seasoned veterans.

Female representatives within the Ministry of Foreign Affairs and International Relations comprised 60.6% of the male cohort; conversely, female participants constituted 39.4%. Notably, 44% of the employees surveyed are married women, who may struggle to deliver exceptional service due to multiple responsibilities at home. In certain cases, one partner may need to engage in organizational activities while the other is preoccupied with various commitments, which includes both widowed women and men. Predominantly, they are from the southern region (56.1%) and possess 1 to 6 years of experience using online forums and social media platforms. A majority of the respondents (60%) report having three years of experience, and two-thirds rely on online forums and social media to accomplish their tasks. In the South, respondents allocated 21.2%, 32%, 26.1%, 15.2%, and 5.5% of their entity resources on education and utilizing content communities, blogs, forums, social networks, and content aggregators, respectively. Similarly, in the North, the distribution mirrors this spending pattern.

The data reveal that 5%, 10%, 63%, 14%, and 8% of respondents in the South utilize (Content) Communities, Blogs, Social Media Forums/Bulletin boards, and Content Aggregators, respectively. The percentages in the North align with these figures. The ratio of personnel or respondents employing online forums and social media to facilitate quicker and more efficient workflows indicates that 30% and 16% of respondents in the South and North, respectively, leverage appropriate technology to streamline their work, while 70% and 84% do not. On average, 23% of all respondents report utilizing technology to simplify and expedite their lives, contrasted with 77% who assert they do not. Participants educated staff on DSL, dial-up, broadband, and cable systems across all employees and technical professionals within the Ministry of Foreign Affairs and International Relations.

Results and interpretation

The analytical findings from 331 answers to a structured questionnaire designed to evaluate users' adoption of Knowledge Management Systems (KMS) within the context of the Attitude-Technology Acceptance Model (ATT-TAM) are presented in this part. Two successive stages of the analysis were carried out. Using IBM SPSS Statistics version 28.0, the first step covered data integrity, screening, and descriptive statistics. The measurement and structural models were tested in the second phase using Partial Least Squares Structural Equation Modelling (PLS-SEM). SmartPLS version 4.0.8 was used for the analysis (Ringle et al., 2015). PLS-SEM was chosen because of its ability to handle complex models with latent variables, create theories, and conduct predictive research. Additionally, PLS-SEM can evaluate the measurement and structural aspects of the model at the same time and is strong at handling non-normal data distributions (Hair et al., 2014).

Using the Fornell–Larcker criterion and the heterotrait-monotrait ratio of correlation, the measurement model evaluated the instrument's psychometric qualities, such as indicator reliability, construct reliability (Cronbach's alpha and composite reliability), convergent validity (average variance extracted and factor loadings), and discriminant validity. Furthermore, the variance-inflated factor (VIF) was used to assess multicollinearity in order to make sure that indicator redundancy did not skew the structural routes. The importance and strength of the hypothesised correlations between Perceived Ease of Use, Perceived Usefulness, Trust, Attitude towards Using KMS, and Intention to Accept KMS were then assessed by looking at the structural model. In order to assess mediation effects, bootstrapped confidence intervals were used to examine both direct and indirect effects. In accordance with the recommendations given by Henseler et al. (2016), a variety of global fit indices (such as SRMR, NFI, d_{uls} , and d_g) and parsimony-adjusted metrics were used to evaluate the model's overall fit. The findings are shown in the parts that follow, starting with the assessment of the measurement model and moving on to the assessment of the structural relationships and data integrity.

Data integrity assessment

In quantitative research, addressing missing data is a crucial prerequisite for ensuring the accuracy and validity of subsequent statistical analyses. The absence of responses in a dataset may be random or systematic, and understanding this mechanism helps prevent biased conclusions and loss of statistical power. Before engaging in full-scale analysis, it is necessary to probe the nature and extent of missing data to determine whether any underlying pattern might bias the findings. Accordingly, my study followed the guidance of Tabachnick and Fidell (2007), who recommended that missing data should be examined for randomness—an essential assumption in multivariate

analysis. When missing values are not properly addressed, they can lead to reduced statistical power, biased parameter estimates, and potentially flawed conclusions. As such, I first explored the pattern and mechanism underlying the missing responses in my dataset. The classification of missing data mechanisms, as defined by Rubin (1976) and further discussed by Baraldi and Enders (2010), includes three types: Missing Completely at Random (MCAR), Missing at Random (MAR), and Missing Not at Random (MNAR). An MCAR mechanism implies that the probability of a data point being missing is unrelated to any observed or unobserved variables in the dataset. This is the most desirable form of missingness, as it allows the researcher to proceed with standard estimation techniques without introducing bias.

EM Estimated Statistics

EM Means ^a																		
TRU1	TRU2	TRU3	TRU4	PU1	PU2	PU3	PU4	PU5	PEOU1	PEOU2	PEOU3	PEOU4	ATT1	ATT2	ATT3	ATT4	ATT5	INT1
5.60	5.46	5.18	5.09	5.28	5.20	5.11	4.88	4.74	5.08	5.27	5.07	5.13	5.08	5.24	5.07	5.13	4.24	5.26

a. Little's MCAR test: Chi-Square = 106.315, DF = 143, Sig. = .991

Figure 3.1. Abridged little' MCAR Test

To assess the mechanism underlying the missing values, Little's MCAR test was conducted using IBM SPSS Statistics version 28.0. The results (see Figure 3.1) showed that the missing data were Missing Completely At Random (MCAR), as evidenced by a non-significant chi-square result ($\chi^2 = 106.315$, $df = 143$, $p = .991$). This high p-value indicates that the pattern of missingness is not dependent on any observed or unobserved variables, thereby satisfying the assumption that data are MCAR. Overall, missing values across variables were minimal, ranging from 0.3% to 1.8% per item (see Figure 3.2). This falls within the acceptable threshold of 5% commonly cited in the literature (Hair et al., 2010), indicating that the dataset is largely complete and that the missing values are unlikely to distort the findings or reduce statistical precision. Given the MCAR result and the low

rate of missingness, the Expectation Maximisation (EM) algorithm was employed to impute the missing data. EM is a robust method that estimates missing values based on observed data and maximises the likelihood under the assumption of multivariate normality. The EM technique maintains the overall structure and variability in the data while providing complete datasets for advanced analyses. By adopting this approach, my study ensured that the dataset used for the measurement and structural modelling stages was both statistically sound and methodologically rigorous.

Univariate Statistics							
	N	Mean	Std. Deviation	Missing		No. of Extremes ^a	
				Count	Percent	Low	High
TRU1	331	5.60	.681	0	.0	4	0
TRU2	331	5.46	.846	0	.0	10	0
TRU3	331	5.18	1.005	0	.0	18	0
TRU4	331	5.09	1.048	0	.0	24	0
PU1	330	5.28	1.082	1	.3	25	0
PU2	327	5.20	.982	4	1.2	19	0
PU3	327	5.11	1.061	4	1.2	24	0
PU4	327	4.88	1.227	4	1.2	4	0
PU5	327	4.74	1.295	4	1.2	10	0
PEOU1	331	5.08	1.215	0	.0	30	0
PEOU2	325	5.26	.971	6	1.8	16	0
PEOU3	325	5.06	1.119	6	1.8	26	0
PEOU4	325	5.12	1.131	6	1.8	28	0
ATT1	327	5.07	1.226	4	1.2	39	0
ATT2	328	5.23	.988	3	.9	20	0
ATT3	328	5.06	1.108	3	.9	25	0
ATT4	331	5.13	1.080	0	.0	24	0
ATT5	331	4.24	1.415	0	.0	59	0
INT1	328	5.26	.941	3	.9	14	0
INT2	328	5.33	.895	3	.9	14	0
INT3	325	5.29	.979	6	1.8	19	0
INT4	328	4.94	1.224	3	.9	33	0
INT5	328	5.12	1.145	3	.9	29	0

a. Number of cases outside the range (Q1 - 1.5*IQR, Q3 + 1.5*IQR).

Table 3.6 Overall missing values across variable

Measurement model assessment

The measurement model was the focus of the first step of the Partial Least Squares Structural Equation Modelling (PLS-SEM) process, which addressed the validity and reliability of the study's latent constructs. PLS-SEM analysis is typically executed in two phases: Stage One involves the assessment of the measurement model, whereas the structural model is the focus of Stage Two (Hair et al., 2019). Before deciphering the structural links between the theoretical constructs, this two-step method guarantees that the observable variables measure them appropriately.

In the context of this study, the measurement model was reflective in nature—meaning that each latent construct (perceived ease of use, perceived usefulness, trust towards use of the system, attitude towards using KMS, and intention to accept KMS) was assumed to cause the observed indicators. In reflective models, indicators are expected to be interchangeable and share a common underlying construct, and measurement quality is primarily assessed through Average Variance Extracted (AVE), Cronbach's alpha, composite reliability, and outer loadings. The following standards were used to evaluate the reflective measuring model:

Cronbach's alpha and Composite Reliability (CR) are used to evaluate internal consistency reliability. Convergent validity is evaluated by looking at the AVEs and the indicators' outer loadings, or standardised loadings. To ascertain whether constructs are empirically different from one another, discriminant validity is assessed using the heterotrait-monotrait ratio and the Fornell-Larcker criterion.

All indicators were modelled reflectively and evaluated accordingly. The outer model evaluation confirmed whether the measurement items reliably captured the intended latent constructs. Figure 3. 2 illustrates the conceptual framework guiding this analysis, which models

technology-related eliefs—perceived usefulness, perceived ease of use, and perceived trustworthiness—as predictors of Attitude Towards Using KMS, which subsequently influences Intention to Accept KMS.

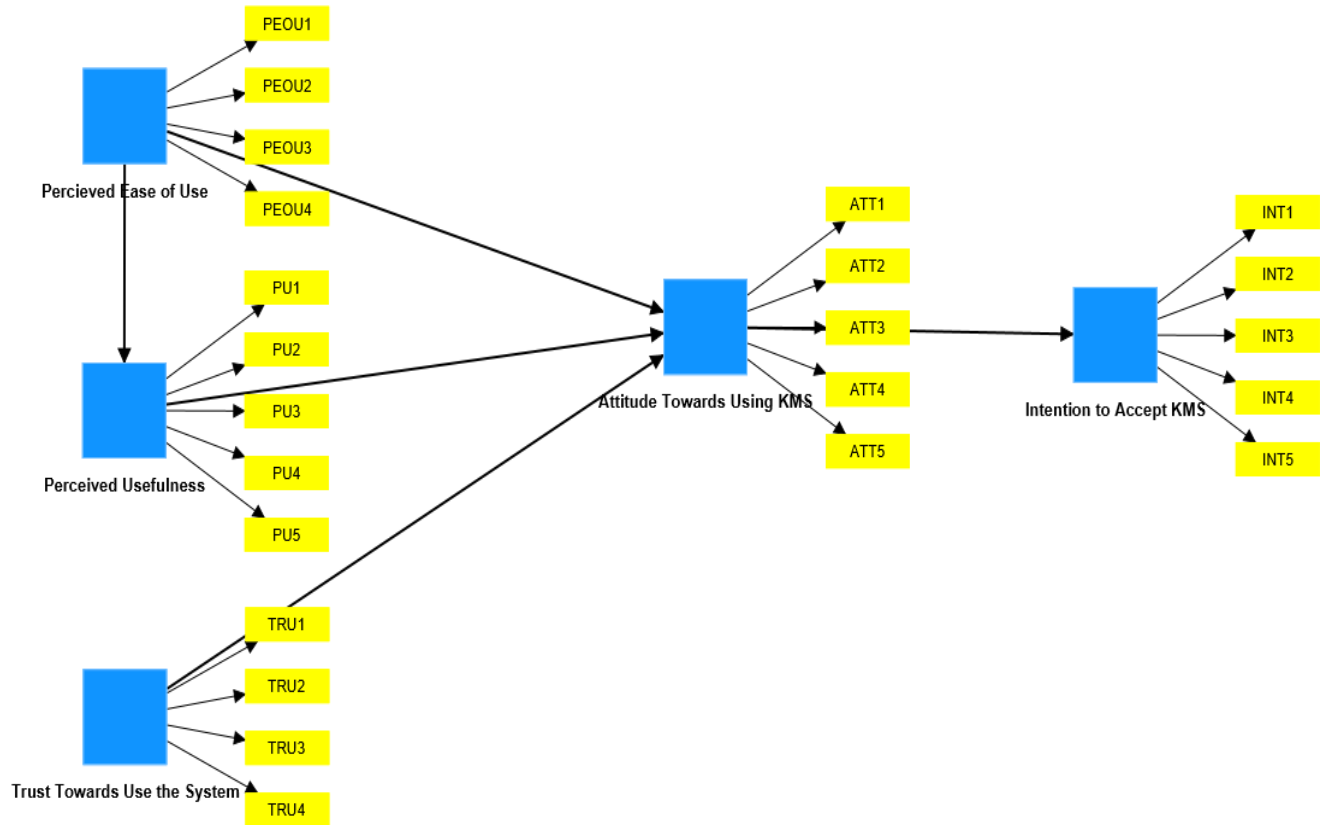


Figure 3.2. Hypothesised measurement model

To evaluate the measurement tools' psychometric qualities utilised in this investigation, a two-stage analytical procedure was followed. This process was designed to ensure both the dimensional integrity of the constructs and the statistical robustness of the indicators prior to assessing structural relationships. First, composite component analysis (CCA) was carried out to investigate the factor loadings of all observed items. This step helped identify items that significantly contributed to their respective constructs, allowing for the elimination of those with weak loadings or cross-loadings that could undermine construct validity. Only items with substantial and

theoretically consistent factor loadings were retained for the next stage of analysis.

Second, the refined model was assessed using PLS-SEM modelling. This modelling approach was employed to assess the convergent and discriminant validity of the latent constructs within the hypothesised Attitude-Technology Acceptance Model (ATT-TAM). All items in the model were specified as reflective indicators. The constructs included perceived ease of use, perceived usefulness, trust towards the system, attitude towards using KMS, and Intention to Accept KMS. Each construct was assessed independently for measurement reliability and validity before proceeding to structural evaluation. Figure 3.3 illustrates the standardised estimates of the final measurement model, highlighting the outer loadings between the constructs and their respective indicators, along with the construct correlations.

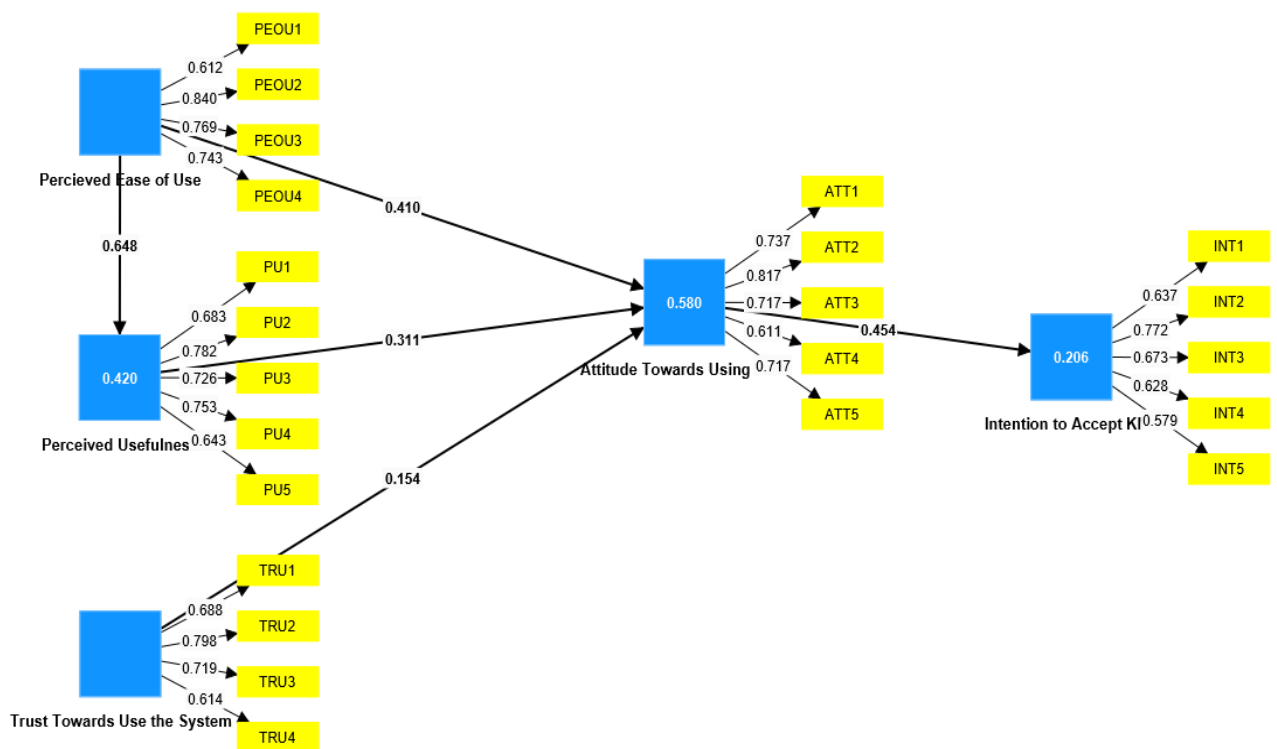


Figure 3. 3. Estimates of the measurement model

As depicted in Figure 3.4, the model assessment relies on the estimates of each construct and its associated indicators to explain the causal relationships within the hypothesised framework. Each construct's validity and reliability were assessed using the standard criteria suggested for PLS-SEM reflective measurement models. According to Hair et al. (2010), the reliability of an indicator can be assessed through its factor loading on the corresponding construct. Hair et al. (2022) further emphasised that an item is deemed reliable when its outer loading exceeds 0.70, although values between 0.40 and 0.60 are considered acceptable in certain contexts. Regarding internal consistency, both Cronbach's alpha and composite reliability serve as indicators, with higher values reflecting stronger reliability. Hair et al. (2022) recommended that for exploratory research, reliability values should fall between 0.70 and 0.90, while values in the range of 0.60 to 0.70 are still acceptable. The amount of variance captured by the concept in relation to the measurement error is ascertained using the average variance extracted (AVE), which is used to establish convergent validity. According to Hair et al. (2017) and Fornell and Larcker (1981), adequate convergent validity is indicated by an AVE value of at least 0.50. Table 3.7 displays the model's construct reliability and validity findings.

Table 3.7. Construct validity and reliability of the measurable model

Construct	Indicator	Loading	Cronbach's α	Composite Reliability	AVE	VIF
Attitude Towards Using KMS	ATT1	0.737	0.768	0.844	0.522	1.528
	ATT2	0.817				1.797
	ATT3	0.717				1.495
	ATT4	0.611				1.214

	ATT5	0.717				1.443
Intention to						
Accept						
KMS	INT1	0.637	0.682	0.793	0.437	1.209
	INT2	0.772				1.385
	INT3	0.673				1.364
	INT4	0.628				1.217
	INT5	0.579				1.236
Perceived Ease						
of Use	PEOU1	0.612	0.767	0.842	0.517	1.214
	PEOU2	0.840				1.757
	PEOU3	0.769				1.494
	PEOU4	0.743				1.359
Perceived						
Usefulness	PU1	0.683	0.729	0.832	0.555	1.486
	PU2	0.782				1.778
	PU3	0.726				1.477
	PU4	0.753				1.451
	PU5	0.643				1.321
Trust Towards						
the System	TRU1	0.688	0.668	0.799	0.501	1.432
	TRU2	0.798				1.630
	TRU3	0.719				1.223
	TRU4	0.614				1.141

The latent variables' validity and dependability in the original measurement model are summarised in Table 3.7. An inspection of the outer loadings revealed that a few indicators had loading values below the permissible limit of 0.60 (Hair et al., 2022), suggesting limited reliability in representing their respective constructs. Specifically, items such as INT4 (0.628), INT5 (0.579), and ATT4 (0.611) fell near or below the minimum threshold and were flagged for potential removal. Low values in Average Variance Extracted (AVE)—particularly for the construct Intention to Accept KMS (AVE = 0.437)—can be attributed to these weak outer loadings. According to Fornell and Larcker (1981), AVE values should exceed 0.50 to establish sufficient convergent validity. Values below this threshold indicate that the construct may not adequately explain the variance in its indicators, thereby raising concerns about construct validity. To improve the model's psychometric properties, indicators with outer loadings substantially below 0.60 or those contributing negatively to AVE were considered unreliable and thus unsuitable for testing the hypothesised model. Accordingly, based on the results, items such as INT4 (0.628), INT5 (0.579), and ATT4 (0.611) were marked for removal. These items were eliminated from the measurement model, and the model was subsequently re-estimated. As a result of this item deletion, the re-specified model exhibited improved factor loadings, AVE, and overall measurement reliability. The revised model is presented in Figure 5a, showing enhanced clarity and stronger empirical support for the hypothesised relationships between constructs. This refinement process ensures that only valid and reliable indicators contribute to the structural model, thereby enhancing the interpretability and credibility of the results. This table did not fit on the bottom of the previous page. Therefore, the entire table was moved to the next page.

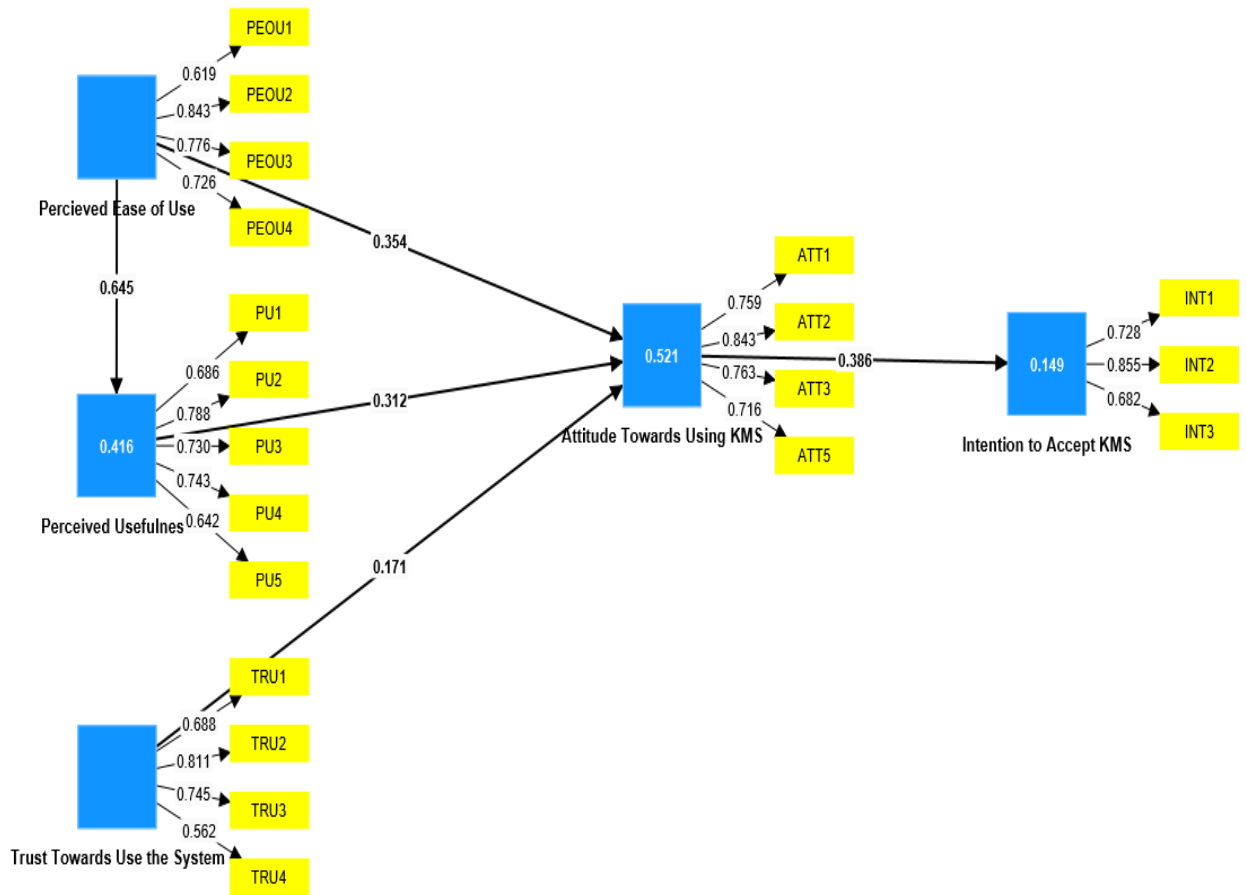


Figure 3.4. Re-Specified/ Validated measurement model

Figure 3. 4 illustrates the validated re-specified measurement model used to assess the causal structure hypothesised in this study. The model evaluates the reflective constructs of perceived ease of use (PEOU), perceived usefulness (PU), trust towards use of the system (TRU), attitude towards using KMS (ATT), and intention to accept KMS (INT) in the context of KMS adoption. To establish the psychometric adequacy of these constructs, convergent and discriminant validity, internal consistency, and collinearity diagnostics were conducted, as presented in Table 3.8, and figures 5a, b, and c, respectively.

Table 3.8. Validated construct validity and reliability

Construct	Indicator	Loading	Cronbach's α	CR	AVE	VIF	R2
ATT	ATT1	0.759	0.773	0.854	0.595	1.509	0.521
	ATT2	0.843				1.763	
	ATT3	0.763				1.495	
	ATT5	0.716				1.377	
INT	INT1	0.728	0.637	0.801	0.575	1.203	0.149
	INT2	0.855				1.343	
	INT3	0.682				1.254	
PEOU	PEOU1	0.619	0.767	0.842	0.518	1.214	
	PEOU2	0.843				1.757	
	PEOU3	0.776				1.494	
	PEOU4	0.726				1.359	
PU	PU1	0.686	0.729	0.832	0.556	1.486	0.416
	PU2	0.788				1.778	
	PU3	0.730				1.477	
	PU4	0.743				1.451	
	PU5	0.642				1.321	
TRU	TRU1	0.688	0.668	0.797	0.500	1.432	
	TRU2	0.811				1.630	
	TRU3	0.745				1.223	
	TRU4	0.562				1.141	

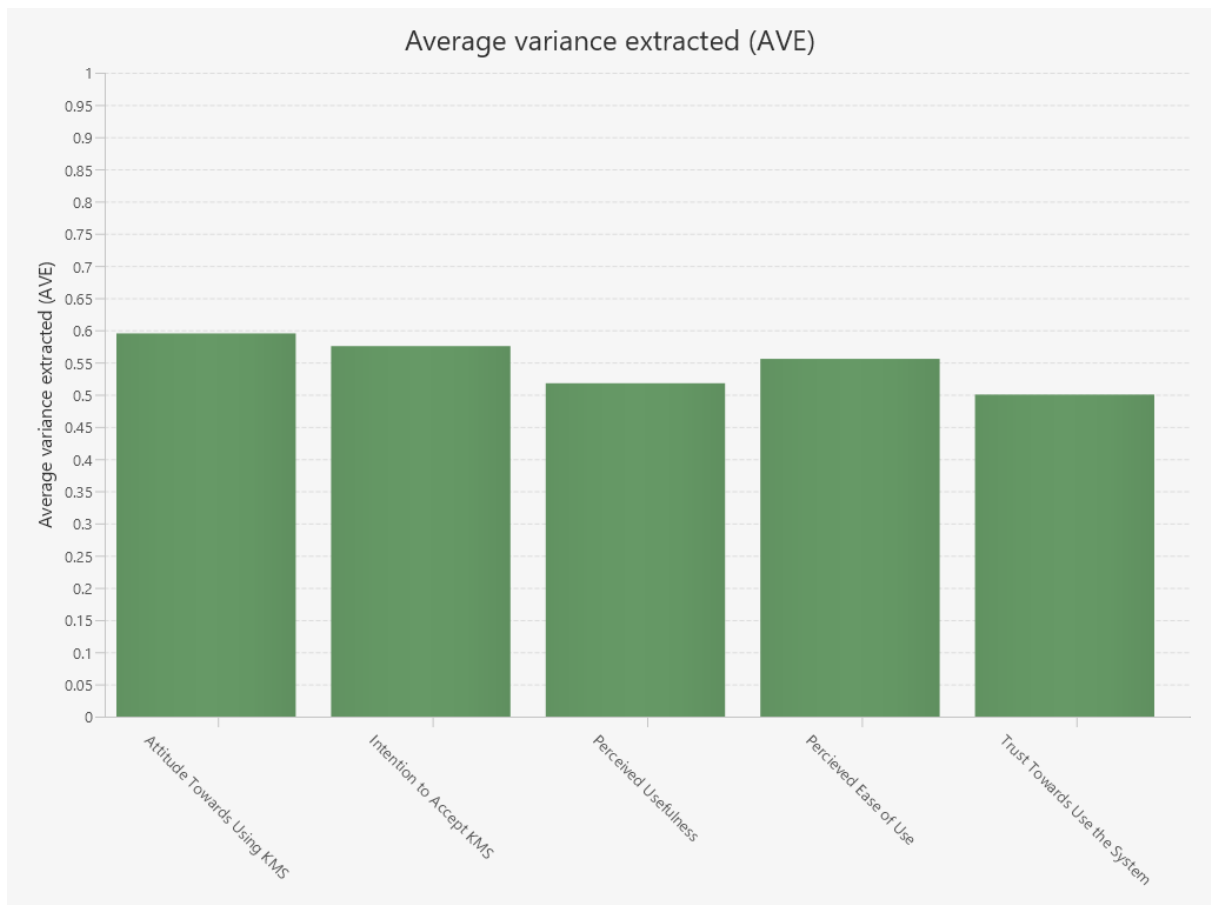


Figure 3.5 A. AVE for all the variables in the model

According to Hair et al. (2022) and Bagozzi (1981), item loadings in Table 3.8 above 0.70 indicate strong reliability, although items with loadings above 0.60 may be retained in exploratory settings. All indicators retained in the refined model exceeded the minimum threshold of 0.50, with most falling above 0.70. For instance, ATT2 = 0.843, PEOU2 = 0.843, and INT2 = 0.855 demonstrated robust loading values. Furthermore, all constructs had adequate convergent validity, as indicated by the Average Variance Extracted (AVE) values, which varied from 0.500 (TRU) to 0.595 (ATT) (Fornell & Larcker, 1981). This suggests that over 50% of the variance in each latent variable's indicators can be explained. Additionally, Cronbach's alpha and Composite Reliability (CR) were used to evaluate internal consistency. The range of Cronbach's alpha values was 0.637

(INT) to 0.773 (ATT), indicating acceptable reliability for exploratory research (Taber, 2018). Composite Reliability values surpassed the 0.70 cutoff recommended by Henseler et al. (2009), ranging from 0.797 (TRU) to 0.854 (ATT), affirming overall measurement stability. Multicollinearity was evaluated using the Variance Inflation Factor (VIF) statistics. As reported in Table 3.8, all VIF values fell well below the critical threshold of 5.0 (Hair et al., 2016), suggesting no evidence of collinearity problems across indicators.

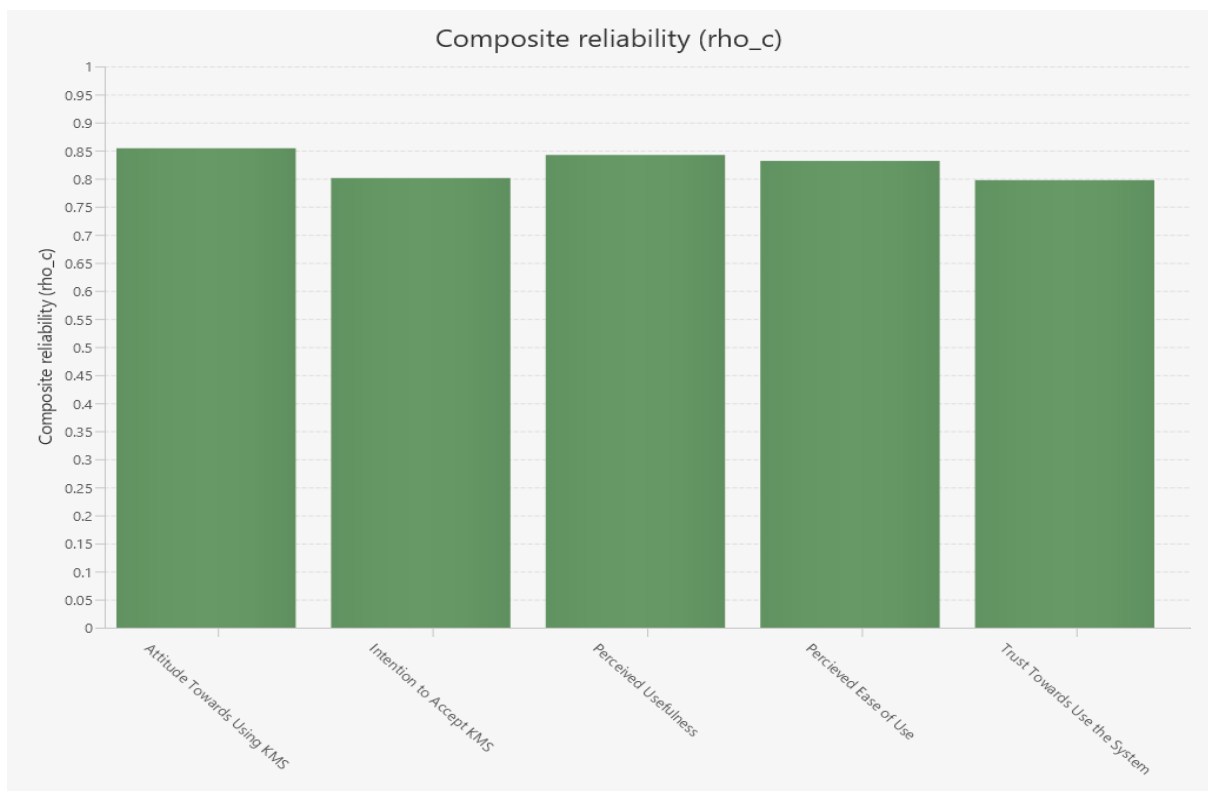


Figure 3.5B. CR for all the variables in the model

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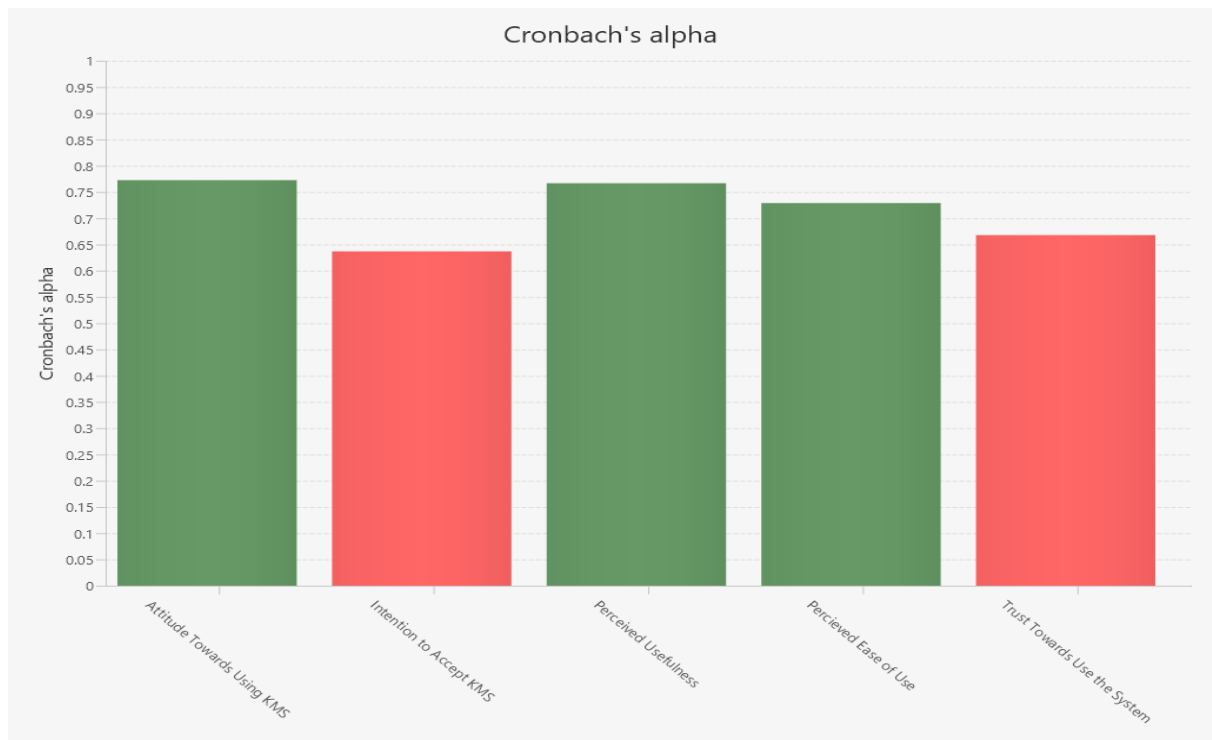


Figure 3. 5C. Cronbach Alpha for all the variables in the model

Furthermore, Both the Heterotrait–Monotrait ratio (HTMT) of correlations and the Fornell–Larcker criterion were used to assess discriminant validity. Fornell and Larcker (1981) state that the Average Variance Extracted (AVE) square root should be greater than any inter-construct correlations. This condition was satisfied for all constructs (see Table 3.9a). For example the AVE square root for Perceived Ease of Use was 0.745, which exceeded its correlations with Perceived Usefulness (PU) (0.645) and Trust (TRU) (0.571). This table did not fit on the bottom of the previous page. Therefore, the entire table was moved to the next page.

Table 3. 9 A. Discriminant validity-Fornell-Larcker criterion

Constructs	ATT	INT	PU	PEOU	TRU
ATT	0.771				
INT	0.386	0.759			
PU	0.633	0.407	0.720		
PEOU	0.653	0.422	0.645	0.745	
TRU	0.543	0.341	0.545	0.571	0.707

Discriminant validity was further confirmed by HTMT values (see Table 3.9b), which were below the suggested cutoff of 0.90 (Henseler et al., 2015). For example, the construct distinctiveness was supported by the HTMT ratios of 0.814 between PU and Attitude (ATT) and 0.827 between Perceived Ease of Use (PEOU) and TRU. Essentially, the indicator reliability, internal consistency, convergent validity, and discriminant validity of the improved measurement model were all at satisfactory levels. The measuring model is considered robust since all AVE values are greater than 0.50, CR is greater than 0.80, and the HTMT and Fornell-Larcker tests validate discriminant validity. In order to investigate the hypothesised correlations between constructs, the study moved on to structural model analysis.

Table 3. 9 b. Discriminant validity-HTMT ratio

Constructs	ATT	INT	PU	PEOU	TRU
ATT	-				
INT	0.527	-			
PU	0.814	0.566	-		
PEOU	0.860	0.582	0.848	-	
TRU	0.720	0.520	0.765	0.827	-

Model fit assessment

Evaluating the overall fit of the re-specified measurement model is essential to verify how well the model matches the data that was seen. Several fit indices were used in this investigation, such as the Standardised Root Mean Square Residual (SRMR), the squared Euclidean distance discrepancy (d_{ULS}), the geodesic discrepancy (d_{G}), the Chi-square statistic, and the Normed Fit Index (NFI). These indices collectively provide a robust basis for assessing the global model appropriateness of the PLS-SEM model (Henseler et al., 2016; Oluwajana et al., 2019). As shown in Table 3.10, the SRMR value for the saturated model is 0.080, and for the estimated model it is 0.100. While the SRMR value for the estimated model slightly exceeds the conventional threshold of 0.08 (Henseler et al., 2014), it remains within an acceptable margin for exploratory studies with moderately complex structures.

The d_{ULS} value for the saturated model is 1.618, and for the estimated model it is 2.080. Additionally, the geodesic discrepancy (d_{G}) is 0.474 for the saturated model and 0.503 for the estimated model. According to model fit requirements, acceptable fit is demonstrated when the discrepancy values from the saturated model are less than their corresponding bootstrapped 95% upper confidence intervals in the estimated model (Quintana & Maxwell, 1999; Henseler et al., 2016). These conditions are met, confirming that the model does not deviate significantly from the observed data. Moreover, the Chi-square statistic is reported as 979.916 for the estimated model, with the saturated model yielding a value of 946.695. Although PLS-SEM does not primarily rely on Chi-square for fit evaluation, these values provide complementary insight into absolute model fit. The Normed Fit Index (NFI) values are 0.637 for the saturated model and 0.624 for the estimated model. While these values fall below the traditional benchmark of 0.90, this is not uncommon in

PLS-based modelling, particularly when dealing with complex models and relatively modest sample sizes (Hair et al., 2022). Taken together, these indices suggest that the measurement model fits the data well enough to support moving on to the structural model evaluation.

Table 3. 10. Summary of model fit indices

Fit Index	Saturated Model	Estimated Model	Interpretation
SRMR	0.080	0.100	Acceptable (exploratory)
d_UIS	1.618	2.080	Saturated < Estimated
d_G	0.474	0.503	Saturated < Estimated
Chi-square	946.695	979.916	Informational only
NFI	0.637	0.624	Marginal for PLS

Structural model: Coefficient of determination (R^2) and Predictive Relevance (Q^2)

The coefficient of determination (R^2) and Stone-Geisser's Q^2 (predict) were assessed in order to determine the structural model's explanatory power and predictive relevance. When predicting endogenous constructs in Partial Least Squares Structural Equation Modelling (PLS-SEM7), these measures are crucial markers of model quality (Hair et al., 2022). The R^2 values for the endogenous constructs indicate moderate to strong explanatory power, as illustrated in Figure 3.8 and summarised in Table 3.11. In particular, the model accounts for 14.9% of the variance in Intention to Accept KMS ($R^2 = 0.149$), 52.1% of the variance in Attitude Towards Using KMS ($R^2 = 0.521$), and 41.6% of the variance in Perceived Usefulness ($R^2 = 0.416$). A R^2 value of 0.25 is regarded as poor, 0.50 as moderate, and 0.75 as substantial, per Cohen (1988) and Hair et al. (2022).

Therefore, while Attitude and Perceived Usefulness demonstrate moderate explanatory power, Intention to Accept KMS displays a relatively weak, though still meaningful, level of explanation. This suggests that although attitude significantly shapes behavioural intention, other unaccounted factors may influence users' intention to adopt KMS. To complement the explanatory assessment, Q^2_{predict} values were generated using the PLSpredict algorithm. This provides insights into the model's out-of-sample predictive capability. As shown in Table 3.11, all endogenous constructs recorded Q^2 values greater than zero: Attitude Towards Using KMS: $Q^2 = 0.436$, Perceived Usefulness: $Q^2 = 0.402$, and Intention to Accept KMS: $Q^2 = 0.151$.

Table 3. 11. PLSpredict output (Q^2 , RMSE, and MAE)

Constructs	Q^2_{predict}	RMSE	MAE
Attitude Towards Using KMS	0.436	0.760	0.522
Perceived Usefulness	0.402	0.780	0.547
Intention to Accept KMS	0.151	0.935	0.696

A Q^2 value above 0 suggests that the construct may be predicted using the model (Hair et al., 2017). In this case, both Attitude and Perceived Usefulness show high predictive accuracy, while Intention reflects a moderate predictive level. These results indicate that the proposed model is not only statistically sound in explaining user perceptions and attitudes but also exhibits practical usefulness in forecasting user behavioural intentions towards KMS usage. In terms of prediction error the Mean Absolute Error (MAE) and Root Mean Squared Error (RMSE) values offer further evidence of predictive power. Although RMSE values ranged from 0.760 to 0.935 and MAE from 0.522 to 0.696, these are within an acceptable range, especially given the moderately complex nature of the model.

Structural model assessment

Partial Least Squares Structural Equation Modelling (PLS-SEM) was used with SmartPLS 4.0 to assess the hypothesised causal links between the constructs in the suggested model. Building on the established measurement model, the goal of this structural assessment step is to ascertain the importance, potency, and orientation of the hypothesised routes. The essential constructs—Perceived Ease of Use (PEOU), Perceived Usefulness (PU), Trust (TRU), Attitude Towards Using KMS (ATT), and Intention to Accept KMS (INT)—are directly related to one another, as shown in Figure 3.7.

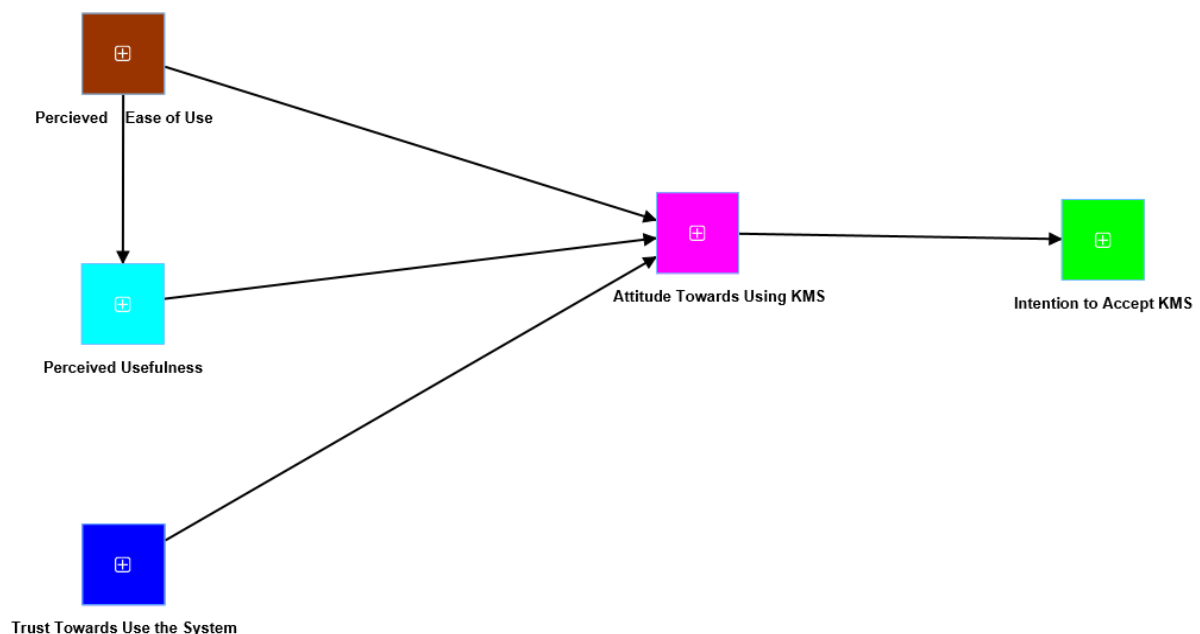


Figure 3.6 Proposed structural model

To assess each one's statistical significance hypothesised path, the bootstrapping method was implemented with 10,000 subsamples, consistent with the suggestions made by Hair et al. (2017). Standard errors, t-values, and p-values can all be estimated using this non-parametric resampling method for each path coefficient. Each bootstrap subsample equalled the original sample size ($N =$

331), ensuring stable parameter estimation and enhanced reliability of inferential outcomes. The structural model's findings, such as the significance levels, t-values, and path coefficients, are presented in Table 3. 12 and Figure 3.7. These values provide the empirical basis for testing the study's hypotheses and determining whether each independent variable significantly influences its associated dependent variable.

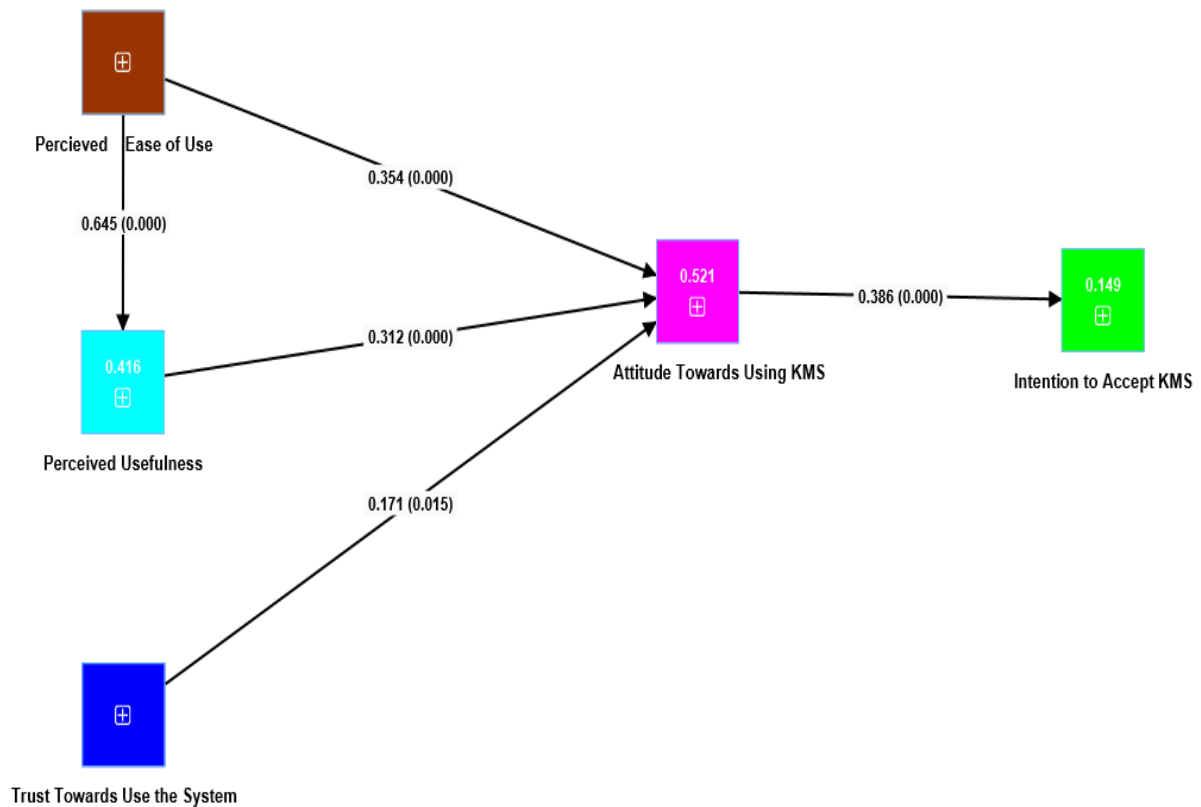


Figure 3.7. Structural model parameter estimates

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Table 3. 12. Paths relationship of the structural model

Hypothesis	Path Relationship	β	t-value	p-value	95% CI	f^2	VIF	Decision
H1	PU $\rightarrow$ ATT	.312	4.006	< .001	[0.187, 0.443]	0.109	1.860	Supported
H2	PEOU $\rightarrow$ ATT	.354	3.533	< .001	[0.194, 0.521]	0.135	1.940	Supported
H3	TRU $\rightarrow$ ATT	.171	2.173	.015	[0.043, 0.301]	0.038	1.611	Supported
H4	ATT $\rightarrow$ INT	.386	6.398	< .001	[0.278, 0.479]	0.175	1.000	Supported
H5	PEOU $\rightarrow$ PU $\rightarrow$ ATT $\rightarrow$ INT (Indirect)	.078	3.148	.001	[0.041, 0.123]	-	-	Supported

Research hypotheses

Table 3.12 presents the path coefficients, t-statistics, p-values, confidence intervals, and effect sizes (f^2) used to ascertain the power and direction of the relations among the constructs. The following hypotheses were tested:

H1: Perceived usefulness (PU) exhibits a significant positive direct relationship with attitude towards using KMS (ATT).

The first hypothesis (H1) posited that perceived usefulness (PU) would have a significant positive influence on attitude towards using KMS (ATT). The results (see Table 3.12) supported this hypothesis, as indicated by a significant path coefficient ($\beta = 0.312$, $t = 4.006$, $p < .05$). The 95% confidence interval [0.187, 0.443] did not include zero, and the effect size ($f^2 = 0.109$) demonstrated a moderate impact. This suggests that when users perceive the KMS as useful in enhancing their work performance, their attitude towards adopting the system becomes significantly more favourable.

H2: The effects of perceived ease of use (PEOU) have a significant positive direct relationship with attitude towards using KMS (ATT).

The second hypothesis (H2) proposed that perceived ease of use (PEOU) would have a significant positive effect on attitude towards using KMS. The analysis (see Table 3.12) showed a statistically significant relationship ($\beta = 0.354$, $t = 3.533$, $p < .05$), with a confidence interval ranging from 0.194 to 0.521. The associated effect size ($f^2 = 0.135$) indicated a moderate-to-substantial contribution. This finding implies that when users find the KMS simple to use, they have a higher chance to develop a positive disposition towards using it, thereby supporting the theoretical assumption that ease of use can enhance user attitudes.

H3: Trust towards use the system (TRU) exhibit a significant positive direct relationship with attitude towards using KMS (ATT).

The third hypothesis (H3) suggested that trust towards using the system (TRU) would positively influence attitude towards using KMS. This hypothesis (see Table 3.12) was also supported ($\beta = 0.171$, $t = 2.173$, $p = .015$), with a 95% confidence interval of [0.043, 0.301] and a small but significant effect size ($f^2 = 0.038$). The implication here is that users who trust the KMS—believing it to be secure, reliable, and consistent—are more likely to form a favourable attitude towards its use. Trust, while less impactful than usefulness or ease of use, still plays a notable role in shaping user acceptance.

H4: Attitude towards using KMS (ATT) exhibit a significant positive relationship with intention to accept KMS (INT).

Hypothesis four (H4) examined whether attitude towards using KMS significantly predicted intention to accept KMS (INT). This relationship was strongly supported by the data (see Table 3.12), displaying a path coefficient of $\beta = 0.386$ ($t = 6.398$, $p < .05$), and a confidence interval of [0.278, 0.479]. The effect size ($f^2 = 0.175$) suggested a substantial effect. This result reinforces TAM's core assertion that attitude is a critical antecedent of behavioural intention. In other words, users who feel positively towards KMS are significantly more inclined to convey a strong desire to adopt and use it in practice.

H5: The indirect effects of perceived ease of use (PEOU) on intention to accept KMS is significantly and positively mediated by perceived usefulness and attitude towards using KMS (ATT).

Lastly, hypothesis five (H5) evaluated the indirect effect of Perceived Ease of Use on Intention to accept KMS, mediated through perceived usefulness and attitude. Table 3.12, revealed that the mediation path was significant ($\beta = 0.078$, $t = 3.148$, $p = .05$), with a confidence interval of [0.041, 0.123]. This implies a meaningful indirect influence: users who find the KMS are more likely to think it's helpful if it's simple to use, which then fosters a positive attitude and ultimately strengthens their intention to use the system. The mediation confirms a sequential cognitive pathway consistent with extended TAM literature. Additionally, the effect sizes (f^2) and variance inflation factor (VIF) values were examined to assess the contribution and independence of each predictor construct in the structural model. According to Cohen (1988), f^2 values of 0.02, 0.15, and 0.35 respectively represent small, medium, and large effects. In the present study, attitude towards

utilising, perceived utility, and perceived ease of use KMS demonstrated small to moderate effect sizes, indicating that they meaningfully contributed to the variance explained in their respective dependent constructs. Regarding multicollinearity, Hair et al. (2017) recommend that VIF values should remain below 3.0, and certainly not exceed 5.0, to ensure that predictor variables do not overlap excessively. As shown in Table 3.12, all VIF values in this model were well below the 3.0 threshold, ranging from 1.000 to 1.940, thus confirming the absence of multicollinearity concerns. Overall, the results offer strong empirical support for the proposed model. Every construct—perceived utility, perceived usability, and trust—demonstrated significant effects on attitude, and attitude, in turn, was a key driver of intention to accept KMS. Moreover, the indirect path from ease of use to intention, mediated by usefulness and attitude, affirms the interconnected nature of user perceptions and behavioural intent.

These findings highlight the importance of designing usable, functional, and trustworthy KMS platforms to facilitate wider adoption and sustained usage among intended users. Informed by the Technology Acceptance Model (TAM), this study has crafted an innovative framework for the incorporation of digital assets into the Knowledge Management Model (KMM) confirmatory factor analysis (CFA) and exploratory factor analysis (EFA) are two methods. Researchers have demonstrated that in order to manage resources with trained staff, successful integration requires addressing different stages of technology deployment (Stergiou et al., 2018). The selection of specific techniques, the implementation of new service trends, and a prudent financial plan are among the elements that are particularly significant. Furthermore, because of its versatility and simplicity, the Nonaka KMM was chosen as a suitable framework for scientific archives following an analysis of other KMMs (Riera et al., 2009). Its two components give it its applicability: the

explicit understanding of its technology component and the tacit understanding, which is more concerned with human issues, have continuously bolstered its usefulness. Deliberating on how to incorporate the integration aspects into the KMM to achieve integration objectives is worthwhile. In the past, archives have found it difficult to create think tank centres and use their knowledge to improve systems when resources are merged through the KMM.

Even with adequate funding, the technological assumptions linked to the corresponding latent variables have substantially impacted each other and thus affirmed the theoretical model. To deepen this inquiry given the forthcoming shifts in technology and the emergence of new frameworks, it is essential to emphasize the limitations to fashion a more adaptable model that can be adjusted according to evolving technological circumstances to support archives. Because the model encompasses numerous components requiring integration, sufficient funding and thorough evaluations are essential for IT specialists and administrative advisors to accomplish this pioneering endeavor (Chatterjee & Samanta, 2022; Swacha, 2015; Erickson & Rothber, 2015). Management must take into consideration this emerging concept in order to implement it with a reasonable budget, cutting-edge technology, and qualified staff because resource integration will inevitably progress.

Summary

Research methodology refers to the techniques or strategies employed to collect, choose, process, and analyze information. It involves scrutinizing data associated with a specific topic. The methodology section of a study informs the reader about the methodology used in the study. It assesses the investigation's overall validity and dependability. Investigate methodology is an organized approach to addressing a research problem. It embodies the scientific study of conducting research in a systematic manner (Claybaugh, 2020; Wright et al., 2017; Tobi et al., 2018; Creswell,

2014). Essentially, it is the procedure through which the researcher undertakes the assessment, prediction, and description of phenomena. It provides insights by selecting appropriate scientific instruments, techniques, materials, and methods pertinent to solving the issue at hand. Quantitative research methods are grounded in quantifying the collection and examination of data (Shaw, 2016; Kosso, 2011; Bryman, 2012). Hence, the objective of quantitative research is to formulate and evaluate hypotheses, concepts, and mathematical models related to a particular phenomenon, utilizing a rational process informed by positivist and empiricist philosophies, with an emphasis on theory verification. The study will target top management, individual staff members, and service personnel from the Lesotho Ministry of Foreign Affairs and International Relations to meet its primary objective. According to Saunders et al. (2012), both probability and non-probability sampling techniques. Non-probability sampling is commonly used when there are time and budget limitations. Employees, top management, and service providers at the Lesotho Ministry of Foreign Affairs and International Relations interact through digital platforms, mobile applications, and social media, such as people connecting for a shared goal, vision, or interest via the internet using chat rooms, mailing lists, and forums as their main form of communication. Due to the difficulty in estimating or defining the size of the entire target group, the researcher will depend on data gathering.

In order to gather information for this project, a self-administered questionnaire was utilized, both in paper format and online. Invitations via email were used as they present an economical, effective, and convenient means for respondents to ponder the inquiries and their answers. An online survey represents a common and efficient method for polling individuals who possess access to and proficiency in technology (Quinlan, 2011). The email meets the criteria for the online survey while fulfilling the participants' desire to engage. A paper-based questionnaire was disseminated among

the Ministry departments, practitioners, and technical management teams. The researcher would drop off the questionnaires and retrieve them the following day. This deliberate approach to data collection was intended to afford participants ample time to respond to the inquiries. This research formulates and evaluates a cohesive conceptual framework for comprehending knowledge management practices and issues, along with the relationships among effective knowledge management applications, information dissemination, and knowledge safeguarding. The suggested framework was explicitly validated through empirical investigation.

For this research, respondents' approval was indicated by the acknowledgment and return of questionnaires, consent was obtained by providing information and formal consent was received through the web portal's consent section or consent form, obtained by providing information and completing the consent section or permission within the online portal prior to initiating the research; the ethical committee of the University sanctioned the informed consent dates in the report. Protecting the identities and confidentiality of study participants is another significant aspect of research ethics. When the researcher commits to maintaining confidentiality, individuals are more willing to reveal information, particularly sensitive or personal details. In contrast, unduly intrusive data collection methods could harm research participants; the risk of harm becomes heightened once the data is collected. This occurs when data is not managed with care, whether for professional or private purposes, as seen in scenarios involving storage, analysis, or submission of a dissertation for review.

The notion of a social learning is related to the community of practice dynamics that unfold when individuals sharing a common interest in a certain subject or issue come together to exchange ideas, develop solutions, and foster innovations (Noe, 2016; Davies et al., 2020; Chatterjee &

Samanta, 2022). Here, we present a perspective and a functional definition of CoP that can be implemented in various KM initiatives. We interpret a practice community by means of the lens of learning. This perspective regards learning as an expression of membership within a 'community of practice.' The theory aims to explore both the composition of communities and the nature of learning that takes place within them. We adopt and endorse the following definition of a CoP as stated by Stewart (2001): 'A CoP is a collective of professionals, loosely connected through their exposure to a shared set of problems, joint pursuit of solutions, and thus themselves representing a reservoir of knowledge.'

While these spontaneous communities serve as effective knowledge-sharing platforms, they do have significant drawbacks. Knowledge transmitted via email threads disperses once the thread concludes. New employees or those encountering new challenges remain unaware of the spontaneous communities and lack the ability to access their expertise (Davies et al., 2020; Noe, 2016). Insights gleaned from experience may vanish alongside retiring staff. Employee turnover and organizational restructuring weaken these informal networks to such an extent that even long-tenured staff might not know whom to contact. As a result, innovative organizations are formalizing these communities to establish new frameworks for creating, acquiring, and disseminating knowledge essential for their success (Davies et al., 2020; Noe, 2016; Chatterjee & Samanta, 2022). With these communities of practice established, this network emerges as the reliable source for generating and sharing knowledge. By providing structure, support, and resources, leading organizations have enhanced the functionality of communities of practice beyond that of their informal predecessors.

In alignment with the research goals, the data underwent a statistical analysis through SmartPLS-SEM. Initially, descriptive statistics were applied to outline the demographics of the participants. Following that, the data was scrutinized for reliability and validity. Subsequently, the analysis of moment structures (PLS-SEM) was employed to assess how well the study model. Lastly, the results of the hypotheses were presented. The primary research approach is a survey, and the researcher adopts a quantitative research design. While analyzing the data, it is conceivable that an individual's identity and responses may be deduced by observing correlations between variables (i.e., survey inquiries) (Groves et al., 2010; Eisinga et al., 2012; Griffith, 2014; Soeters et al., 2014).

Chapter 4: Findings

Trustworthiness of Data

The majority of studies were released between 2018 and 2025, with a few exceptions to provide context on the background and establishment of knowledge management (KM). For this investigation, the researcher selected 365 publications. Leading contributors in KM research from universities in Hong Kong, Europe, and China emerged as significant entities in this discipline, with the United States taking the lead in contributions. The field of KM has attracted interest due to its relationship with innovation, digital tools, implicit knowledge, information technology, KM frameworks, financial strategies, organizational effectiveness, and sustainability.

A thorough analysis of the behaviors exhibited by various organizations over the decades reveals their efforts to leverage the most effective technology-driven management techniques and innovations to secure their existence. This includes understanding knowledge management's impact on the organisational culture among employees, which encompasses trust in utilization, perceived ease of use, perceived usefulness, attitudes toward adoption, intention to embrace, which include digital tools, implicit knowledge, information technology, KM frameworks, financial strategies, organizational effectiveness, motivation, and achievement. It has been observed that currently, strategic thinking and management are considered crucial organizational assets that are likely to enhance the value of organizations over time (Chatterjee & Samanta, 2022; Rafi et al., 2020).

Furthermore, it was highlighted that knowledge management represents the core element of strategic management, encompassing the processes of acquiring/creating, overseeing, distributing, and utilizing collective knowledge to enhance decision-making within an organization and ensure its prosperity (Chatterjee & Samanta, 2022; Rafi et al., 2020; Figueiredo et al., 2016). The conclusion drawn implies that actively engaging employees in the knowledge management process is likely to positively influence their organizational culture, motivation, and overall success in their respective organizations.

Numerous tools and methods are effectively utilized in managing organizational knowledge (Chatterjee & Samanta, 2022; Rafi et al., 2020). In this study, we outline several tools associated with organizational knowledge management. We assert that the act of knowledge management itself functions as a tool and an effective technique for more proficiently organizing organizational knowledge. In this context, this research enhances our comprehension of what organizational knowledge entails and how it should be adeptly managed to foster organizational achievement.

An overall of 331 questionnaires were distributed in both paper and digital formats to ministry personnel, experts, and practitioners, making them more likely to have engaged with knowledge management (KM). Analyzing the survey data revealed key components of KM within the organizations represented by the participants.

We have summarized and evaluated a limited theoretical framework regarding KM, including definitions and stages. Following this, an extensive review was conducted on the main strategies for developing KM systems from various viewpoints, encompassing digital knowledge resources, tacit knowledge, information technology, KM models, financial planning, organizational performance,

knowledge sharing, performance metrics, and the organisation and representation of knowledge for KMS.

The findings of this research provide several managerial insights for the ministry's services (Chatterjee & Samanta, 2022; Rafi et al., 2020). Primarily, this study aims to define the essential indicators of the KM process and its infrastructure and to propose an effective KM model for the ministry. The empirical findings indicate that knowledge utilization and generation are the most pivotal processes to focus on. Conversely, factors such as technology, culture, and leadership significantly impact the KM infrastructure.

Drawing on theoretical insights, a framework was developed to explore the relationships among six elements of knowledge management (KM) performance, digital assets, tacit understanding, information systems, KM framework, and budget planning. Exploratory Factor Analyses (EFAs) were utilized to derive empirically validated dimensions of each element based on a sample from the service sector in Lesotho. The results of structural equation modelling showed that KM performance exerted a significant and positive influence on digital assets, tacit understanding, information systems, KM framework, and budget planning. Ultimately, the findings substantiated that KM performance is linked to financial planning effectiveness (Chatterjee & Samanta, 2022; Rafi et al., 2020). In essence, when taking into account the direct pathway through financial planning effectiveness, KM performance demonstrates a robust and positive effect on financial outcomes.

Toward a knowledge management based framework

Incorporating national archival resources to deliver knowledge services focused on people necessitates a high-level design for such integration (Chatterjee & Samanta, 2022; Rafi et al., 2020; Davies et al., 2020). To effectively meet this necessity, this research introduces a framework grounded in knowledge management aimed at the optimal use of the Ministry of Foreign Affairs and International Relations archival resources through their strategic integration in Lesotho. This framework is crucial for safeguarding the intrinsic value of ministry archival resources as knowledge assets through the arrangement of knowledge management roles embedded in e-government, for disseminating the significance of ministry archival resources as knowledge assets among public servants via reengineering knowledge management activities within e-public service, and for enhancing the worth of ministry archival resources as knowledge assets among public servants through the creation of knowledge management artifacts incorporated in e-resources (Gilliland, 2014; Figueiredo et al., 2016; Cabrera & Cabrera, 2005).

The suggested framework reinterprets the ministry archival resources as an intellectual concept of knowledge assets associated with the ministry, especially when an organization archives records of individuals, families, or other entities (An et al., 2014a). It offers insight into the divergent ontologies and epistemologies present among employees that emerge within varying cultural expressions and perspectives of cultural property and operational realities (Gilliland, 2014). This framework enhances employees' comprehension of the interconnections between various integration strategies and their role in social transformation, digital transition, and archival reform in ministry staff practices concerning the management and application of archival resources. It provides a comprehensive structure to leverage existing mechanisms as a cohesive new entity for the

effective amalgamation of archival resources, promoting their optimal utilization. Moreover, the framework serves as a guiding tool for developing a national strategy for integrating archival resources to ensure the delivery of employee-centered knowledge services.

This research focuses on establishing a conceptual structure for the coordination of ministry archival resources at the highest tier. Future empirical investigations will be conducted to assess the efficacy and possible applications of this framework. Particular indicators and metrics will be created to evaluate the importance of this framework in practical scenarios.

Perceived usefulness

Acquiring and spreading implicit knowledge among ministry staff should be a primary emphasis for IT organizations aspiring for innovation. The creation of implicit knowledge is directly linked to innovative results, whether this understanding stems from experiential learning (learning gained through practice) or interactions with others (learning acquired through collaboration). The success of leveraging implicit knowledge hinges on employees acknowledging their own understanding as well as their willingness to share it with others (Gilliland, 2014; Davies et al., 2020; Figueiredo et al., 2016). Acknowledging and distributing knowledge is crucial for efficiently utilizing it for innovation, and these aspects can serve as potent tools to enhance organizational creativity. Furthermore, critical thinking, which nurtures awareness and the desire to share knowledge, is crucial for the effective application of implicit knowledge (An et al., 2014a; Gilliland, 2014). Workplace environments can further stimulate innovation by encouraging reflection and cognitive engagement. Shared implicit knowledge can serve as a significant precursor to innovation in internal processes as well as external products/services. Many connections within these relationships have been theorized and examined in previous studies. This research distinctly provides

direct empirical insights into the extensive process and all interconnected variables, mapping the path from implicit knowledge acquisition to its recognition (or lack thereof) and sharing, ultimately leading to both internal and external innovation (An et al., 2014a; Gilliland, 2014; Davies et al., 2020). The study encompasses two regions at differing developmental stages. The contrasts between these regions highlight how these variables may differ, how regions can access different sources of implicit knowledge, manage it in various ways, and utilize it for diverse types of innovation. The research effectively synthesizes numerous concepts from the implicit knowledge domain, integrates them into a singular quantitative empirical model, and documents national discrepancies in the model's performance.

An exploration of prospective inquiries into the KM conceptual framework that effectively articulates the connections between technological and cultural elements will be carried out, alongside a thorough examination of the current literature that facilitated the identification of critical organizational traits associated with KM. These aspects, delineated below, are the fundamental components in the development of the conceptual framework.

Perceived ease of use

The implementation of a knowledge management system (KMS) within the ministry enhances organizational learning by capturing essential knowledge and rendering it accessible to employees when needed for reutilization. The influence of KMS upon the acquisition of explicit knowledge is vital, as explicit knowledge serves as the groundwork and precursor for the evolution of tacit knowledge (Alavi and Leidner 2001). Recent findings in the realm of knowledge-based systems (KBS) literature support this, indicating that inexperienced users tend to favor explicit knowledge support, while seasoned decision-makers lean toward available tacit knowledge support

(Arnold et al. 2006). It is vital to note that the type of KMS employed varies among organizations; for example, accounting firms typically utilize a top-down approach to KMS, which encompasses manuals, directories, and newsletters; knowledge of work processes, such as working papers, proposals, client communications, and other engagement materials; and information related to customers, including continuity and history data (O’Leary 1998).

Research indicates that, to some extent, KMS alleviates the necessity for users to encode explicit knowledge into long-term memory, as applicable knowledge components can be promptly retrieved from the users' active working memory (Gilliland, 2014; Lemieux et al., 2014; Foster et al., 2013). Alavi and Leidner (2001) emphasized that a KMS encompasses both explicit and tacit knowledge. However, explicit knowledge is initially integrated into the system since it is more easily articulated, followed by the incorporation of tacit knowledge, which contextualizes the explicit knowledge, facilitating a shared knowledge environment. Despite the advantages and impacts associated with KMS usage, some scholars argue that these effects can be both positive and negative. KMS might influence user knowledge acquisition—although there are diverse theoretical perspectives on whether this effect is likely to be constructive or detrimental (McCall et al., 2008). Given the prevalent implementation of KMS in professional settings, it is crucial to investigate how KMS adoption affects user performance and expertise development to fully comprehend the ramifications of using KMS. Reports indicate that KMS users tend to outperform traditional reference material users when tackling structured problems (Arnold et al. 2006; McCall et al. 2008).

The generation, application, storage, sharing, and use of knowledge are all tasks that are commonly included in the process of knowledge management in an organization (An et al., 2014a; Gilliland, 2014; Davies et al., 2020). To accomplish this, however, the organization must actively engage in the collaboration of different activities through the efficient use of knowledge management systems (KMS) to enhance knowledge management efforts. Although there are hurdles linked to the implementation of KMS within a company, the findings indicate that such systems can facilitate a broader and deeper generation, application, storage, and dissemination of knowledge; this leads to an increased usage of existing information, ultimately enhancing decision-making, organizational effectiveness, and productivity (An et al., 2014a; Gilliland, 2014; Davies et al., 2020; Boadu et al., 2014). Furthermore, the matter of standardization should be taken into account. Will the systems be applied uniformly and governed by the same guidelines across the organization? This should not be mandated if it risks causing resistance to acceptance or is not realistically attainable.

Trust towards use

Initially, a brief overview of theoretical foundations related to KM, encompassing definitions and phases of KM, has been compiled and examined. Following this, an extensive evaluation of the primary methodologies for structuring the KM system from various viewpoints, such as well as indicators for KM performance, sharing, organisation, and representation of information.

Knowledge has gained widespread recognition as the most important competitive resource in recent years (Palacios and Garrigos, 2006). Knowledge denotes an understanding of a given issue, either theoretically or practically. Since it has been applied to a wide range of tasks and fields with the goal of managing, creating, and improving intellectual resources, knowledge management (KM) has grown in popularity in the twenty-first century (Shannak, 2009). Furthermore, it has been

enhanced by a wide range of contributions from many academics as well as a substantial body of experience. From a deeper standpoint, knowledge management (KM) should serve as a guiding principle as well as an operational strategy. KM is closely related to information and communication technologies, even if it is a component of management studies (Mihalca et al., 2008). Since many different fields contribute significantly to knowledge management, it is possible to view it from a variety of perspectives. Philosophy, cognitive science, social science, management science, information science, knowledge engineering, artificial intelligence, and economics are some of these well-known fields (Kakabadse et al., 2003).

According to a commonly accepted view, knowledge is a dynamic human resource that is employed to support individual beliefs in the search for truth (Nonaka, 1994). It can therefore be argued that knowledge is an invisible or non-material resource and that gaining it requires complex cognitive processes that include perception, learning, communication, association, and reasoning (Epetimehin and Ekundayo, 2011). The ideas, abilities, experiences, and insights that serve as the foundation for creating, evaluating, and using information are all embodied in knowledge (Soltani & Navimipour, 2016). Scholars from a wide range of backgrounds have proposed numerous knowledge management (KM) procedures over the last 20 years. We have examined and summarised a number of important KM process interpretations. Even if there are several meanings, some terms—like 'creation', 'storage', 'transfer', and 'application'—seem more common and necessary than others.

The process by which new insights are produced is referred to as knowledge generation. In both tacit and explicit knowledge, this phase includes the creation of new information or the replacement of preexisting data (Ajmal and Koskinen, 2008). The process of recording and preserving knowledge in repositories such as databases, filing systems, and archives is referred to as

knowledge storage. Its goal is to transfer knowledge to departments, teams, or individuals that need to use it (Johannsen, 2000). A key element of knowledge management (KM) is knowledge transfer, which is the flow of knowledge to locations where it is needed and useful (Pirkkalainen and Pawlowski, 2013). Since a successful transfer must lead to changes in the knowledge base, this step is essential to the effectiveness of the KM process (Argote and Ingram, 2000). The act of putting information into practice is known as knowledge application. This procedure can be used to improve efficiency, save costs, handle new problems, and fine-tune strategic direction (Newell et al., 2004). By putting best practices into practice, for example, this step also seeks to efficiently utilise the knowledge produced.

In order to manage information by creating links between related content, knowledge representation and organisation is a technique that improves the effectiveness of clarifying relationships between knowledge domains. In the field of knowledge management (KM), the semantic link network (SLN) has become increasingly popular within the past ten years. Semantic links between concepts are illustrated using SLN as a framework. It consists of nodes that represent concepts and edges that show the semantic relationships between them (Hai, 2011).

Ontology is the most common method among the different SLN applications in KM. Ontology is a term that was first used in philosophy to describe a methodical understanding of existence. It serves as a list of current ideas in a field, including predicates, term semantics, and their relationships (Natalya et al., 2001). The classification of information, the building of knowledge and information databases, and the establishment of intelligent search engines are all made possible by ontology. As shown, over the past ten years, many scholars have been fascinated by the use of ontology in the field of knowledge management.

The exchange of information between individuals is one way to define knowledge dissemination. Its goal is to bring together different sources of information and turn them into new frameworks or methods. According to Dan and Sunesson (2012), the terms 'knowledge transfer' and 'dissemination' are sometimes used synonymously or are thought to have similar connotations. In line with most of the literature, we will consider knowledge transfer and diffusion to be semantically similar (Paulin and Suneson, 2012). The degree to which the recipient misinterpreted the information determined how effective the spread of that knowledge was. Swacha (2015) provided a set of appropriate gamification guidelines that make use of a few carefully chosen gamification components meant to motivate people to engage in a range of knowledge-sharing activities.

Yong (2013) offered fresh perspectives on the precise relationships between people's intents to share knowledge and organisational incentives, reciprocity, enjoyment, and social capital— aspects that previous research had failed to consider. Their research will greatly advance our awareness of the relative contributions of social capital and personal motives on people's intents to share knowledge. In an online learning environment, Ma and Yuen (2011) introduced and evaluated a framework for online knowledge-sharing among undergraduate students. Perceived online attachment motive and perceived online relationship commitment are two new characteristics added to this paradigm. The impact of both intrinsic and extrinsic motivation on information sharing in group settings was investigated by Hung et al. (2011). Their study's findings showed that effective information sharing requires a knowledge management system with built-in reputation feedback. By taking into account pertinent elements from a variety of viewpoints, Tohidinia and Mosakhani (2010) evaluated the effects of several potential factors on knowledge-sharing behaviour and suggested a methodical strategy for improving knowledge-sharing behaviour in organisations.

In this study, we aim to present a comprehensive theoretical overview and critique of Knowledge Management (KM). Initially, we encapsulated and examined the theoretical frameworks surrounding KM, encompassing its definitions and developmental phases. Subsequently, we explored several key methodologies for structuring KM systems from various angles, including digital assets, implicit knowledge, information systems, KM frameworks, financial strategies, knowledge modeling and structuring, knowledge dissemination, and performance assessment for KM. The insights generated from this research will benefit government officials, scholars, and practitioners engaged in the exploration of KM.

We address research inquiries concerning organizational knowledge management processes and the foundation for forthcoming investigations. As such, we contend that information technology's function in organisational knowledge management ought to garner significant academic exploration and serve as a central theme for inquiry. It is our aspiration that the ideas, discussions, and research challenges presented in this study will ignite interest and pave the way for future endeavors in the field of knowledge management among researchers.

Attitudes towards using

The fundamental premise indicates that knowledge can be perceived from an integrated standpoint; it flows throughout the organization, fostering knowledge assets and impacting the organization's effectiveness. It possesses diverse traits, including mental state, entity, access to data, or the capacity to shape future actions.

Clyde et al. (2011) discuss previous pertinent KM research and elucidate: First, it seems that KM performance is a significant aspect for managers to take into account. Second, numerous studies indicate a favorable correlation between various components of KM performance and certain facets of organizational performance. Third, the majority of the empirical data are based on the perceptions of both independent and dependent variables by individuals entrenched in the organizations under scrutiny. This kind of investigation introduces risks, complexities, and inefficiencies for ventures involving knowledge generation, knowledge preservation, and knowledge dissemination. Fourth, a limited number of studies assess whether an organization's actual financial outcomes relate to its KM performance. Although confirming empirical evidence is scarce, it has been broadly accepted in KM literature that there are positive effects on financial results.

In a similar vein, the evaluation of the expenses versus benefits associated with investments in knowledge management (KM) systems has long been debated, especially following some initial implementations of large, costly IT infrastructures that yielded unsatisfactory results. This perspective, combined with apprehensions that disseminating knowledge too broadly could enhance susceptibility to competitors' intelligence or other incursions, indicated that a more cautious strategy for sharing proprietary knowledge assets might be wise (Erickson & Rothberg, 2015).

Cohen & Olsen (2015) demonstrate that the relationship between codification and human capital KM capabilities plays a role in shaping customer service outcomes. Connections between KM capabilities and performance were found to hinge on the business strategy of the organization. Researchers have assigned considerable focus to the experimental investigation of the relations between knowledge management (KM) and performance of the organization. These efforts have generally concentrated on the KM capabilities necessary for the externalization and codification of

institutional knowledge, as well as the nurturing and preservation of tacit knowledge embedded in human resources. Competing theoretical frameworks regarding the interplay between these two KM capabilities and their ramifications for an entity's performance have been explored in earlier studies. The effect of knowledge management capabilities on the output of organizations in service-oriented sectors such as hospitality has attracted less scrutiny (Cohen & Olsen, 2015).

Various constructs have been linked to organizational performance, each with differing degrees of significance. Yang et al. (2009) demonstrate that organizational framework and knowledge management culture correlate with performance outcomes like innovation, financial health, and customer satisfaction. According to these authors, technology does influence financial outcomes and customer service within organizations. It was observed that leaders preferred relying on their personal experiences and professional relationships. Hence, a culture grounded in trust serves as the cornerstone for their endeavours to control knowledge.

The objective of the systematic review is to explore how authors have connected KM practices with financial performance on an organizational scale (An et al., 2014a; Gilliland, 2014). At the outset of the systematic review, a review protocol was established to ensure the research proceeds as intended, rather than being swayed by the researchers' biases. This protocol encompasses the research background, research inquiries, search strategy, criteria and procedures for study selection, quality evaluation, data extraction, and strategies for data synthesis.

We observe various techniques that have attempted to clarify this connection, including conventional methods such as statistical techniques applied to surveys (An et al., 2014a; Gilliland, 2014). Additionally, innovative approaches like the correlation between public financial information

and external recognitions for KM (An et al., 2014a; Gilliland, 2014; Davies et al., 2020) have emerged. The results also indicate several pathways for future research, including the suggestion of a comprehensive assessment method that practitioners and scholars can implement to establish a vast database of studies utilizing the same indicators for KM and financial performance, based on the most prevalent measures identified in the research.

The effects of perceived ease of use

Evaluating performance is a crucial component of knowledge management, according to Wang et al. (2015). We may ascertain the effectiveness of knowledge management (KM) methods, evaluate if the current knowledge processes meet our learning needs, and get crucial feedback on KM for continuous improvement through this evaluation process. The selection of evaluation techniques and the development of evaluation criteria are both included in the evaluation of KM performance (Wang and Zheng, 2010). Both qualitative and quantitative studies are used in this review process. Expert interviews (Booker et al., 2008), case studies and surveys (Darroch and McNaughton, 2002), and closed-ended surveys (Changchit et al., 2001) are common quantitative methods for evaluating knowledge management. (Chen and Chen, 2005) On the other hand, quantitative analysis is mostly used to assess explicit knowledge using a variety of indicators that encompass both financial and non-financial factors.

A KM index system with four parts—the KM process, organisational knowledge structure, economic returns, and efficiency—was presented by Wang et al. (2016). Wang et al. (2015) divided performance metrics into three groups: KM processes, knowledge resources, and KM-influencing factors. Based on analyses linking the Balanced Scorecard to knowledge management, Zhang (2010) modified the scorecard to evaluate KM performance. This included thorough assessments of KM

tools in four areas: internal processes, learning and growth, customers, and finances. A KM performance assessment approach that takes into account the knowledge system, structural capital, human capital, intellectual capital, and market capital was presented by Wang and Zheng (2010). Wu et al. (2009) developed a principal component analysis-based approach to KM performance evaluation, using knowledge stocks, learning organisation maturity, information management, and marketing capabilities as assessment indicators. With evaluation criteria encompassing IT, processes, and human resources, Tseng (2008) developed a categorisation matrix to group performance indicators that could be helpful in evaluating KM performance.

The findings from the investigation indicate that the application of knowledge, as well as its creation, storage, and sustainability, has a direct and significant influence on organizational performance. Therefore, from a leadership viewpoint, it is crucial to incorporate knowledge application and sustainability within strategic functional processes (An et al., 2014a; Gilliland, 2014). Many organizations remain hesitant about sustainability due to the associated costs, and several leaders regard sustainability as the practice of preserving and enhancing data, information, and knowledge to fortify the future. The outcomes of this research suggest that implementing sustainable strategies and utilizing knowledge not only correlate with improved organizational performance but also enhance the significance of other organizational processes, including knowledge management.

Human resource management (HRM) on KM

The primary strategies for managing knowledge are made up of the HRM strategy along with the broader strategy of the organization (Noe, 2016; An et al., 2014a; Gilliland, 2014; Boadu et al., 2014). This study has pinpointed two distinct strategies: an exploitative strategy and an explorative

strategy. Each of these approaches impacts behavior, which subsequently influences the process of knowledge management. As a result, the exploitative approach prioritizes the retention of knowledge, technical skills, and the sharing of explicit knowledge via technological information solutions (Davies et al., 2020; Noe, 2016; Choy & Suk, 2005). This increases the risk that organizations utilizing this strategy may become stuck in outdated frameworks and fail to explore future applications. In contrast, the explorative strategy underscores the significance of creating knowledge and facilitating human interactions for transferring tacit knowledge, ultimately boosting innovation and promoting new learning (Davies et al., 2020; Noe, 2016). Businesses that adopt this strategy frequently lack the essential structure and processes to convert innovations into a competitive edge.

Training and development on KM

In a training department structured around a functional model, all individuals engaged in any facet of training or development are included (Noe, 2016; An et al., 2014a). The department is under the guidance of a training director who supervises professionals with specialized expertise in specific subjects or skill sets where training is provided, such as safety instruction, quality improvement, technology and computer systems education, leadership training, and sales strategies (An et al., 2014a; Gilliland, 2014; Davies et al., 2020; Noe, 2016). Each specialist is tasked with designing, implementing, and refreshing training programs within their domain, which are utilized organization-wide. The benefits of the functional model encompass the development of focused expertise, facilitating plan establishment for the department and the efficient creation of a diverse range of programs in specific content areas; defined career trajectories for training staff; and low internal coordination demands (An et al., 2014a; Gilliland, 2014; Noe, 2016; Davies et al., 2020).

While the functional model suits a fairly stable business climate, it is not without its drawbacks. For instance, the department might cultivate knowledge that becomes misaligned with the organization's requirements. Additionally, in larger entities, sluggish response times and bottlenecks can arise from sequential task execution. This model may stifle innovation due to its limited viewpoints. The training director may also face challenges from conflicts regarding priorities and strong coordination demands. To alleviate these potential issues, it is vital for the director of training and other team members to frequently engage with training customers to assess whether the curriculum addresses their demands. Furthermore, expert trainers must be adaptable and proactive in updating their course content to ensure relevance to trainees and alignment with the current business objectives of the organization.

The ministry employs a customer model that is decentralized and relies on teams established to take charge of the training demands of a specific division or other business sectors within the organization. A training director will supervise the team, which usually consists of both subject matter specialists and HR generalists who not only facilitate training but also engage in other conventional HR activities (e.g., performance evaluation, recruitment, benefits, etc.), along with groups of functional authorities who provide courses in specific domains like finance, sales and marketing, manufacturing, operations, and information systems (An et al., 2014a; Gilliland, 2014; Noe, 2016). While there is merit in having functional authorities disseminate their expertise, caution must be exercised to ensure they possess the essential knowledge, skills, and mindset to be effective educators (Noe, 2016; Davies et al., 2020; Ahmadi et al., 2012). For instance, functional experts should receive guidance on fundamental teaching methodologies, such as gathering feedback from attendees and incorporating practical activities into their sessions. This strategy heightens the

likelihood that training initiatives will closely align with the unique requirements of a business group; however, for it to succeed, the instructors must comprehend those needs and adapt courses and content accordingly.

Additional potential benefits of the customer model include alignment with swift changes and a higher probability that training resources will resonate with participants (An et al., 2014a; Gilliland, 2014; Noe, 2016; Davies et al., 2020). Moreover, the customer model promotes undivided focus on tasks, distinctly outlines responsibilities and accountability, and allows simultaneous handling of multiple tasks (An et al., 2014a; Gilliland, 2014).

Conversely, the customer model necessitates a considerable amount of time for implementation, and potential challenges encompass discrepancies in effectiveness from team to team, inadequate design (e.g., problem-solving may be constrained to task-specific needs), conflicts in resource allocation and between tasks and priorities, and difficulties in coordinating efforts. When adopting the customer model, the training director may encounter challenges in establishing and enforcing a uniform instructional design framework and ensuring that the organization's overarching quality philosophy is consistently highlighted in every program (An et al., 2014a; Gilliland, 2014; Noe, 2016; Davies et al., 2020).

The ministry's community of practice thrives on personal interactions among trusted circles of practitioners (Noe, 2016; Davies et al., 2020). These interactions can occur in either physical or digital settings, with the aim of fostering a secure, inviting, and productive atmosphere that encourages individuals to concentrate, unwind, and build trust with one another. A CoP is centered around a specific 'practice.' Three defining traits characterize a 'practice': Joint enterprise, where CoP

members are engaged in a continuous effort to achieve common goals, sharing a mutual task and having a clear understanding of the broader significance of that work; mutual involvement; and a shared repertoire (Noe, 2016; Davies et al., 2020).

Evaluation of findings

The research problem

There exist applications for manipulating statistics, sharing understanding, and comprehending security, in line with the exam query. Several essential components characterize strategies for data manipulation and the challenging circumstances that arise between success and failure within the Lesotho Ministry of Foreign Affairs and International Relations. The subsequent sections encapsulate the literature concerning the interplay between technical factors (provider, system, and data quality), social factors (support utilisation and user satisfaction), user satisfaction, and the success of online businesses and social networks, along with their respective hypotheses. The assumptions for these studies were established in the section's end.

Technical aspects

The extent to which recorded devices align with customer preferences is defined as data quality in this study (Iskandar, 2017; Gao, 2018). Pham contends that data quality has become a crucial element in establishing a competitive edge and navigating rapidly evolving organizational landscapes (2021). Information that is current, trustworthy, precise, and user-friendly can aid organizations in making better decisions more swiftly (Kordab et al., 2020; Abbas, 2020). Moreover, a recent study identified that high-quality information is both a precursor and a significant contributor to customer satisfaction (Abbas, 2020; Jemal, 2021). The success of e-commerce and social platforms hinges on the contributions of online content. This encourages users to adopt a positive

attitude towards information processing systems and enhances their satisfaction with such platforms (Pham, 2021). In this research, data quality is outlined as the degree to which the information fulfills customer requirements (Iskandar, 2017; Gao, 2018). As per Pham, the quality of information has deteriorated. A direct measurement of quality information is essential to promote efficient documentation and consumption among users within an organization.

In this analysis, we explore the potential of web applications as marketing tools, presenting and illustrating the various web or social media elements, including social and economic phenomena. The principal categories include weblogs, online communities, social networks, forums/bulletin boards, and content aggregators. Web 2.0 applications have become frequently integrated into every modern online business domain and the personal and social lives of an ever-growing number of internet users. According to various studies, many individuals utilize social media sites to share or transmit "news" or information to their social circles or other social media users (Ragunathan et al., 2015; Silk et al., 2017; Khoo et al., 2017). Companies can attract customers by gathering a substantial array of likes and comments on their social media posts, thereby cultivating a social media following (Ragunathan et al., 2015; Silk et al., 2017; Khoo et al., 2017).

Affordable internet access has significantly enhanced the allure of digital businesses and social platforms by enabling users to obtain exciting and seamless entry to innovative, engaging, and thought-provoking services. Consequently, social media networks have gained recognition as a powerful tool for shaping public perception (Al-Busaidi et al., 2010; Geschke et al., 2017).

Ultimately, prior studies have shown that individual standards for valuing social networks and digital businesses are important in the relationships between participating organisations and the urgent need to alleviate the negative impacts of online businesses and social platforms (AlBusaidi et al., 2010; Dolata & Schrape, 2015). This increased consciousness may also pave the way for the formation of a coalition of like-minded individuals and entities to pursue significant initiatives. The rising awareness among internet users regarding Web 2.0 and the perception that it empowers consumers in the market landscape is a vital driver behind the widespread adoption and accelerated acceptance of social networks and online enterprises in terms of technological frameworks. Similarly, prior investigations (Kende et al., 2016; Jin et al., 2017; O'Leary, 2010) have identified a correlation between managerial directives and tools or technology consumer satisfaction. The different cognitive processes that users engage in across various social platforms represent a significant area of exploration in online communication.

Earlier research has explored the relationship between online system structures and the assignment of blame that led to this insight. Consumer interpretations of Web 2.0 as a vehicle for personal empowerment, combined with the realization that the web increasingly serves as a key social influencer for many internet users, underscores this trend. Previous studies assert a connection between the efficacy of online platforms and individual contentment (Keke, 2019; Vasic, 2019; Tandon, 2017).

Consumer perceptions are examined and converted into promotional and advertising data on Web 2.0. Any aspect related to the product and/or brand, including any components of the marketing mix, can act as a stimulus for promotion. As a result, participants in Web 2.0 evolve from passive observers to engaged co-creators (Fournier & Avery, 2012; Edwards, 2012; Barwise & Meehan,

2011), fundamentally altering the consumer-brand interplay model (Singh & Sonnenburg, 2012).

The capacity of Web 2.0 to fulfill individuals' aims in disseminating documents, information, and ideas while catering to diverse human requirements, including the rise of innovative communication techniques, is noteworthy. It is essential to harness all skills, abilities, and creative concepts. Researchers indicate that different channels for communication, engagement, and social interaction emerge in online gaming where people congregate to share expertise (Zhao, 2020; Muhammed, 2020). This notion suggests that leveraging social media sites boosts overall record sharing. Web 2.0 pertains to websites and applications that employ user-generated content to draw in new patrons. It has enhanced pre-existing communities and communication pathways while broadening customer involvement and interactivity.

Thanks to the engaging nature of contemporary technology, the internet's purpose is becoming increasingly evident. The marketplace is now authentically participating in the expansion, evolution, and alteration of knowledge. Residual content from the early stages of the internet can still be accessed online, which has long outgrown being an intrinsic attribute of today's realm. Additionally, initial examinations of the system's efficiency chiefly concentrated on its technological facets (Nattapol et al., 2010; Ansari, 2020; Natarajan et al., 2017). The technical features that are frequently assessed include knowledgeable, user-friendly, and service-oriented components. Despite the absence of definitive proof, the influence of collective social behaviors, along with managerial backing, on the overall efficacy of technology-managed systems has been investigated within social networks (Syed, 2021; AsrarHaq, 2016; Areekkuzhiyil, 2016, 2019; Chandran, 2020).

As public interest in social media grows, organizations are presented with new realities and challenges. An organizational culture, which serves as a social factor that encourages the application and execution of knowledge, is defined through recognition and advocacy (AlSwidi, 2014; Silk et al., 2017). Trusting cultural behaviors can facilitate knowledge exchange. For a knowledge-based system to function effectively, it is essential. Prior studies have indicated that subjective norms have a lesser impact on generating intentions than mindsets (Eckhardt, 2010; Silk et al., 2017). A "subjective norm" constitutes a firm and prevailing set of expectations accumulated from various sources.

Web 2.0 is increasingly viewed as a threat to marketers' dominance within the communication landscape, as brands have become more challenging to convey, and the effectiveness of mass marketing has diminished. Research indicates a relationship between enabling conditions and the willingness to use online systems, in addition to a lack of persuasive power (Chipperfield, 2012; Reich, 2016). For instance, Muhammed (2020) and Chipperfield (2012) exemplify this. The study suggests that the more favorable the conditions for online systems, the more likely they are to be embraced. Various studies indicate that consumer motivation to engage with online systems is associated with behavioral control (Primmer, 2018; Pitt, 2020; Bedford et al., 2019).

The perceptual element of organizational culture influences the embrace of digital systems. While some entrepreneurs are acclimatizing to their evolving surroundings, others have identified the economic benefits of social media platforms (Chung et al., 2015; Yip et al., 2012; Blakeney, 2012). In the end, the key insight emphasizes the elements that motivate clients to engage with online systems in the commercial sphere, which has implications for client choices, actions, and the incentives that prompt clients to adopt online systems from the viewpoint of the commercial market

(Al-Swidi et al., 2014; Ali et al., 2019).

People are driven by the beneficial assets in their tendency to align with others' viewpoints, coupled with a sense of community pressure to behave positively. Service excellence represents a service's ability to meet the desires, anticipations, and contentment of its clients. The practice of acquiring and reapplying knowledge can transform into a routine element of an organization's processes by providing guidance and education on how to employ and scrutinize information (Octavia, 2018; Demir, 2020). They recognize that one of the fundamental aspects of their success is their capacity to work together effortlessly. The efficiency of a website in supporting online users to discover, purchase, and access products and services is assessed. The ease with which a website enables individuals to buy, sell, and barter goods affects its practicality and efficiency. Engaging with online consumers to provide products and services is found to be more skilled and effective, according to the outcomes of this research. From the literature review, the Internet is regarded as a crucial instrument that customers can leverage.

In the realm of knowledge sharing and documentation, having a tool framework that promotes and accelerates the process is crucial. Indeed, collaboration and recording are essential. As a result, the caliber of tools is fundamental for efficient data management, and user contentment holds equal significance. The study conducted by Venters et al. (2010), Gracia (2014), and Pringle et al. (2016) exemplifies this pattern. For every organization aiming to adopt contemporary knowledge management solutions, the incorporation of information technology (IT) in data management (KM) is critical (Colomo-Palacios & Popa, 2014; Venters et al., 2010). Scholars have explored the traits of information technology communication within institutions and determined that it has the capacity to serve as a catalyst for knowledge, assisting in document organization, data

storage, retrieval, distribution, alteration, and sharing.

The notion of trust is clarified within the realm of information technology. Key indicators of a trustworthy and adept manipulative tool include reliability, dependability, and overall performance (Wright et al., 2012; Proctor et al., 2012; Lauren et al., 2013). Senior leadership encourages active engagement by highlighting the importance of information systems through educating users about the tool's aims and functionalities. The information technology infrastructure encompasses software, hardware, frameworks, organizational models, and technology-driven activities, along with the supporting supplier elements. According to certain experts, the information technology infrastructure comprises a collection of physical and digital software elements, including network components, which act as the core support for information systems (Rouse et al., 2017; Laan & Gruber, 2012). A tailored infrastructure solution might be essential for various technological tasks (Rouse et al., 2017; Laan, 2012). Professionals point out that the information technology infrastructure is a complex and fast-evolving framework of both physical and digital software components, in addition to network elements, that supports an information entity (Rouse et al., 2017; Laan & Gruber, 2012). A specialized infrastructure solution may be required for an array of technological tasks (Rouse, 2017; Laan, 2012).

Mechanisms of the statistical period depend on the essential resources of their optimal operations. A crucial upper-level support for administrative statistical frameworks has been recognized as a domain where individuals who have directly engaged with the system can greatly impact its effectiveness (Becerra-Fernandez & Sabherwal, 2010; Donnelly, 2019). Educational, tangible, organizational, instructional, and specific assets, along with certain innovative and inherent resources, form the fabric of the network knowledge architecture. Ultimately, a multitude of studies

have been undertaken. The knowledge management architecture, in line with modern research, pertains to the surroundings and facilitators for knowledge advancement, as well as the creation and dissemination of information within an organization (Becerra-Fernandez & Sabherwal, 2010; Donnelly, 2019). Organizational culture, corporate structure, identities, and documentation technology are all components of the knowledge management architecture.

Individuals who feel content with their ability to operate devices will assign them high ratings, reflecting the diverse advantages they experience, such as accelerated task completion, improved decision-making capabilities, and excellence in their professional lives (Nattapol et al., 2010; AlBusaidi et al., 2010). Numerous studies suggest that knowledge management initiatives require managerial backing or guidance. An earlier investigation uncovered a significant link between managerial backing and user satisfaction with particular systems or technologies (Ho, 2019; Nattapol et al., 2010). A few knowledge management systems take into account the influence of social elements like administrative backing and user approval on tool efficacy, although empirical data is scarce (Ho, 2019; AlBusaidi et al., 2010).

The effectiveness of a document management system hinges on the contentment of its users (Ragab and Arisha, 2013; Kwahk and Oh, 2010). We undertook a comprehensive examination of existing literature that indicates an emphasis on information, managing infrastructure, processes, and technology can significantly bolster our collective performance. In the realm of information management, progress is certainly within reach. The ministry stands to excel beyond its rivals. To achieve a position among the industry's elite in document technology, an organization must understand, implement, and perpetually refine its information and management frameworks (Pandey et al., 2018; Vindrola-Padros et al., 2018).

By fostering a culture and improving the human aspect, the ministry can establish a foundation for promoting best practices. This purchase, storage, and application of knowledge become essential as the platform is set in place. Technology is leading the charge for boosted overall performance through the amalgamation of document management strategies. The volume and caliber of information are vital for fostering knowledge exchange among users and enhancing knowledge application directly among individuals within an organization. This goes beyond merely distributing intellectual resources; it necessitates a reconsideration of organizational structures and statistical sharing (Muhammed et al., 2020; Mathrani et al., 2013; Bedford et al., 2019). Operational managers who oversee technical research in high-performing organizations, for example, have access to systems for manipulating organizational information. This study delves into behaviors that aid organizations in cultivating a trust-based comprehensive corporate culture, alongside behaviors essential for a trust-based culture that facilitates information transformation and is nurtured throughout the enterprise. The results also suggest that organizational structure underpins the development of a knowledge culture by encouraging and directing internal behaviors related to data collection, organization, clarification, sharing, and reuse of information.

Customers are notably more likely to feel contentment when insights into manipulation systems provide supplementary advantages along with comprehensive information. Excelling in strategies to secure a competitive advantage and adapt to continuously changing organizational dynamics has become a paramount issue (Pandey & Dutta, 2013; Bedford et al., 2019). Furthermore, this encompasses the costs linked to embedding a knowledge-sharing ethos into management frameworks and procedures.

Organizations must find ways to utilize the data currently housed within their facilities (Muhammed et al., 2020; Mathrani et al., 2013; Bedford et al., 2019). The results further suggest that organizational framework influences the nurturing and development of a culture centered on learning. This study aims to help managers acknowledge the significance of knowledge infrastructure capabilities in fulfilling knowledge management goals and in pinpointing areas requiring deeper exploration to fully exploit the benefits of knowledge management initiatives

Summary

A total of 331 surveys were distributed in both paper and digital formats to the ministry staff, technicians, and practitioners, who were then more motivated to reflect on knowledge management (KM). The examination of the survey data uncovered vital elements of KM within the respondents' organizations. Multiple theoretical foundations related to KM encompassing stages and definitions have been succinctly outlined and evaluated. From various angles, a thorough analysis of the main methods for organising the knowledge management system was then conducted. These included digital knowledge assets, tacit knowledge, information technology, KM frameworks, financial methods, organisational success, representation, and KM performance metrics.

Utilizing theoretical perspectives, a framework was proposed to investigate the relationships among six key constructs: KM effectiveness, digital assets, tacit understanding, information systems, KM frameworks, and financial plans. Exploratory Factor Analyses (EFAs) were employed to extract empirically validated underlying dimensions for each construct, drawing on data from a sample of service ministries in Lesotho. The results from structural equation modeling indicated that KM effectiveness had a notable and positive effect on digital assets, tacit understanding, information systems, KM frameworks, and financial plans. In summary, the results provided empirical support

that KM effectiveness is associated with financial planning outcomes. In essence, considering the direct association through financial planning outcomes, KM effectiveness positively and significantly impacts financial performance.

One essential component of knowledge management is performance assessment (Wang et al., 2015). We can determine whether the current knowledge processes satisfy our learning goals and whether they can provide insightful feedback on KM to promote ongoing changes in KM by using this assessment process to determine the efficacy of KM practices.

The primary knowledge management strategies encompass the human resource management (HRM) strategy and the organization's broader strategy. This research recognized two strategies: exploitative strategy and explorative strategy. Both approaches affect behavior, which in turn influences the KM process. Thus, the exploitative strategy typically focuses on knowledge preservation, technical expertise, and the dissemination of explicit knowledge through information technology solutions. A training department organized based on the functional model includes all personnel involved in various training or development aspects. This department is led by a training manager who supervises specialists among the staff with in-depth knowledge in specific subject areas or skills where they conduct training, such as safety training, quality training, technology and computer systems training, leadership development, and sales training.

A community of practice goes beyond merely being a collective of enthusiasts, such as film aficionados who favor particular genres. Participants in a community of practice are engaged practitioners. They foster a shared treasury of resources, experiences, stories, tools, and approaches to address ongoing challenges—in effect, a common methodology. Communities of practice form

from individuals who engage in a joint learning experience within a shared domain of human activity, refining their skills through consistent interactions.

Chapter 5: Implications

Introduction

The implications of knowledge digital resources, tacit knowledge, information technology, KM model, financial plan, performance, attitude towards usage, perceived utility, perceived ease of use, and trust towards use (Rifi et al., 2020). Creation, storage/retrieval, transfer, and application processes of knowledge are essential to effective organizational knowledge management (Noe, 2016; Davies et al., 2020). We contend that the application of information technologies can create an infrastructure and environment that contribute to organizational knowledge management by actualizing, supporting, augmenting, and reinforcing knowledge processes at a deep level through enhancing their underlying dynamics, scope, timing, and overall synergy.

The concept of "knowledge" is interpreted and applied differently by organisation scholars in theoretical and empirical studies (Noe, 2016; Davies et al., 2020; Bourini et al., 2013; Allameh et al., 2011). In organisational science, two viewpoints have gained popularity in recent years. According to the individualist viewpoint, knowledge can only exist within the physical boundaries of humans and is found in those who study. According to the collectivist viewpoint, knowledge belongs to the group (Little et al., 2002; Edvardsson, 2006; Hendrickson & Psarouthakis, 1998). Knowledge is accumulated by collective entities through social learning methods. Social entities—groups, communities, networks, organisational units, etc.—are the focal points of knowledge boundaries. The distinctions have been highlighted, and the broad adoption of a collectivist approach has been argued against in recent management and organisation science work (Little et al., 2002; Edvardsson, 2006; Hendrickson & Psarouthakis, 1998). Research on information systems is affected by this argument. The present study summarises future directions for information systems research,

reviews a few selected works on the locus of knowledge, and makes a case for a combined collectivist and individualist viewpoint. We demonstrate that information systems research has a strategic role to play in significantly advancing this unified perspective by using two noteworthy examples.

Over the past two decades, various theories and empirical investigations have examined numerous aspects of information inside companies. Subfields, including organisational and management theory (e.g., Spender and Grant, 1992), strategic management (e.g., Spender & Grant, 1966), innovation and technology administration (e.g., Dewar & Dutton, 1986), and information systems inquiry, have all been impacted by the idea of knowledge (e.g., Alavi & Leidner, 2000). Researchers have grown proficient in utilizing knowledge to illustrate and analyze the processes of creation, cognition, strategy, decision-making, and action within organizations. Methodological approaches have become progressively adept at investigating a multitude of precursors and repercussions associated with knowledge in organizational contexts (Schultze & Leidner, 2002). Through dissemination via instruction, education, and practical communication, knowledge has also integrated into the “standard lexicon” of administration (Newell et al., 2002).

Few studies have revealed or examined the knowledge construct's underlying presumptions, despite the fact that it is frequently used in academic work. This leads to two main problems. First of all, it is more difficult to develop coherence between theories, models, hypotheses, and empirical research when these assumptions are unclear. Subsequent work struggles to reconcile study design, constructs, and theoretical frameworks when underlying assumptions are left unclear. For example, "tacit knowledge" (also known as "tacit knowing", see Polanyi, 1966) may be a part of a study framework, but the meaning and understanding of this construct and its related variables significantly affect the selection of research methodology (Nonaka & von Krogh, 2009). On the other hand,

researchers might need to see tacit knowledge in a controlled laboratory setting or get insights from analysing large amounts of data gathered by longitudinal behaviour observation if it is connected to implicit learning and unconscious habitual problem-solving. On the other hand, qualitative interviews or surveys might highlight some of the features of knowledge if the research framework assumes that it can evolve from implicit to more explicit forms via introspection and be communicated to others through spoken words, written texts, or illustrations.

Secondly, when the foundational assumptions are tangled, it can be challenging to develop a cumulative or more holistic grasp of knowledge within organizations (Little et al., 2002; Edvardsson, 2006; Hendrickson & Psarouthakis, 1998). Consequently, researchers frequently express frustration that knowledge remains an extremely elusive concept in academic discourse. After over two decades of exploration in this field, it is difficult to establish commonly accepted confines around the concept that would enhance the generalizability of empirical findings or pinpoint more trustworthy metrics for assessing knowledge (Little et al., 2002; Edvardsson, 2006; Hendrickson & Psarouthakis, 1998). For instance, there is a significant and apparent discord differences in presumptions between a research approach that considers knowledge to be embodied and one that links information processing with cognition and knowledge with information (von Krogh et al., 1994).

Researchers should address these two issues by carefully disclosing and considering their underlying presumptions in order to develop theory and empirical research of knowledge in organisations. These presumptions can include different aspects of substance (knowledge and information), processes (knowing, information processing, and cognition), and the location of knowledge (individual or collective), as demonstrated. The latter has been the subject of a recent management and organisational science discussion (Felin & Hesterly, 2007). The discussion is

between academics who support two different points of view: collectivism, which holds that the locus of knowledge in organisations is collective, and individualism, which places the location at the individual level (Little et al., 2002; Edvardsson, 2006; Hendrickson & Psarouthakis, 1998; Noe, 2016; Davies et al., 2020). Many academics take a hybrid approach that takes into account individual entities, as will be shown later. In order to investigate and demonstrate the need for a combined viewpoint on the locus of knowledge, this study aims to present and discuss a few chosen contributions. Additionally, we support the importance of information systems research in advancing this integrated perspective. The study concludes that the theoretical development and exploration of organisational knowledge lies at the nexus of individualist and collectivist views on the locus of knowledge, as well as context- and artefact-orientated information systems research.

The research is organised as follows. We discuss important contributions to the individualist perspective in the next part after introducing some contributions to the collectivist perspective. Two case studies are used in the next section to demonstrate how information systems research may foster a collaborative perspective on the location of knowledge in organisations. We show how open-source software (OSS) provides a research setting for examining information reuse by individuals and collectives and how such a hybrid perspective can be essential to theorising, as demonstrated by Alavi and Leidner's (2001) knowledge management model (von Krogh & Spaeth, 2007). It is crucial to stress that every point of view includes a wide range of complex concepts, variables, and constructs, leading to additional subcategories within each. The goal of this study is to examine the locus assumption within the current inquiry rather than provide a thorough analysis of the literature on knowledge in organisations (this has been covered in other works—see Nonaka et al., 2006; Nonaka and von Krogh, 2009; Majchrzak et al., 2013), including applications such as wikis, blogs,

social tagging systems, social bookmarking systems, microblogs, and enterprise social networking (ESN) systems.

We have posited that theories and investigations concerning knowledge within organizations must encompass both personal and collective dimensions of knowledge in an intricate manner. Additionally, we assert that the concept known as the 'collectivist perspective' invests efforts into comprehending the various layers of interaction between individuals and collectives in elucidating organizational results. Furthermore, we suggest that research in information systems is crucial for exploring this aspect.

In our exploration of social networks, we acknowledge that contemporary research has shifted focus from technological attributes to their affordances—the potential for action arising from the interplay between the individual and the technology. Majchrzak et al. (2013) describe an affordance as 'the reciprocity of an actor's motivations and technological abilities that offers the possibility for a specific action (Faraj & Azad, 2012, p. 3)' and emphasize a 'mutually beneficial connection between human actions and technological prowess' (p. 3-4). Treem & Leonard (2012) advocate for the affordance approach, which examines 'which combinations of material characteristics enable individuals to perform tasks they could not accomplish before or to do things that were previously challenging to achieve without technology' (p. 10). Both of these affordance perspectives concentrate on how individuals interact with technology and draw comparisons with how they engage with other technological solutions. Thus, the concept of affordance inherently includes a relative assessment of action potentials associated with technologies. In light of our emphasis on knowledge sharing, we tackle Treem & Leonard's inquiry regarding what aspects of

knowledge sharing could not be executed as effectively prior to the adoption of Engineering Software and Network Services (ESNS), making a comparative analysis with the earlier technology of traditional KM systems.

Theoretical frameworks and investigations indicate that ESNS can enhance our current comprehension of expertise distribution. Initially, ESNS presents more instantaneous, informal, and social elements (Zhang et al., 2010; Zhao & Rosson, 2009) compared to traditional KM systems. For example, remarks on ESNS may express more personal perspectives and/or adopt a more casual tone, thereby acting as indirect indicators of expertise. Experts recognized through user-generated content shared in real-time on ESNS can offer more contemporary insights than a conventional expert directory that might only see updates at intervals, such as during annual performance evaluations. This meta-knowledge capability of ESNS can transform previously obscure knowledge distribution into something more discernible.

Furthermore, ESNS integrates social connection information with accrued expertise data to assist in not just identifying the appropriate individuals but also in visualizing various routes to reach those individuals (Shami et al., 2009). For instance, SmallBlue (Lin et al., 2008) tracks social network relationships among employees and generates visual representations of network paths of varying lengths to connect with expertise holders directly or select any intermediary contacts for referral. This characteristic becomes particularly crucial in large organizations where accessing knowledge isn't as straightforward as it might be within smaller workgroups.

Lastly, ESNS can furnish insights into what Kane et al. (2012) refer to as "knowledge conversations." By monitoring the interactions and exchanges among users through their posts, comments, references, and discussions, a user can witness online dialogues that provide hints about who knows what. The capacity of ESNS to render knowledge conversations visible to the community could, to some extent, replace the informal observations that underpin knowledge inferences found in smaller groups. Moreover, the user need not be present during the conversations. Digital remnants of these discussions are integrated into the system and can be revisited at any time by participants and non-participants alike.

Fourth, ESNS serves as a catalyst for promoting bi-directional awareness that enhances the exchange of knowledge. Ehrlich & Shami (2008) discovered that the interactive nature and visibility of ESNS facilitate motivated knowledge providers to effortlessly 'relay' their expertise to those in need, an essential process highlighted in KM theory as 'information allocation.' This elevated knowledge exchange and retrieval can foster the development of expertise awareness. Additionally, ESNS can ignite new connections (Majchzak et al., 2013). As Treen and Leonardi (2012) point out, many ESNS platforms propose links that may prove beneficial to users. Visual representations of networks that illustrate routes to potentially valuable connections have been shown to effectively link seekers of expertise with those who possess it (Shami et al., 2009). Moreover, information available in profiles and posts can be assessed to gauge the potential worth of a new connection (DiMicco et al., 2009).

The ability to present information that enables users to explore new affiliations is not exclusive to ESNS in contrast to formal KM systems. Nonetheless, the capacity to utilize real-time data derived from informal associations provides a tailored, informal, and current recommendation

system distinctive to ESNS (An et al., 2014a; Soltani & Navimipour, 2016). In summary, we propose that the social capital cultivated and maintained within enterprise social networking platforms is connective, as it strengthens interpersonal relationships, and communal, as it makes connective communications between interacting individuals visible and accessible to the entire community. This smooth integration of connective and communal interactions can grant employees, even in loosely linked networks, improved opportunities to reach out to one another through intermediary connections of varying lengths (An et al., 2014a; Soltani & Navimipour, 2016; Gulliland, 2014). Consequently, employees can connect with a wider array of colleagues from the same and different locations, countries, business units, and teams, with enhanced relationship quality and a richer mix of diversity. Thus, we contend that relative to traditional KM systems, ESNS provide broader connections and thereby help to develop and maintain social capital that is essential for knowledge exchange.

The proficient and effective administration of knowledge assets is crucial for organizations seeking to uphold a competitive edge in economies driven by knowledge (Popov & Vlasov, 2014; Wang et al., 2016). This study provides additional empirical validation for this already acknowledged claim. Moreover, the findings indicate that employing knowledge and sustainability tactics acts as intermediaries in this interaction. These outcomes imply that the creation, formalization, and dissemination of knowledge will enhance organizational performance only when aligned with a sustainable approach.

Knowledge utilization refers to a company's capacity to collect, recognize, and convert knowledge into valuable products and services, utilize it in decision-making, and embed it into behaviors (Little et al., 2002; Edvardsson, 2006; Hendrickson & Psarouthakis, 1998). Therefore, the

process of generating, codifying, and sharing knowledge to produce tangible value is intrinsically linked to the capacity of an organisation to use that information to successfully accomplish its strategic goals. Thus, this study recommends that academics and professionals stress the importance of knowledge use in carrying out knowledge management. (KM) (Little et al., 2002; Edvardsson, 2006; Hendrickson & Psarouthakis, 1998; Noe, 2016; Davies et al., 2020). Furthermore, it is vital for managers to understand how knowledge management processes enhance organizational effectiveness.

Another critical insight from this study is the mediating function that sustainability serves in implementing knowledge management. An approach centered around sustainability necessitates a long-term, comprehensive, and interconnected viewpoint. It requires organizations to be cognizant of their environment, which is fundamental for achieving their strategic aims (Chatterjee & Samanta, 2022; Noe, 2016; Ahmadi et al., 2012). Consequently, knowledge management processes augment organizational performance when executed with an emphasis on sustainability. In today's unpredictable business environment, it is crucial for managers to prioritize sustainable strategies in the execution of knowledge management processes.

IT will become the competitive resource to differentiate and provide competitive advantage. The factors driving demand for IT in the new economy—with knowledge management as a prominent factor—are summarized by this Gartner report as follows:

The emerging global economy—globalization, dramatic changes in terms of competition, competition-driven changes in enterprise strategy and structure; Enterprise critical success factors (CSFs), continuous enterprise transformation, and knowledge management (KM) (Noe, 2016; Ahmadi et al., 2012).

The factors driving demand will foster new IT critical success factors (CSFs) and necessitate a fresh perspective on IT architecture that mirrors the realities of thriving enterprises in the early 21st century. The role of technology—particularly information technology—is transforming strategic business expectations regarding execution speed, time constraints, the minimization or complete removal of distance barriers, and perceptions of delivered services (Gartner, 2024). Today's user, customer, or citizen has become more exacting and anticipates engaging with businesses in ways that can predominantly or exclusively be facilitated through technology-driven support systems. These systems are chiefly interconnected with processes and technology grounded in information, knowledge, and the expertise of the individuals involved—the so-called knowledge workers. We will explore these elements in detail later in this study.

Recommendations for application

Knowledge management systems application

There are, of course, many ways to slice up the multifaceted world of knowledge management. The approaches vary by author and school (Noe, 2016; Figueiredo et al., 2016; Davies et al., 2020). Despite this difference, knowledge management can be viewed from each of the following perspectives:

Techno-centric: A focus on technology, ideally those that enhance knowledge sharing/growth. Organizational: This has to do with “how does the organization need to be designed in order to facilitate knowledge processes, and which organizations work best with those processes? Ecological: Seeing the interplay of individuals, identity, knowledge, and surroundings as a multifaceted adaptive system (p, 961).

However, Popov and Vlasov (2014:813) pinpointed two main avenues of knowledge management, which encompass the management of information and the management of human resources. In the context of information management, researchers perceive knowledge as akin to objects that can be recognized and manipulated within information systems. Conversely, the management of human resources, as viewed by scholars and practitioners, comprises processes involving a complex array of evolving skills and expertise that are in a constant state of flux. A thorough examination of this classification indicates that its characterization may be somewhat skewed and fails to accurately depict the significant distinction in methodologies regarding organizational knowledge management. This observation prompted a tripartite classification of 'Knowledge Praxis' that includes: Mechanistic approach to knowledge management, cultural/behaviorist approach to knowledge management; and the systematic approach to knowledge management.

Mechanistic approach to KM

Mechanistic strategies for managing knowledge are defined by the utilization of technology and assets to accomplish the same tasks more efficiently (Gartner, 2024; Wang et al., 2015, 2016). The fundamental premises of this strategy include:

Improved access to information is crucial for superior techniques of retrieval and reusing documents (hypertext linking, databases, full-text searches, etc.). Networking, technological advancements in general (particularly intranets), and groupware specifically will serve as essential solutions. Overall, technology and the shared volume of information will contribute to its effectiveness (Sayed, 2015: 167).

Cultural/ Behaviourists approach to KM

As stated by Noe (2016), the cultural/behavioral perspective, which is deeply embedded in process re-engineering and change management, tends to perceive knowledge challenges as management dilemmas". This perspective places greater emphasis on innovation and creativity (the learning organization) rather than capitalizing on existing explicit resources or articulating operational knowledge. The fundamental beliefs of this perspective are organizational behaviors and cultures must undergo significant transformations. In a data-rich environment, organizations may become misaligned with their business goals. Organizational behaviors and culture are indeed malleable, but conventional technologies and approaches to addressing the knowledge conundrum have hit their ceiling of efficacy. Hence, a critical viewpoint is imperative. In this context, theories regarding the behavior of large-scale systems are frequently referenced. It is the processes that are crucial, not the technology. Nothing happens or changes unless a manager makes it happen (Wang et al., 2016: 978).

Taxonomies of knowledge

Nonaka (1994) described two facets of knowledge within organizations: tacit and explicit. Grounded in action, personal experience, and engagement within a particular setting, the tacit aspect of knowledge (hereafter termed as tacit knowledge) encompasses both cognitive and practical elements (Nonaka, 1994). The cognitive aspect pertains to an individual's mental frameworks, which include mental schemas, beliefs, paradigms, and perspectives. The practical component consists of tangible skills, crafts, and expertise that are applicable to a specific context. This table did not fit on the bottom of the previous page. Therefore, the entire table was moved to the next page.

Table 5.1: Knowledge taxonomies and examples

Knowledge Types	Definitions	Examples
Tacit	Knowledge is rooted in actions, experience, and involvement in specific context	Best means of dealing with specific customer
Cognitive tacit:	Mental models	Individual's belief on cause-effect relationships
Technical tacit:	Know-how applicable to specific work	Surgery skills
Explicit	Articulated, generalized knowledge	Knowledge of major customers in a region
Individual	Created by and inherent in the individual	Insights gained from completed project
Social	Created by and inherent in collective actions of a group	Norms for inter-group communication
Declarative	Know-about	What drug is appropriate for an illness
Procedural	Know-how	How to administer a particular drug
Causal	Know-why	Understanding why the drug works
Conditional	Know-when	Understanding when to prescribe the drug
Relational	Know-with	Understanding how the drug interacts with other drugs
Pragmatic	Useful knowledge for an organization	Best practices, business frameworks, project experiences, engineering drawings, market reports

[Source for the Research Purpose]

Knowledge management and knowledge network systems are valuable tools for organizations seeking to improve efficiencyencourage creativity, and obtain a competitive advantage. By addressing the challenges associated with their implementation and leveraging the benefits they offer, organizations can create a more knowledge-driven culture that supports growth and success. Systems for managing knowledge (KMS) and knowledge management (KM) have significant implications for organizations. Impacting their performance, innovation, and competitiveness (Mandroleanu & Fanea-Ivanovici, 2019; Usman et al., 2020). Effective KM fosters collaboration, reduces redundancy, and improves decision-making. Conversely, neglecting KM can lead to knowledge loss, operational inefficiencies, and a weaker competitive position. Positive implications of KM and KMS are enhanced collaboration and innovation when KM facilitates knowledge sharing, breaking down silos and enabling cross-functional collaboration. This fosters a

culture of innovation and allows entities to leverage the collective knowledge of their staff (Mandroleanu & Fanea-Ivanovici, 2019; Usman et al., 2020; Rehman, 2015). The negative implication of poor KM is about knowledge loss and silos, indicating that without effective KM processes, valuable knowledge can be lost when employees leave, and information can be siloed within departments, hindering collaboration (Mandroleanu & Fanea-Ivanovici, 2019; Usman et al., 2020; Sullivan, 2016). Neglecting KM can lead to significant negative consequences, including knowledge loss, operational inefficiencies, and a weaker competitive position. This table did not fit on the bottom of the previous page. Therefore, the entire table was moved to the next page.

Table 5.2: Below indicates knowledge perspectives and their implications

Perspectives		Implications for Knowledge Management (KM)	Implications for Knowledge Management Systems (KMS)
Knowledge vis-à-vis data and information	Data is facts, raw numbers. Information is processed/interpreted data. Knowledge is personalized information.	KM focuses on exposing individuals to potentially useful information and facilitating assimilation of information	KMS will not appear radically different from existing IS, but will be extended toward helping in user assimilation of information
State of mind	Knowledge is the state of knowing and understanding.	KM involves enhancing individual's learning and understanding through provision of information	Role of IT is to provide access to sources of knowledge rather than knowledge itself
Object	Knowledge is an object to be stored and manipulated.	Key KM issue is building and managing knowledge stocks	Role of IT involves gathering, storing, and transferring knowledge
Process	Knowledge is a process of applying expertise.	KM focus is on knowledge flows and the process of creation, sharing, and distributing knowledge	Role of IT is to provide link among sources of knowledge to create wider breadth and depth of knowledge flows
Access to information	Knowledge is a condition of access to information.	KM focus is organized access to and retrieval of content	Role of IT is to provide effective search and retrieval mechanisms for locating relevant information
Capability	Knowledge is the potential to influence action.	KM is about building core competencies and understanding strategic know-how	Role of IT is to enhance intellectual capital by supporting development of individual and organizational competencies

[Source for the Research Purpose]

On one side, there is the management of human resources, and on the other, the organization's method for overseeing knowledge. The codification tactic focuses mainly on explicit knowledge to achieve efficiency and rapidity. Thus, the processes of selecting staff, training, and performance evaluations are aligned with this goal (Davies et al., 2020; Noe, 2016). Conversely, the personalization approach emphasizes the development of tacit knowledge to promote creativity and

innovation. Personnel selection, training initiatives, and performance metrics are designed to support this aim. Interestingly, the knowledge management strategies result in completely different behavioral changes among employees (Davies et al., 2020; Noe, 2016; Bourini et al., 2013).

As such, the codification of knowledge encourages individuals to archive their expertise into databases for future use, adhere to standardized procedures, and engage in low-risk activities (thereby avoiding alterations to established work methods), while also fostering task specialization to boost efficiency and cut costs (Davies et al., 2020; Noe, 2016). Fundamentally, the codification knowledge strategy seeks to systematize knowledge within organizations. In contrast, the personalization strategy promotes risk-taking (testing new ideas and experimenting), collaboration, and the sharing of concepts among individuals to inspire new products and services while enhancing work practices (Davies et al., 2020; Noe, 2016).

Enhancing employee development is best achieved as a collaborative effort between employer and employee (Davies et al., 2020; Noe, 2016). For this collaboration to be fruitful and beneficial for both parties, it's essential to commence with an individual development plan crafted by the employee, incorporating insights from their supervisor and other organizational members, including HR representatives. Employee development should extend beyond training in practical skills necessary for proficient job performance and focus on the long-term ambitions and aspirations of the employee, as well as the roles they might fulfill in the organization's quest for its own goals and objectives (Davies et al., 2020; Noe, 2016). While organizations are undoubtedly eager to cultivate employees in ways that are most advantageous during their tenures, they must also recognize that the process involves learning that will bolster the individual's long-term employability in the larger market, potentially leading them to future positions with other employers.

We propose that the method for training employees should revolve around the notion that education can occur anywhere and at any moment. The framework for employee training ought to be structured as a deliberate network of strategies, beginning with collaborative education and advancing through online learning, team-oriented education, and formal and informal ‘coaching’ and mentoring, while involving employees in the assessment system to define the benchmarks by which their contributions will be evaluated, motivating them to fulfill their roles as efficiently as possible. It is essential to establish a connection between the objectives of the knowledge strategy, the knowledge management approach, and the human resources management plan, providing fresh opportunities for discovering and recruiting talented individuals and creating a talent database. (Davies et al., 2020; Noe, 2016; Figueiredo et al., 2016).

Knowledge management frameworks are predominantly modeled after human resources management systems. The function of human resources management in contemporary organizations is undergoing transformation. Managers across all levels are working more collaboratively, driven to devise innovative solutions to human resources management challenges. Ilic and Mihajlovic (2014) indicate that the novel method of managing human resources serves as a guide and advisor to employees. Organizational divisions of human resource management also assist in reshaping management methodologies (Noe, 2016; Davies et al., 2020). We advocate for the creation and initiation of knowledge management teams within this paradigm, where regulations can be revised. In terms of human resources, changes incurred by emerging business models must include the involvement of employees in the evaluation process to establish the criteria utilized to assess their contributions, thereby encouraging them toward optimal task execution. Consequently, based on external and internal circumstances, strategic direction, and the scale of the organization, 'knowledge

brokers' may be integrated into the organizational hierarchy to determine whether a knowledge management team or an individual manager is necessary to oversee the organization.

Recommendation for future research

The notion of a community of practice pertains to the social learning dynamics that unfold when individuals sharing a common interest in a certain subject or issue come together to exchange ideas, develop solutions, and foster innovations (Noe, 2016; Davies et al., 2020; Chatterjee & Samanta, 2022). Here, we present a perspective and a functional definition of CoP that can be implemented in various KM initiatives.

We interpret a professional community by means of the lens of learning. This perspective regards learning as an expression of membership within a 'community of practice.' The theory aims to explore both the composition of communities and the nature of learning that takes place within them. We adopt and endorse the following definition of a CoP as stated by Stewart (2001): 'A CoP is a collective of professionals, loosely connected through their exposure to a shared set of problems, joint pursuit of solutions, and thus themselves representing a reservoir of knowledge.'

While these spontaneous communities serve as effective knowledge-sharing platforms, they do have significant drawbacks. Knowledge transmitted via email threads disperses once the thread concludes. New employees or those encountering new challenges remain unaware of the spontaneous communities and lack the ability to access their expertise (Davies et al., 2020; Noe, 2016). Insights gleaned from experience may vanish alongside retiring staff. Employee turnover and organizational restructuring weaken these informal networks to such an extent that even long-tenured staff might not know whom to contact. As a result, innovative organizations are formalizing these communities

to establish new frameworks for creating, acquiring, and disseminating knowledge essential for their success (Davies et al., 2020; Noe, 2016; Chatterjee & Samanta, 2022). With these communities of practice established, this network emerges as the reliable source for generating and sharing knowledge. By providing structure, support, and resources, leading organizations have enhanced the functionality of communities of practice beyond that of their informal predecessors.

This research sheds light on the attributes of organizational learning, innovation, performance, and the interconnections between them (Davies et al., 2020; Noe, 2016). Organizational learning serves as a prevalent strategy for safeguarding knowledge within an organization. The literature suggests that organizational learning forms the foundation for organizational enhancement, encompassing both innovation and performance (Davies et al., 2020; Noe, 2016; Chatterjee & Samanta, 2022). Similarly, organizational performance is influenced by both organizational learning and innovation. Moreover, the metrics chosen to evaluate organizational learning, innovation, and performance are contingent upon the organization's objectives and strategies.

From a practical standpoint, organizations should foster organizational learning initiatives aimed at boosting both innovation and performance (Chatterjee & Samanta, 2022; Noe, 2016). In essence, an increase in organizational learning will lead to a rise in organizational innovation and performance. Additionally, the results indicated that these variables are often synergized with other fields, such as knowledge management and competitive strategy, to enhance and sustain organizational performance. This viewpoint can also be adapted to various contexts based on the specific goals of different areas within the organization. Furthermore, organizations should consistently apply their chosen perspectives, as these approaches yield both direct and indirect

benefits for the organization.

This finding carries significant implications, not just for prospective scholarly inquiry but also for forthcoming practical uses. The purpose of this research is to give a thorough framework for grasping the complex interplay between organizational learning and innovation, while also illuminating the techniques through which learning organizations can enhance their innovative capabilities. Ultimately, the insights garnered from this study could offer valuable support to organizations striving to boost their innovation potential in an increasingly dynamic and competitive landscape. Future investigations should establish a holistic learning system across the organization; motivate employees to further their education, and organizational learning concerning four key aspects: knowledge generation, knowledge strategies, knowledge implementation, and evaluation.

Conclusions

The strategic and proficient administration of knowledge assets is crucial for organizations to sustain a competitive edge in economies that are driven by knowledge (Noe, 2016; Davies et al., 2020). This study provides additional empirical validation for this well-established claim. Moreover, the findings reveal that the application of knowledge and sustainability strategies serves as intermediaries in this connection. These results imply that the creation, formalization, and distribution of knowledge will only enhance organizational performance when aligned with a sustainable approach.

Knowledge application is characterized as an organization's ability to collect, recognize, and transform knowledge into valuable offerings and services, utilize it in decision-making processes, and integrate it into actions (Noe, 2016; Davies et al., 2020). Consequently, the practice of

generating, codifying, and sharing knowledge to create tangible value is intimately connected to an organization's ability to capitalize on that knowledge to effectively achieve its strategic objectives (Lemieux et al., 2014; Noe, 2016; Davies et al., 2020). Therefore, this research encourages both academic scholars and professionals to emphasize the significance of understanding application in the execution of knowledge management (KM). Additionally, it is vital for leaders to acknowledge how knowledge management practices contribute to enhancing organizational performance.

A significant discovery of this research is the intermediary function that digital assets, implicit knowledge, information systems, knowledge management frameworks, financial strategies, organizational effectiveness, and sustainability fulfill in the execution of knowledge management (Rifi et al., 2020; Noe, 2016; Davies et al., 2020). A sustainable methodology demands a long-term, comprehensive, and interconnected viewpoint. It requires organizations to be mindful of their environment, which is vital for achieving their strategic goals. Consequently, the processes of knowledge management enhance organizational effectiveness when implemented with an emphasis on digital assets, implicit knowledge, information systems, knowledge management framework, financial strategy, organizational effectiveness, and sustainability. In the current unpredictable corporate environment, it is crucial for leaders to prioritize sustainable approaches in executing knowledge management processes.

On one side are HRM practices, while on the other is the organization's methodology for managing knowledge. The codification approach primarily addresses explicit knowledge for efficiency and speed. In doing so, the selection, training, and performance of staff are aligned towards that objective (Noe, 2016; Davies et al., 2020). The personalization approach is mainly considered

for the enhancement of tacit knowledge to encourage innovation. The choices made regarding personnel, training, and performance metrics support this aim. Interestingly, the knowledge management strategies lead to entirely different behavioral changes among staff.

Thus, the documentation of knowledge motivates individuals to record their insights into databases for the purpose of reutilizing information, adhering to standardized procedures, and undertaking low-risk initiatives (maintaining established workflows). Additionally, tasks are specialized to enhance efficiency and reduce expenditures. Fundamentally, the documentation of a knowledge strategy represents an effort to systematize knowledge within organizations (Noe, 2016; Davies et al., 2020). Conversely, the personalization strategy promotes taking risks (experimenting and trying new approaches), fostering collaboration, and sharing ideas among individuals to inspire innovative products and services and refine work practices.

The advancement of employees is most effectively realized as a collaborative effort between the employer and the employee. For this alliance to be beneficial and fruitful for both parties, it is essential to commence with a personalized development plan created by the employee with contributions from their supervisor and other organizational members, including HR representatives. Employee development, which extends beyond training in essential practical skills required for performing the current job efficiently, should aim at the long-term ambitions and needs of the employee as well as the potential roles they may assume in advancing the company's objectives. While companies are certainly eager to cultivate employees in ways that promise significant value throughout their careers, they must also recognize that this process should encompass learning that bolsters the individual's long-term employability in the broader job market and may eventually lead to the employee accepting a position elsewhere.

We propose that the method of employee education should stem from the belief that learning can occur anywhere, at any moment. The framework for employee development needs to be structured as a deliberate network of strategies, commencing with collaborative education and progressing through e-learning, teamwork-focused learning, and formal and informal ‘coaching’ and mentoring, while including employees in the assessment system to define the criteria by which their contributions will be evaluated and motivating them to fulfill their roles as efficiently as possible. Establishing a connection between the objectives of the knowledge strategy, the knowledge management plan, and the human resources management program will create fresh opportunities for sourcing and recruiting skilled individuals and developing a talent inventory.

Communities of practice can inform the design of initiatives that enhance learning effectiveness and assist both learners and practitioners in navigating the complexities of learning. A primary step is to recognize the potential of communities of practice as a foundational theory. Learning projects that may emerge from this approach might involve integrating communities of practice into the knowledge framework, actively involving learners in joining the community, intensifying the focus on explicitly addressing role modeling, mentoring, experiential learning, and reflective practices, offering support from the training and development department, and acknowledging the importance of monitoring progress toward community membership.

The results of the investigation were truly captivating. Initially, research has established a strong link between customer contentment and the quality of information provided. This conclusion implies that user satisfaction is directly influenced by the volume of information available in the ministry's online forums and social media platforms. It indicates that enhanced information quality will lead users of knowledge management systems in this study to seek more reliable and transparent

assertions of data, thereby increasing their satisfaction with usage. The findings of this research also align with those of other frameworks (DeLone and McLean, 2003; McLean, Jennex, and Olfman, 2005; Kulkarni et al., 2007; Sowmya, 2021; Brown, 2020).

To guarantee that the standard of information within their online communities and social media is consistent and valuable to their employees. Moreover, the entity's management team will have to come up with plans like formal review processes and data curation. Additionally, the research revealed that user satisfaction was significantly influenced by the system quality employed by the entity's social media and online communities. This research indicates that consumer satisfaction with the system is greatly affected by poor quality of online communities and social networks. Issues such as flawed user interfaces, outdated technology, unreliable services, and other challenges contribute to this problem.

Nevertheless, this study's findings are consistent with earlier studies showing that user happiness is positively impacted by technological quality. (Jennex & Olfman, 2003; Halawi et al., 2007; Nattapol et al., 2010; Brown, 2020). The ministry should therefore prioritize enhancing the quality of technology in their online communities and social networks by centralizing their databases, merging their systems, and deploying the latest technology, high-speed internet, and more efficient enterprise servers, which will assist users.

This is due to the fact that online communities and social networking activities are influenced by the accessibility, responsiveness, and accuracy of structured business information, all of which will enhance organizational performance (Chua and Lam, 2015). Furthermore, it has been established that user satisfaction is driven by the level of service provided by the ministry's online platforms and

social media channels. These crucial connections underscore the importance of service quality, as they involve interactions between the system's end-users (organizational staff) and the system itself. In this context, end-users are regarded as customers and expect a system that offers knowledgeable technical support and prompt issue resolution. It is believed that users will be satisfied if a system can meet their needs (Kettinger and Lee, 2005).

Employees may also benefit from the 'Assistance' and 'Common Inquiries' (Kettinger and Lee, 2005) sections of the system. Furthermore, the social and technological aspects of the study yielded results that were similar, indicating that managerial support and user trust significantly impacted the bank's online communities and social networks, positively influencing customer satisfaction with the bank. Trust in governmental social platforms and online forums has been linked to employee satisfaction (Kettinger and Lee, 2005). For instance, this demonstrates that customers who place their trust in online communities and social networks are more inclined to engage with them, which enhances system satisfaction. This avenue argues that consumers believe social networks and online groups are crucial for their functionality and can encourage knowledge utilization (Chua and Lam, 2015). Consequently, users deem the ministry's social media platforms and online communities essential. To foster employee satisfaction and confidence in the system, the management team must establish a robust knowledge foundation.

This study investigates the relationship between users' satisfaction concerning their engagement with online communities and social networks and the support provided by the organization's management team. Equipping ministry management with resources that facilitate their interaction on social media and in online forums leads to enhanced system satisfaction ratings. Moreover, managerial support is perceived as vital within the context of online communities and

social networks since it can cultivate positive experiences and attitudes (Kulkarni et al., 2017). Therefore, the management team should adequately allocate financial resources as well as non-financial support, guidance and training, emotional assistance, effective collaboration, and responsiveness to user feedback regularly to demonstrate that they value and care about their employees' contributions.

This strategy is vital as it enables the management team to set operational targets while supporting already-formed online communities and social networks. This method motivates users to engage with the system, which enhances their satisfaction levels. According to DeLone and McLean (2003), user satisfaction affects the effectiveness of online communities and social networks. This data indicates that they have been successful users of professional social networks and online discussion forums (valuable). User satisfaction is directly fostered through the ministry's online discussion platforms and social media networks. Among others, Jennex and Olfman (2003); McGill et al. (2003); Jennex (2005); Halawi et al. (2017), and Nattapol et al. (2010), among others, reported similar findings (2010). Due to the various interconnections, user satisfaction is a primary concern that organizational management should address.

Conversely, concentrating on the benefits that final users obtain can be a strategy to enhance customer satisfaction. As users' perceptions of online platforms, which can be highly beneficial and effective in achieving their goals and expectations, evolve within the system, overall improvement will follow. Consequently, the organization should provide efficient online platforms that empower users to manage their workloads and productivity while also keeping an eye on their satisfaction levels. However, it is crucial to review its findings. There exists a significant limitation. This raises the issue of generalizability since the outcomes of this study may or may not extend to other

organizations under uncommon conditions. Future research may focus on other fields where online companies and social networks play a pivotal role in the organization's processes. Additional inquiries should explore the various types of online companies and social networks, along with the factors influencing their success.

The results of this study impact the dialogue around social networks and online communities, facilitating organizational development. The members of the online community report having built strong social connections with each other (Foasberg, 2012; Greene, 2012; Rowley, 2015). The number of effective online communities adhering to the network model has surged as the Internet and computer-mediated communication have gained traction (Nattapol et al., 2010). Thus, Supervisors of knowledge management will have to put in additional effort to influence or encourage engagement among users, as acceptance is fundamentally based on personal belief. Managers contribute to the growth of consumer acceptance of online communities and social networks by highlighting the reliability and trustworthy characteristics of their design.

Individuals establish emotional and social connections, gaining understanding and resources while enjoying themselves in online platforms and artwork directed towards shared objectives. Researchers are investigating internet interaction and in-person meetings (Silverman, 2011; Jan & Vlachopoulos, 2018). According to Flouch (2011), online platforms are beneficial for increasing the urge to connect with others in the community. The aim of an online community is to bring together individuals with similar passions. Virtual groups can utilize calendars to track upcoming events and activities.

A networking platform is a piece of software or technology that enables members of a community to engage with one another to create mutually beneficial opportunities. A platform is a collective of technologies that serve as a foundation for the development of new applications, methods, or technologies (Mlaiki et al., 2017). The research indicates that through the entity's professional networking platforms, employees may interact with other experts, join groups, publish blogs, and share knowledge. A social networking service site is defined as an online platform that allows individuals to establish social networks or communicate socially with colleagues who have shared interests, hobbies, backgrounds, or real-life connections (Obar, 2015; Mlaiki et al., 2017).

Social networking is a composite element of the promotional mix since it merges aspects of integrated marketing communication tools (organizations communicating with consumers) with an extremely amplifiable variant of word-of-mouth (consumers communicating among themselves), where marketing managers lack control over the frequency and content of such messaging. The findings suggest that social media is a hybrid, stemming from a combination of technological and media origins that facilitate rapid, real-time communication and utilize multimedia formats (audio and visual presentations) alongside numerous global distribution channels (such as Facebook, YouTube, and blogs). On these platforms, users can exchange ideas, digital images and videos, blogs, and various other content. The rise of a well-informed clientele has been supported by a consumer base that is often affluent and increasingly discerning and demanding. Observers argue that consumers' ability to communicate with one another constrains firms' capacity to tailor content and information dissemination (Vollmer & Precourt, 2008; Singh, 2018). Consumers wield more power over their media consumption than ever before in this era of social networks and online communities. This shift in information management has dramatically altered the manner in which individuals

acquire and respond to market data. Consequently, marketers are integrating social media into all dimensions of their marketing strategies.

Due to their crucial role in boosting organizational efficiency, digital systems and market orientation have become trendy phrases. To thrive in a modern economy, businesses must adopt innovation as a core strategy (Li et al., 2009; Shujahat et al., 2019). The relations among organizational innovation and market orientation on the success of an organization's transformation is being explored. The research indicates that knowledge management significantly influences organizational success. Organizational innovation greatly impacts a company's performance. Additionally, it has been found that market orientation enhances corporate effectiveness (Brewer & Brewer, 2010; Berner et al., 2018).

Moreover, according to the analysis, market orientation and innovation tend to change the way that knowledge management attitude and organizational achievement (Liu et al., 2017; Maughan, 2012). To foster innovation, individuals and organizations need appropriate strategies, standards, and regulations. An effective knowledge management strategy can assist a company in developing new products, services, and management systems while also enhancing organizational memory, fact assimilation, knowledge sharing, and receptivity to new ideas (Rouse et al., 2017; Maughan, 2012). Organizations should adopt a market-oriented approach to improve their performance because innovative companies are marked by increased volatility and unpredictability.

As the information age progresses, knowledge management systems have grown increasingly complex and varied (McInerney & Koenig, 2018; Arora et al., 2018; Rahman & Selwyn, 2017). Users demand more precise and reliable information management solutions. There is a rising demand

for superior knowledge management systems. To develop high-quality knowledge management systems, the key dimensions must be identified first. The quality metrics acquired can be utilized to enhance knowledge and management systems based on knowledge management techniques (Yang et al., 2010; Melenez et al., 2018). Quality principles governing knowledge management systems include process focus, employee involvement, continual knowledge acquisition and enhancement, measurement, and standardization. The results of this investigation indicate that knowledge management can create a positive environment for robust growth, and high standards can be established. Effective knowledge management systems include the dissemination of strategic managerial information, and a solid knowledge management system should be user-friendly and adaptable to the needs of the organization's clientele (Mohammad, 2022; Jabar, 2014; Rahman & Selwyn, 2017).

The ministry's non-physical, knowledge-driven infrastructure and investments have transformed into intellectual assets. The research indicates that cloud-based accounting and financial infrastructure significantly influences human capital. Although a remarkable relationship may exist, it remains statistically insignificant (Campos et al., 2020; Cleary & Quinn, 2016). Employees' knowledge and experience are effectively utilized in the creation of both tangible and intangible assets. The internal form represents the systems of information generation, concepts, models, and patents. The external form pertains to the organization's interactions with its suppliers and customers. The strengths, ingenuity, and skills of employees align with the company's values and culture. Structural capital encompasses all the tools, software, databases, and organizational frameworks used to enhance an organization's productivity (Camfield et al., 2017; Le et al., 2021). In financial accounting and balance sheets, intangible assets, which include tacit knowledge, must be recognized

and valued in the same manner as tangible assets are.

An information management system or control support is any document technology system that stores and retrieves data, aimed at enhancing knowledge, collaboration, and alignment of methods. Organizations typically utilize information management systems, but they can also be employed to provide customers with insights during the information process. Rising service demands and increasingly complex IT environments require the development of a management system that can help tackle these challenges (Abdelrahman, 2019; Greco, 2013; Kohn, 2019; Gower, 2018). The implementation of 'bring your own device' can, for instance, create difficulties for the IT support team at the service desk (Abdelrahman, 2019; Greco, 2013; Kohn, 2019; Gower, 2018).

Managing knowledge within an organization enhances quicker and more effective decision-making, boosts organizational flexibility, accelerates the pace of innovation, supports employee growth and development, improves communication, optimizes organizational processes, facilitates the sharing of expert knowledge, and expedites problem-solving (Kohn, 2019; Gower, 2018). The report states that utilizing a knowledge management system for technical support provides companies with a significant competitive edge over those who delay. Thanks to information technology, knowledge management delivers tangible, verifiable advantages. It ensures that individuals, processes, and technology work in harmony toward shared objectives, including assisting businesses in adopting new technologies to yield faster and superior outcomes (Abdelrahman, 2019; Greco, 2013).

Consequently, the costs associated with implementing a knowledge management system far exceed the risks involved in such investments. In practice, knowledge management is far from being straightforward. It requires considerable time, focus, and effort to execute correctly, which many organizations often lack. By minimizing software oversight, artificial intelligence can aid professionals in saving time and resources. Knowledge acquisition, sharing, discovery, and maintenance are significantly simplified through artificial intelligence. It employs semantic search, natural language processing, and machine learning to help employees uncover information even more rapidly (Kohn, 2019; Gower, 2018).

The overall performance of the ministry has been enhanced through the establishment of an archival and information governance system. This serves as the entity's tribute. The "governance domain is responsible for the efficient and methodical administration of progress, acceptance, conservation, utilization, and disposal of information, which includes methods for documenting and safeguarding proof of organizational activities and transactions," which is what we term information governance (RM) (Mosweu, 2020; Touray, 2021). As per the research, accurate information is crucial for the government's ability to function effectively. It also provides significant evidence of presidential actions and decisions, making the government accountable. The data can be found in libraries and reporting centers. This grants the organization a sustainable competitive edge, and it becomes considerably less detrimental should any of its skilled personnel be lost (Buchanan et al., 2017; Kabel et al., 2021). There is a possibility that their data will be recorded through a film or by some other means. Experts within the organization should develop strategic guides. In this way, artificial intelligence, or the automated approach to operations, can be preserved in the institutional memory (Buchanan et al., 2017; Sana, 2020; Saman et al., 2020). Trends from the past, present, and

future are all observable, allowing for more informed decision-making that benefits the entity. In information and knowledge governance, financial management, accounting, marketing, human resource management, research and development, health, and engineering, exceptional practice is the most effective method of operation. This is a commitment to adhere to best practices in any field by utilizing all available data, knowledge, information, and communication technologies.

To enhance information-related performance and organizational commitment, decision-makers in the public sector require the establishment of data governance tools and methods (Razzaq et al., 2019; Sana, 2020; Saman et al., 2020). The connection between data governance practices and information-related performance is influenced by organizational commitment. This commitment empowers organizations to achieve their objectives by enabling employees to feel connected to the organization. Consequently, their work becomes more efficient and focused (Chiu, 2016; Hislop, 2013). Despite this, many researchers have overlooked the impact of data governance on organizational commitment (Razzaq et al., 2019; Javad & Davood, 2012). The acquisition, storage,

Organization, validation, security, distribution, and utilization of data are defined through the application of data governance methods and organizational commitment (Park et al., 2014; Toraj & Yacob, 2015). Effective data governance strategies, according to findings, encompass activities such as discovery, collection, organization, sharing, reuse/application, and integration into operational processes, ensuring that both internal and external end-users can gain access to, utilize, and/or update data as required. Before implementing data governance systems and procedures across the organization, members of the data governance team must first review existing organizational procedures to integrate the most suitable data governance strategies. When appropriate data governance practices or activities align with the right organizational procedures, individuals within

an organization gain the access necessary to make critical decisions, improve efficiency, communicate effectively with colleagues, train others efficiently, and more (Razzaq, 2019; Park et al., 2014; Toraj & Yacob, 2015). Understanding how each aspect of the data governance process aligns with the organization's structure is just as vital as ensuring that the process is managed properly.

The resolve of an organization significantly influences its overall performance within the knowledge management system. Research indicates that this level of resolve is linked to organizational success. Employee allegiance to their supervisors is prevalent, which can pose challenges for all parties involved (Meyer & Allen, 1991; Hislop et al., 2018). Knowledge management, as per scholars, stands out as a crucial strategy to keep employees informed about the organization's aims, goals, financial plans, and the outcomes of leadership and policy discussions, in addition to what is occurring broadly (Hislop et al., 2018; Bakhta & Yasmina, 2019; Reich, 2016). Their findings suggest that achieving a high level of overall performance necessitates a documentation and communication framework that supports knowledge management incentives and practices, along with a favourable outcome for employee values, attitudes, and behaviors, culminating in individual organizational resolve.

Furthermore, the research findings reveal that the relationship between organisational knowledge management resolve can aid in uncovering pathways to transform elusive tacit knowledge into accessible forms. This is achievable by nurturing and establishing an incubative organizational atmosphere that promotes engagement, knowledge exchange, and accessibility for all members of the organization through the cultivation of an environment conducive to focus and knowledge sharing (Omran, 2016; Kordab et al., 2020; Jemal, 2021).

In conclusion, it is undeniable that establishing a dependable online platform offers a remarkable advantage in boosting user satisfaction while simultaneously providing a competitive edge for any agencies that monitor the tool. Thus, the strategy of creating and maintaining effective online systems has evolved into a vital aspect of organizational strategy. While the technical components are crucial in elucidating customer satisfaction, they also influence the networks within the organization and, furthermore, within the research framework. To summarize, we emphasize social media's position as a targeted platform for audiences, where knowledge management is extremely vital for the enterprise reliant on it, especially following the swift evolution of the economic landscape and its shift from a conventional business economy to a knowledge-driven economy. This suggests that knowledge management holds significant importance because it dominates the technological services market by empowering organizations to create a conducive environment for a vast market. Moreover, knowledge management now serves as a foundation for collective advancement across most centers and services currently offered. The knowledge sector has become increasingly engaged not only in fostering an environment that supports knowledge but also in developing strategies to fully utilize the knowledge it holds and can acquire. Consequently, all cognitive strategies are employed in a manner that facilitates their tacit knowledge; hence, we stress the term 'knowledge empowerment' since it is not limited to a single level; instead, it permeates all tiers of knowledge management. If all knowledge were to become explicit, it would not pose a challenge for us in terms of knowledge control.

Knowledge influences the systems, enhancing the value of an organization's personnel, products, and processes. Beyond the variables, there are types of factors that affect knowledge management systems within organizations, including gaining competitive advantages, improving

customer retention and satisfaction, retaining key talent and expertise, launching enhanced new services, boosting image, and preventing the loss of essential personnel. Conversely, improper management of organizational knowledge can result in significant losses. Knowledge can become futile if a culture is not maintained through high-quality lifecycle management and is properly structured for organizational utilization. Recognizing essential quality dimensions enables the assessment of the knowledge control tool, as a superior understanding of a management tool comprises the integration of acquired high-quality dimensions. This is a review of work that encompasses research into key quality dimensions and their competency regarding standards for technical, functional, organizational, and personal qualitative aspects.

It is crucial to consider these elements due to their foundations in information management systems. The superior quality factors of information management tools are linked to those domains. There are very few researchers exploring the path of high-quality versions of information management tools. Nevertheless, these high-quality models are confined by a limited set of factors. There is no standardized high-quality model to assist in managing information, with significant quality dimensions continuing from its related works. A comparative approach must evaluate and investigate the data gap in the existing knowledge of management tool quality models, particularly as viewed as the future of this inquiry.

The focus on understanding management is vital, as it is central to knowledge-based economic systems by leveraging investments in information, which is regarded as a crucial resource that fosters the growth of knowledge economies. This involves providing staff with various courses and workshops on managing economic systems, stimulating teamwork through the development of an effective organizational culture, and offering clear strategies that facilitate and encourage the

adoption of knowledge management concepts. Additionally, establishing a database regarding the qualifications and training available to employees at these libraries ensures they are equipped systematically and consistently to meet the requirements of knowledge management applications.

The research examines the connections between knowledge management, innovation, and corporate competitiveness. It is been determined that knowledge management results in innovation and enhances organizational competitiveness. Furthermore, the results reveal significant relationships between knowledge management and organizational competitiveness within the ministry, as well as between technical management staff and practitioners in Lesotho. This study indicates that knowledge management acts as a precursor to innovation, which in turn boosts corporate competitiveness. Organizations that manage knowledge effectively will secure a competitive advantage in the volatile and dynamic business landscape of the 21st century. An organization's capacity for innovation is heavily reliant on knowledge, making knowledge management an essential component for effective organizational operation. Businesses must leverage technology to introduce new products and provide continuous staff training to ensure customer satisfaction.

Organizations should place increased emphasis on fostering creativity in articulating their objectives and recognize individuals who contribute positively to the environment with innovative and fresh ideas. An examination of the outcomes revealed that knowledge management strategies positively influence creativity. Innovation enhances a company's competitive edge, while creativity serves as a bridge between knowledge management and corporate competitiveness. Thus, firms should focus on knowledge governance to bolster competitiveness through inventive thinking. The insights from this research add value to existing literature by providing empirical evidence linking

knowledge management practices, innovation, and corporate rivalry within the ministry. This study offers valuable information to managers, encouraging them to adopt knowledge management practices to stimulate innovation and improve corporate competitiveness, ultimately influencing the organization's performance level.

Knowledge institutions have become engaged in determining the most effective methods to cultivate an environment that promotes understanding while also refining their strategies to capitalize on all the knowledge they possess and can acquire. Consequently, all cognitive processes are utilized in ways that facilitate both their implicit and explicit knowledge. Hence, we underscore the concept of knowledge empowerment, as it transcends a single level and permeates all tiers of knowledge management. If all knowledge becomes explicit, it would fundamentally transform the notion of knowledge management. Furthermore, organizations must employ innovative practices and techniques to advance their competitive stance and secure their position in the marketplace by utilizing competitive strategies and tactics.

Effectively managing knowledge is essential for establishing online frameworks within an organization. Furthermore, innovation is crucial for an agency's performance in this ever-changing landscape. Leaders must acknowledge the methods of knowledge management, which include gathering, sharing, and responding to knowledge, in order to foster creativity and eventually improve the efficacy of the organisation. By emphasising how knowledge management affects organisational commitment, the present study has shown that harnessing knowledge management optimizes individual efforts and employee potential, maximizing resources in a productive and sustainable manner. Every individual within the organization possesses knowledge and information valuable for developing team operations. Yet, too frequently, this knowledge goes untapped and is overlooked.

In environments where knowledge is actively applied and encouraged, we observe greater creativity from its owners, as they create value for those eager to learn and, importantly, share experiences. Ultimately, employees are found in teams that prioritize and nurture knowledge management practices to grow alongside the organization.

The research indicated that the application of archives management technology is not just limited to performing routine tasks of administration, storage, retrieval, and oversight of daily operations. The software is tailored to the requirements of the system, the individuals involved, the content of operations, and the tasks to be accomplished. Instead, it is imperative to broaden its application, especially in social interactions, like engaging in forums, utilizing emails, and leveraging networks for collaboration and communication with colleagues and stakeholders through sophisticated administrative systems and collective applications. Furthermore, a professional organization has become concerned not only with creating an environment conducive to fostering knowledge but also with developing strategies to harness and capture the full breadth of knowledge it possesses.

Consequently, all cognitive processes are utilized in ways that facilitate the expression of tacit knowledge, which is why we stress the concept of knowledge empowerment, as it transcends one level, permeating all dimensions of knowledge management. If all knowledge were to become explicit, it would alleviate the challenges related to knowledge. Community-of-Practice (CoP) is a notion that has been discussed in management literature since the early 1990s and has garnered interest from academics and practitioners worldwide. Alas, there is a scarcity of research elucidating what encourages a network to engage in dialogue to share their knowledge and experiential support.

This study takes a look at and discusses how practices take regions in a digital network of practices. The discourse evaluation performed illustrates that participation of area professionals plays a vital function in engaging in a colorful and significant debate. The area professionals now no longer simply supply the wanted stimulus while the discussions supply off, but additionally intervene to assist awareness of the primary problems of the controversy, while the network becomes approximately to disperse the essence of the controversy in subthreads.

The machine dynamics of Community-of-Practice research below allow the strategies of socialization, externalization,, and aggregation on through chat rooms in which new expertise is created with the aid of interacting with extra, informed participants. In the aggregate manner, the based archive that the CoP holds makes it viable for participants to get entry to all beyond and gift discussions if wanted while confronted with the aid of using a selected problem. Our evaluation

Additionally, it shows that socializing through face-to-face bankruptcy conferences and annual meetings was a vital mechanism for the network participants to broaden their network ethos and personalization to grow to be extra enthused in digital debates. This takes a look at reviews of discussions that had good 'replies' fees related to a disparate organization of participants. The restrained contribution with the aid of using the maximum people-taking element in those discussions is incredibly unlucky, as it does now no longer permit us to peer into how people's perspectives evolved via an interactive manner of this dialogue. This obstacle to taking a look at is trouble accepted. However, this doesn't save us from assisting the wider methodological method we've adopted to examine digital CoP.

Purpose of the study, research aims, and objectives

The motive of this investigation is to analyze the chance affecting usage of online groups and social networks that act as an accepted template of running towards expertise control within the organization. Furthermore, we will attempt to investigate and discover the vital organizational factors and their interrelationships impacting expertise control. Additionally, it will make contributions to the sector of expertise control to bridge the space amongst theories and practices that broaden principles, strategies, and approaches of running towards expertise control. This appearance is a quantitative studies method due to the fact the intention is to evaluate determinants of expertise control practices and disturbing situations of online groups and social networks modeling (variable one) upon individual's behavioral intentions and behaviors (variable two).

Self-administered quantitative questionnaires had been randomly allotted to manor woman employees, control, and technical aid in the Lesotho Ministry of Foreign Affairs and International Relations elderly between 18 and 70 years as a statistical series device for the manner of creating, sharing, and utilizing and dealing with understanding and recording sin in an organization; however, they're keen to introduce an understanding of the control paradigm of their organization. However, there may also be little-regarded approximate elements and techniques of employees' understanding-sharing conduct, like the utilization of online groups and social networks. Knowledge desires a scientific technique to increase abilities that boost up the evolution of understanding in a key organizational resource. Online groups coordinate (urban, suburban, and rural) at the same time as private behavior of adopting social networks like Facebook, Twitter, Google+, LinkedIn, etc. The questions protected within the questionnaires will pursue a prepared order and address the studies questions and the cause of the investigation.

Research methodology adopted for this study

The research technique followed for this observation was quantitative techniques. An online survey may want to be carried out using random sampling to accumulate information. Amos, the SPSS software program may want to be used to examine the 330 legitimate responses received. Tests may want to be undertaken to increase a conceptual version in order to be examined for health as compared to the discovered outcomes from the survey instrument. The nature of the survey carries close-ended questions in order to permit the researcher to accumulate quantitative information. Further, the researcher will outline the study's framework and discuss the philosophies of positivism and interpretivism in statistics generation studies. The contemporary observer was studying techniques inside information control practices and traumatic situations basically based totally on IT in the information control studies area, which deals with the studies techniques followed by this observer. He or she may be capping a position to describe the timeline for information collection, barriers, and moral concerns are mentioned, the questionnaire layout is described, and the study plan is depicted.

Limitations

The extent of these studies is impacted by a few constraints. For starters, the people who answered our poll included practitioners, technical managers, and ministry workers from both the North and the South. Both laterally and vertically, a larger base of respondents should be included in future surveys. Second, a sizable sample of practitioners, technical managers, and ministry employees participated in the surveys and interviews. The results would have more statistical significance with a bigger sample size. Greater sample diversity in terms of entity size, industry, and geographic locations would also be advantageous for future studies. Although the results were

similar in the North and South, management and practitioners were probably applicable to many additional participants. Future studies should encompass a wide range of organisations, such as prospective studies on youth (and even those who are not ministry employees). It will have more validity, and a more thorough analysis of the results ought to be assessed. Adoption of information technology is facilitated by the youth market's familiarity with technological developments. Perhaps more significantly, patterns of knowledge transfer are influenced by cultural context; these connections should also be investigated. Finally, more validation is required for the tacit knowledge transfer metric. It is evident from our results that opinions on the transfer of tacit knowledge are correct or consistent across organisational levels.

This limitation can be tackled by extending future studies to non-technological employees and other youth markets, providing further factors that influence young adults to adopt information technology. Another potential limitation of the study is that only the quantitative approach was followed. To improve the validity of the findings, future researchers may employ both qualitative and quantitative research approaches.

Ethical considerations

In this study there would possibly be moral considerations. Quinlain (2011) argues that researchers ought to replicate one code of behavior while they're engaged with members on how their techniques of fact series and storage, analyses, and the way they'll write it. Ethics are an element of each factor of the study process. The maximum crucial principles of confidentiality and anonymity would possibly be adhered to. Ethical troubles would possibly be mentioned with the supervisor. Where the overlaying digital mail and survey gadgets would possibly be covered in Appendix A and B, respectively. Email will encompass the researcher's contact information and emphasize

that participation is precisely voluntary. The members would possibly be notified about the confidentiality of their responses, anonymity, the nature and motive of the studies, and what is required of them as members.

Organizational gain of understanding is the foremost impact for expertise control. To make contributions successfully to organizational strategy, groups have to construct and make stronger the linkages among expertise control, human aid control, and enterprise improvement. Online systems education and improvement programs make sure that the improvement of management takes account of the complicated courting among online systems talents and control exercises on the ground. The proof underlines the need for networks and different social modes of engagement to triumph over those epistemic limitations and help the flow of expertise. This method might inspire improvement of shared views among the CoPs on the use and alertness of unique types of managerial expertise. Therefore, the popularity of the embeddedness of expertise strategies in social networks factors into the significance of assisting the formation of robust community ties to beautify expertise sharing and gain understanding of it. Knowledge control has to be deliberately established and supplied with enough sources so that it's far from capping a position to be incorporated during the mission cycle; while it is miles carried out, it brings extraordinarily good return.

However, builders want to speak with different builders, testers want to communicate with different testers, and product proprietors want to talk with friends from different agile groups, and so on. This is crucial for leveraging a couple of reviews and extraordinary styles of realistic know-how to be had from lots of human beings (Staal, 2022; Wenger-Trayner & Wenger, 2015). That is what drives craftsmanship and non-stop learning, facilitating the adoption of recent methods and techniques. Domain-targeted interactions are regularly supported with the aid of using CoPs casual

networks designed especially for green know-how sharing and exploration throughout groups, training, and the complete organization. For example, scrum masters from extraordinary agile groups might also additionally shape a CoP to trade practices and reviews in constructing tremendously effective agile groups. As CoPs begin to advantage reputation and participation, subject matter is primarily based on communities.

Recommendations for application

This empirical proof shows that information control is cautiously based mostly on generation. However, business enterprise exercising shows that many corporations have expert problems in correctly using information control technologies. In order to have a nice effect on factors of information, fact generation desires to be added through a fix of organizational modifications. In exercising its way, introducing fact generation is an achievement and has a nice effect on information control practices, handiest if it is backed up through modifications in people, organizational climate, and organizational strategies.

Organizational structure lets an enterprise optimize strategies and outline processes, oriented shape. If so, information control may be followed effectively within an enterprise. Effective information control cannot be achieved without a big behavioral and cultural shift. There needs to be a strong culture, trust, and transparency in all regions of an enterprise. Besides, the cultural factors that distinguish corporations from every other are decided to be associated with information control efficiency. It has ended up being further observed that information control practices have a nice effect on organizational performance. Moreover, the questionnaire built and used on this has a look at the need to end up with an elegant way to measure information control maturity. Organizations need to use the effects of the survey as a benchmark.

Knowledge control is especially important for the enterprise that is primarily based totally upon it, especially after the fast improvement of the economic tool and its transformation from an enterprise economic tool to an expertise economic tool. From that, it is able to be visible that expertise control is of incredible significance because of the reality that expertise control has ruled the facts, technology, and offerings marketplace because it enabled agencies to set up an appropriate surrounding for a large marketplace, further to the reality that expertise control is now a shipping of collective development for the maximum of the centers and offerings presently provided. Knowledge enterprise has grown to be involved not only with growing a surrounding conducive to permitting expertise, but also with growing its techniques to hire all of the expertise garage it possesses and which it is able to seize. For this reason, all cognitive procedures are hired in a manner that serves to permit their tacit expertise, and we therefore emphasize the usage of the time duration expertise empowerment, as it isn't always restricted to at least one stage; however, as a possibility, it permeates all levels of expertise control, and if all expertise changed into explicit, it might not rate us the hassle of expertise control.

The emergence of primarily internet-based social media and online groups has made it feasible for one person to talk with masses or possibly loads of numerous human beings about services or products a corporation is imparting to them (Mangold & Faulds, 2010; Nattapol et al., 2010). The findings advocate that the effect of customer-to-customer communications has been substantially magnified within the marketplace. In this research we argue that online groups and social networks are hybrid factors of the advertising and advertising aggregate due to the fact that in a conventional experience they allow clients to speak properly away to at least one another. The findings furthermore display that the context, timing, and frequency of the net groups and social

networks—primarily based on totally sure conversations taking place among clients—are out of the outdoor managers' direct control. This stands in evaluation of the conventional blanketed advertising and advertising communications paradigm wherein an excessive degree of control is present.

Therefore, managers need to learn how to form customer discussions in a way that is ordinary with the corporation's assignment and prevalent standard overall performance goals. The method by way of which this may be finished is delineated herein. They embody imparting clients with networking platforms and the usage of blogs, social media tools, and promotional tools to interact with clients. Several findings within the take-a-look display that an achievement online groups will be inclined to make use of a whole lot of advertising and advertising techniques, every one of which makes the most of digital technology at the same time as balancing the technology with a conventional cognizance of the customer's needs (Ho et al., 2019; Mutongi, 2016; Kulkarni et al., 2007; Passey, 2020). Content advertising and advertising are some of the high-quality techniques to generate new leads online.

The elements influencing the use of the data technology have been analyzed primarily based totally completely totally on person pride and technology beauty with the provider brilliant, data brilliant, and device brilliant (Ho et al., 2019; Mutongi, 2016). There are numerous findings on this look that are genuinely, well, honestly, properly, really well worth noting. Firstly, know-how is validated to be notably related to personal pride. This locating determined that the brilliance of know-how within the ministry's know-how control structures has a fantastic direct impact on the person's pride. Specifically, this means that the brilliant in know-how will offer legitimate and similarly dependable reassertions of data for the customers of know-how control structures on this look at, consequently ensuring their utilization pride. Moreover, the stop-cease end result of evaluation on

this look is regular with proof from the preceding researches (DeLone and McLean, 2003; Jennex and Olfman, 2003; Kulkarni et al., 2007; Passey, 2020). Consequently, there is a want for the control group of the Ministry to region into effect techniques at the side of know-how refinement and formal assessment approaches to make sure that the developments of know-how of their know-how control structures are dependable and beneficial to their staff. Secondly, this study has a look at the location of the first class of the machine for an enterprise record manipulation machine, which has furthermore really had an impact on users' pride. This proof demonstrates that inferior first-class records manipulate machines within the context of vintage technologies, complex person interfaces, and unreliable functions, which will, in reality, have an effect on the users' pride in the machine.

Moreover, the findings from this have a look at dovetails with the previous studies research in which it could be conceded that machines appear as effective contributors o the pride of users (Halawi et al., 2007; Nattapol et al., 2010; Jenex & Olfman, 2003). Therefore, it might be necessary for the ministry workers to prioritise the construction of top-notch devices for their records. Using the methods of centralising their database, machine integration, modern computers, fast broadband, and faster business enterprise servers to manipulate machines could probably assist in lessening mistakes and decorating productiveness for the numerous users, which in turn could probably motivate their pride in the machine. This is due to the fact that dependable, first-class machines have an excessive effect on the records manipulation machine strategies regarding the accuracy of the codified business, reaction times, and ease of use enterprise records in order to make real contributions to the enterprise's performance (Nattapol et al., 2010; Thatcher & Muller, 2011).

Finally, the company splendid for the Ministry's expertise control device decided to have an enormous, excellent impact on consumer pleasure. This enormous dating shows that company splendid is a vital aspect, as its miles of what is to be saved by customers (Ministry personnel) enjoy with the device. This state of affairs orchestrated that the save of customers is like consumers, and that they want a device that could offer ok technical help and a speedy reaction rate in fixing problems. It is argued that a device that ought to fulfill the customers' desires might also additionally need to sell pleasure amongst them (Kettinger & Lee, 2005; Wang & Noe, 2010; Thatcher & Muller, 2011). Moreover, the connection among expertise control device company features with consumer pleasure changed into further support in diverse studies regarding expertise control devices (Al-Busaidi et al., 2010; DeLone & McLean, 2004; Halawi et al., 2007; Nattapol et al., 2010; Chua & Lam, 2015).

It is strongly advised that ministries allocate sufficient resources to establish support groups and provide technical permits for ministry staff en route to enable them to perform more of their duties, given the importance of Splendid for the expertise control device. Additionally, it may be necessary to assess whether the "Help" and "Frequently Asked Questions" sections of the structures are beneficial to the staff.

Moreover, social factors for this investigation further show comparable effects because of the reality of the technical factors in which the effects above display that each customer's trust and control aid have a tremendous impact on customers' delight for the enterprise statistics control system within the authorities sector. Specifically, it is well-known that the tiers of bear in mind most of the personnel at the enterprise statistics control system have a superb direct impact on their utilization delight. This scenario absolutely observed that if the customers bear in mind the statistics

control system, this can inspire them to apply the statistics control system, which in turn provides a proper reason for them to be happy using the system. As with this course, it grows to be further said that the amount of bearing in mind from the customers at the statistics control system is located to be crucial for statistics control system implementation and might facilitate the technique of usage of statistics (Al-Busaidi & Olfman, 2005; Nattapol et al., 2010). This locating consequently shows the significance of customer trusts in statistics control systems within the authorities sector. Referring to this reality, it's far more vital for the control institution to create a powerful operation of statistics-based data to create awareness among personnel in the system, which can also further decorate their degree of delight (Nattapol et al., 2010). With that, statistics supervisors will want to make more attempts at influencing or growing the perception of bear in mind amongst customers, as bear in mind is for the statistics control system with the aid of the use.

For the context of a beneficial, useful resource, locating from this study has attained to examine and affirmed that the beneficial, useful resource given via the agency control group has validated an effective effect on purchaser pleasure for the information control machine they used. This manner of controlling beneficial, useful resources can also additionally facilitate using information to control the machine, the various agency personnel, and the ability to upsurge the quantity of pleasure amongst customers of the machine. Moreover, controlling beneficial, useful resources within the information control machine context is argued to be vital due to the reality that it is able to create effective studies and ways of thinking of various customers within the route of the machine overall (Al-Busaidi & Olfman, 2005; Kulkarni et al., 2007). With that, therefore, there may be a want for a control group to offer a good enough beneficial, useful resource within the context of monetary and non-monetary permits, together with giving recommendations and guidance, an

emotionally beneficial, useful resource, prompting sturdy teamwork, and imposing incentives. For example, an agency control group is normally advocated to pay heed to the customers' feedback from within, always to show that they care and value the inputs from their personnel. This approach is likewise vital, as it is able to permit the control group in crafting operational techniques and, at the same time, enhancing the current information control machine to inspire customers to apply the machine that lets them, in addition, strain their degree of pleasure. of emphasizing dependable and sincere factors in statistics control system architecture.

Furthermore, the results of this investigation also showed that person pride has a power at the fulfillment of knowledge control machine and vice versa, as hypothesized with the useful resource of the usage o DeLone and McLean (2003) and Jennex and Olfman (2003) of their study. This proof enables the fact that happy customers might be given the right to the knowledge control machine they used as a hit in phrases of the existence or useful for them in acting on their technique responsibilities. Besides, the end result of giving up furthermore found out that blessings generated from knowledge control within the authorities place furthermore have a right away to have an impact on a person's pride. Other previous research determined that a comparable end-give-up end result is embodied by Jennex and Olfman (2003) and Halonen (2013). The considerable interrelationships advise that person pride is an essential element to which a knowledge control supervisor wants to pay attention. Users' pride may also decorate their opinions of the machine's advantages. On the other hand, one could contend that customers' pride may be more relevant with the useful resource of the usage of focusing on the blessings that a knowledge control machine brings to the give-up customers too. A quite useful and powerful knowledge management machine that can meet the dreams and necessities of the customers may also enhance their perceptions of the

usage of the machine. Therefore, it's miles important for the organization to put in force a powerful knowledge control machine that permits customers' technique responsibilities and productivity, which may also furthermore appreciably decide their pride level.

The Web 2.0, to begin with, famous amongst more youthful generations, includes an increasing number of famous mainstream customers as an agent of consumer empowerment. Customers turn out to be an increasing number of people more aware about the fact that Web 2.0 packages gift them with new and formerly unknown opportunities and power (Gillin, 2007; Bernoff & Li, 2008; Stroud & Weinel, 2020), now not only because of the right of entry to greater and higher facts, however, because of ample, nearly endless online options and choices. In addition, the net consumer enjoys the first-rate consequences of social networking, no longer restrained to teenagers (Stroud & Weinel, 2020), because it has turned out to be the beginning of peer-to-peer connectivity and network building. Consumers have a large gateway to product facts, reviews, comments, and hints contributed by wonderful customers, and there are already warning signs and symptoms that customers discover such advice to be more credible than facts provided by businesses or specialists reviews. The findings inside display how online clients appear to have lots and tons less take shipping as proper within what entrepreneurs inform them. Empowerment makes the consumer voice louder; many social media websites have turned out to be boards of dialogue for governments with their social, ethical, and industrial enterprise responsibilities.

Based on above consequences and discussion, present study encouraged that specialize in information management as its miles the point of interest of the information- primarily based totally absolutely on financial tool via way of approach of making an investment in facts this is taken into consideration an essential commodity that lets in withinside the growth of the information financial

tool, paintings to offer personnel with several courses and workshops associated with information management financial tool, activating the approach of strolling as a fixed via way of approach of developing suitable organizational culture, to offer clean techniques that beneficial aid and stimulate the adoption of the idea of information manage, and constructing a database at the education and qualification supplied to personnel withinside the ones libraries sincerely so they'll be informed systematically and consistent with the necessities of information management application.

Ministry managers should commonly inspire sharing of information because it is hooked up to inspire organizational self-control, and control should inspire their subordinates to percentage or distribute information with the intention to assist the organization in the treatment of their problems. Many groups want to redefine techniques to sell information creation to maximize human capability within the workplace. To keep up with the ever-converting generation and to make certain that an organization is an achievement in addressing surprising challenges, an organization wants to mix generational infrastructure, processes, incentives, and lifestyles that would inspire humans to combine and use information control. The prosperity of an organization is primarily based totally on its functionality to control information in a powerful manner.

The authorities' vicinity or groups should furthermore expand their capability through specializing in information control. Knowledge control is taken into consideration to be terrific to the ministry and all groups and should consequently be explored in greater detail. The literature assessment stresses that information control is taken into consideration, terrific in case there is a need for growth in the overall standard performance of an organization within the authorities' ministry within the Mountain Kingdom of Lesotho, consequently its relevance. This benchmark survey of data manipulation practices within the ministry changed into advanced use of a stylish

studies approach. Senior technical managers have been requested to finish the survey with input, as required, from their control team. Data from person survey responses have been dealt with confidentially, and the best combination findings have been reported. The findings offer empirical proof of the significance of data control practices in enhancing the organizational effectiveness of the ministry. They offer facts about the modern organization with regard to data practices, illustrating the direct and tangible benefits of imposing such practices and justifying persistent or additional efforts to make sure that data control programs and structures are strategically deliberate and performed by technical managers in an organization. The check offers insights into the mechanisms through which data control practices have an effect on organizational effectiveness and supply a foundation for in-check (Kero & Lee, 2016; Valmohammadi & Roshanzamir, 2015; Ahmad, 2008). It is anticipated that the survey device and advanced measures are probably used for destiny data control research to some degree and solve this vital problem on an ongoing basis. The evaluation approach and statistics furthermore offer a dimensional foundation for the ministry's benchmarking and improvement.

Knowledge management practitioners have studied knowledge management and identified techniques on the aspect of mentoring, agencies of practice, schooling programs, and methodologies for shifting knowledge within the organization (Rasula et al., 2012; Kero & Lee, 2016; Valmohammadi & Roshanzamir, 2015). Some practitioners checked out imposing usage of the proper aggregate of people, process, and era to collect powerful knowledge extrude using a tool to manage knowledge method. They furthermore described several phrases on the aspect of folks who describe the highbrow assets of agencies and authorities (Kero & Lee, 2016; Valmohammadi & Roshanzamir, 2015; Ahmad, 2008). In the book of Thomas H. Davenport and Laurence Prusak

(2000) recommend the following crucial terms in Working Knowledge (Harvard Business School Press, 2000):

Data a hard and fast set of discrete goal records of approximate events. Information: a message, commonly within the shape of a file or an unseen communication. It has a sender and a receiver. Information is supposed to alter the manner in which the receiver perceives something, to have an effect on his judgment and behavior. Knowledge provides a framework for evaluating and integrating fresh assessments and data. It is a conglomeration of framed experience, values, contextual knowledge, and professional opinion. It begins and is performed in the knowers' brains. It will frequently become ingrained in organisations, not only in files or repositories but also in routines, procedures, practices, and standards (Davenport & Prusak, 2000). Here are our suggestions for implementing an effective knowledge transfer, in order of importance:

Senior leaders of the employer need to set up and sell an understanding-sharing subculture. Ideally, this needs to arise on the very pinnacle of the employer and be replicated down the control chain in the employer (Levallet & Chan, 2019). If senior leaders on the pinnacle aren't equipped to guide understanding and control, then man or woman workplaces that want to create a powerful alternate understanding can set up their personal understanding subculture. This effort calls for the guidance of the instantaneous managers of these workplaces who want to put in force an understanding-sharing subculture.

An understanding-sharing subculture needs to start early within the employee's career. For modern-day understanding people, which paintings need to start immediately? Knowledge introduction needs to be diagnosed as pinnacle precedence in the paintings unit. If the understanding introduction attempt isn't at the pinnacle of the concern list, it isn't possible to show up in a powerful

manner. When putting closing dates for a project, usually consist of necessities for conveying the ‘understanding’ most of the understanding people within (Stenguist & Kwon, 2020).

The paintings unit. Knowledge people need to be held chargeable for their understanding of alternate efforts, and additionally, understanding people need to be rewarded for his or her contributions. Staff need to study a way to efficiently percentage understanding. Some expert fields, including facts era, investigators, and others, that regularly did now no longer have expert education necessities. Within the facts era, we've seen a few very innovative, understanding people; however, we additionally have understanding people with very constrained know-how. Even though the facts era discipline is so broad, many facts era clients see all facts era experts as being equal. Managers need to make sure that their reviews pursue suitable education and set up praise packages for those who brazenly percentage their know-how with colleagues (Flavin, 2012). Methods for shifting tacit understanding need to be developed. This venture would require running with expert understanding control experts who are educated in supporting agencies to broaden and put in force solutions (Slyter, 2019).

Based on above effects and discussion, cutting-edge examine advocated that focusing on understanding manipulate as it is the focus of the understanding-based totally absolutely financial device via making a funding in data that is considered as crucial commodity that permits withinside the increase of the understanding financial device, art work to provide employees with various courses and workshops related to understanding manipulate financial device, activating the method of going for walks as a collection via developing appropriate organizational culture, to provide easy strategies that assist and stimulate the adoption of the concept of understanding manipulate, and building a database on the training and qualification provided to employees in the ones understanding

manipulate libraries simply so they're professional systematically and in step with the requirements of understanding manipulate application.

This study has to examine a few suggestions for useful resource managers to understand the way to beautify worker organizational studying, records control, organizational innovation, and organizational everyday universal overall performance. Our motive modified into research and shows the awesome effect of records control on organizational everyday universal overall performance. Although researchers frequently advocate this awesome impact of records control on organizational everyday universal overall performance, the researchers that empirically show the triumphing hyperlink are very rare. For this study, a modern survey was modified into an advanced one and tested, and it proved to be a fulfillment and justified new degree of records control constructs in an organization. Organizational studying takes place at the same time as managers do now no longer simply create thoughts but are also able to share them and accomplish self-control of studying amongst members (Ulrich et al., 1993; Liao & Wu, 2010; Passey, 2020). In organizations, managers should show awareness of constructing a context useful to innovation and organizational studying. Innovation takes place in contexts that legitimize innovative conduct and denote reevaluation of innovation. Results of this have a take to examine display that innovation had a direct impact on the organization's everyday universal overall performance. In this take to examine, the organizational innovation is modified into a further position to be sincerely associated with organizational everyday universal overall performance. In general, our study suggests the significance of an incorporated evaluation of direct and oblique impacts of organizational traits on organizational everyday universal overall performance and strengthens preceding literature on the significance of the relationships among the aforementioned variables.

Recommendations for the future research

Knowledge control permits innovation to develop in the organization, clients' benefit from improved access to pleasant practices, and personnel turnover is reduced. Knowledge properties are the “recognize how” that the ministry has to have to use to invest and to develop. Building and coping with its know-how property are key additives for an organization to create price for its stakeholders and to assist in maintaining usual organizational overall performance success. The ministry has to expand knowledge of property by figuring out what they want to recognize, categorizing its knowledge of property, having clean company facts and safety policies, selling knowledge sharing, steadily preserving knowledge, and getting the proper technology.

Knowledge asset control wishes for a clean strategy, an empowering organizational culture, the proper techniques and systems, a clever control team, and sturdy technology. Knowledge belongings are discussed with the gathered highbrow assets of the business enterprise. It is the expertise possessed by the Ministry and its body of workers in the form of data, concepts, knowledge, comprehension, memory, insights, and technical and cognitive skills and abilities. The findings will suggest that expertise belonging may be measured and stepped forward so as to analyze causal relationships with diagnosed measurements of performance. The findings show that, by way of drawing from each asset primarily based on organizational getting-to-know literature, an expertise control framework can be offered to explain notably separate reassessments of expertise inside organizations (Chen et al., 2015, 2016; Cheng & Krumwiede, 2017; Costa & Monteiro, 2016). Knowledge reassessment can be built as expertise abilities, which can permit the evaluation of organizational expertise belongings, specifically expertise documents, classes learned, regulations procedures, expertise, and data. The researcher's findings say expertise belongings changed into the

first added in 2003. The term ‘expertise asset’ refers to a business enterprise’s gathered highbrow assets. Information and expertise belongings are understood withinside the business enterprise to make investments and grow. Proper expertise asset control is the important thing to create cost for stakeholders and maintain organizational performance. Knowledge best turns into reality treasured while it's miles well-managed. Together with the selling boom and competition, the sharing and use of expertise inside an enterprise result in advantages like. Improving strategic decision-making. Better knowledge of rules and procedures. Greater cost-effectiveness. Increased worker engagement and innovation. Improved documented expertise asset wafts throughout organizational boundaries (Flavin, 2012; Slyter, 2019).

It additionally lets personnel proportion their collective wisdom, experience, and know-how to make their personal paintings more efficient. Nonaka et al. (2000) regard the understanding of belongings as the premise of understanding developing technique and describe them as “firm-precise sources that might be imperative to create values for the firm.” The resource-based view, described in Wernerfelt’s (1984) study and advanced through the 1990s, indicates that groups ought to endeavor to increase their personal idiosyncratic sources and talents and, through those approaches, formulate their strategies (Aaker, 1989; Barney, 1991; Li et al., 2009; Kopec et al., 2022). In literature, quite a few belongings can be as distinctive as understanding belongings. Among them can be an organization’s managed skills, competences, and talents and the manner that they're used to create output (Reed & DeFillipp, 1990), facts, assumptions, and heuristics of monetary value (Wilkinson et al., 2015; Kopec et al., 2022), patents, copyrights, databases, personnel’s brains, processes, and data in data systems (Housel & Bell, 2001; Kopec et al., 2022), variations and interpretations of data, know-how, experiences, mistakes, and different inferences

(Debowski, 2006; Kopec et al., 2022). As many different belongings may also be listed, it is crystal clear that they have got to be categorized. Nonaka et al. (2000) described an evolved taxonomy of understanding belongings, which comprised four types:

Experiential facts assets are the ones that might be received via mutual arms on the enjoyment of the people of the employer and a few of the people of the employer and its stakeholders. Skills realize how care, love, trust, facial expressions, and gestures are a number of the examples; the ones that are assets are tacit, and it's miles difficult to be aware of them. However, they will be very valuable because of the reality that they will be employer-particular and inimitable (Nonaka et al., 2000).

Conceptual facts are more particular in nature, and they will be transmitted via images, symbols, and language. They are based completely on the perceptions of customers and people. Examples encompass logo equity, concepts, and designs (Nonaka et al., 2000). Although they've got tangible office work, and it's miles easier to recognize than experiential facts and assets, it's miles difficult to apprehend what people's and others' perceptions are. Systematic facts are every other kind of particular fact that is systemized and arranged (Nonaka et al., 2000). They encompass, in truth, stated technologies, product specifications, manuals, and documentations. Contrary to experiential facts assets, systemic facts assets are the most tangible ones, and thus they will be transferred mainly easily. Routine facts assets are every other kind of tacit asset that has grown to be habitual and pondered within the moves and practices of the employer. Know-how, manner of existence, and the methods of performing the daily industrial corporation are considered as habitual assets. They can be received via testimonies and myths about an employer, and they will be very practical (Nonaka et al., 2000).

In order to utilize information belongings and to control information advent and exploitation efficiently, a corporation ought to be capable of perceiving and quantifying those resources. Hence, a corporation has to map its shares of information belongings at the same time as retaining in thought that they're dynamic, and new information belongings may be made out of present ones (Nonaka et al., 2000; Alyoubi, 2015). The significance of information belonging relies upon the goals, targets, and method of the precise corporation. For this purpose, Carlucci & Schiuma (2006) and Sandeep & Thapliyal (2012) have proposed an information belongings fee spiral that aims to reply to the query of figuring out and enhancing information belongings. In the destiny study, take a look at framework information. Belongings could be described on the premise of their contribution to the organizational overall performance. The information asset fee spiral can have four essential stages, like the corporation's overall performance targets, evaluation of information asset fee drivers, information asset control process, and evaluation of overall performance improvements.

The research framework displays a separate reassessment of know-how, defined and sincerely described as organizational intangible know-how property. These know-how properties are called know-how abilities (KCs). Knowledge control can be applied to leverage those properties in a good way for systematic development within the technique of attaining elevated organizational performance. The following sections will deal with the applicable literature within the improvement of the know-how abilities as know-how property. First, the researchers perceive numerous sorts of know-how and introduce every one of the proposed know-how abilities including knowledge documentation, data, rules and processes, expertise, and lessons learnt. The segment will offer a definition of every know-how functionality, spotlight particular traits of that know-how functionality, and imply the company significance of every know-how functionality. The subsequent

segment will offer insurance of previous studies that give the basis for developing the know-how abilities, as know-how property establishes the particular traits of every know-how functionality and contrasts a number of the big variations among the know-how abilities. The subsequent segment will opine on the sorts of know-how resident inside every know-how functionality through an evaluation of the information or data /know-how debate and an evaluation of the tacit/implicit/specific additives of every know-how functionality. Our concluding segment will speak to the consequences of viewing those know-how abilities as separate know-how property; conclusions may be drawn from this line of looking at and implying the route that destiny has to soak up pursuing the dimension of know-how property.

Organizational innovations related to the market orientation construct are the descriptive statistics and graphs and charts for the construct of organizational market, which includes the following:

Our records on improvements captured an implementation degree of the improvements. To count on a bigger position within the adoption degree. In the implementation degree, cooperation throughout features can be more instrumental within the fulfillment of followed improvements (Slyter, 2019).

We discover the position of organizational improvements within the assumed marketplace orientation-overall performance relationship. In the process, we reaffirmed that improvements, as important additives to company overall performance, warrant huge company interest for a hit implementation of each technical and administrative kind. This calls for a committed, marketplace-oriented company way of life in an effort to facilitate organizational innovativeness, which an increasing number is turning into a key element in handing over advanced company overall

performance. Also, it is able to be beneficial to take a factor clever technique to the marketplace orientation assembly due to the fact the jobs of various marketplace orientation additives would possibly vary, contingent on the styles of innovation techniques and turbulences gifted within the environment.

Knowledge management strategy and planning-related knowledge management techniques are the descriptive statistics and graphs and charts for the construct of knowledge management strategy and plan, as well as knowledge management system, which include the following measures:

The corporation clearly documented the excessive degree of expertise control plan and goals. Implementation of the expertise control approach and plan is brazenly and actively supported by way of means of control (Flavin, 2012; Hallikainen, 2015; Hiatt & Choi, 2016). Knowledge control roles and duties are definitely described and understood by way of managers and employees. Other control strategies (e.g., human resources, facts systems, operations, communications, and protection plans) are intently aligned with the expertise control approach and plan. The wishes and gaps within the organizational expertise base are periodically reviewed, and the expertise control approach and plan are revised to deal with them (Slyter, 2019; Maier et al., 2015; Hudson & Thai, 2013).

Support for organizational learning related to knowledge management practices is descriptive statistics and graphs and charts for the construct of support for learning, which includes the following measures:

Knowledge advent and application (e.g., locating higher methods, technological innovation) are advocated, recognized, and rewarded. Sharing of information is promoted and rewarded (e.g., professionals are advocated and rewarded to instruct or mentor different employees) (Nonaka et al., 2000; Straud, 2008; PNT Marketing Offerings, 2010). Open conversation and a no-blame method to

reporting troubles and sharing training found out are promoted (e.g., everyday conversation is advocated among upkeep and operations) (Flavin, 2012; Dooley et al., 2012; Granitz & Koernig, 2011). Learning possibilities are advocated (e.g., becoming a member of professional businesses or attending schooling seminars).

In addition, it is hypothesized that powerful expertise control practices could have an instantaneous effect on the pleasantness of expertise processes, and those, in turn, have to enhance average ministry organizational effectiveness. The statistics generation infrastructure of the employer is likewise anticipated to play an essential position with the aid of using permitting and helping those pleasant expertise processes. Thus, it's widely anticipated that the quantity of expertise control practices and the effectiveness of the statistics generation infrastructure will each have an advantageous effect on the extent of supportive organizational lifestyle and will at once and undoubtedly affect organizational effectiveness (Greenmerer & Gaudin, 2008; Viswanathan et al., 2010; Kaplan & Haenlein, 2010). The assembly of first-class know-how approaches is primarily based totally on the important thing: know-how approaches. Several authors agree that the build-up and use of know-how approaches (e.g., Rastogi, 2015; Probst, 2020). Authors use special phrases and definitions to explain know-how approaches; however, they may be summarized as simple know-how approaches that are determined regularly within the literature, and for the functions of this study, they have been described as follows:

Quality of understanding acquisition and adoption strategies—that's the method of acquiring and adopting new outside understanding (whether or not tacit or explicit) into the company. This is interpreted to consist of understanding identity and choice strategies for the cause of acquisition. Quality of understanding sharing and switch strategies—that's the trade of understanding within the

company (immediately or indirectly) and which includes strategies of understanding conveyance and distribution (Rastogi, 2015; Probst, 2020).

Quality of understanding technology and validation method This is the advent of recent understanding, generally with the aid of using incremental understanding development and its validation within the company. It may consist of understanding identity and choice strategies related to inner understanding technology strategies (Tullis & Albert, 2016; Chiou & Tucker, 2017; Sinan & Seyda, 2019). Quality of understanding retention and garage strategies This is the method of preserving understanding (whether or not tacit or explicit) within the company and keeping its availability and relevance for future use. It contains the associated ideas of understanding capture, preservation, storage, retrieval, accessibility, identity, and safety within the context of inner organizational understanding and retention. Quality of understanding usage and alertness strategies—that's the idea of inner organizational understanding use (whether or not tacit or explicit) and which includes the method of adapting or decoding it in a hassle context (Wenger-Trayner & Wenger, 2015; Sherri, 2020; Keckan, 2018).

Constructing a human useful resource information control exercise involves centralizing all human useful resource documents, policies, records, and information and making those important records smooth for absolutely everyone within the organization to get admission to and replace from anywhere (Staal, 2022; Botha et al., 2014). According to Bai (2015) and Bustelo (2015), human useful resource control could make a crucial contribution to information control absolutely due to the fact that information is shared among humans as follows:

Human beneficial resource-associated understanding practices and statistics control-associated understanding control practices all have an excessive quality and direct effect on the

excessive-satisfactory of understanding, sharing, and switching processes. Human beneficial resource-associated understanding control practices and schooling-associated understanding control practices have an excessive quality, and direct effect on the excessive-satisfactory of understanding retention and garage processes. According to Davis (2015) and Pandita & Singh (2016), the process management-related knowledge management practices are descriptive statistics and graphs and charts for the construct of process management-related knowledge management practices, which include the following:

For all methods and techniques, precedence is positioned on making sure the necessities, methods, inputs, outputs, interfaces, responsibilities, and workflow are documented effectively and maintained as up-to-date as possible. Consider hazard construct in all paintings and selection methods. Procedures are aligned to expertise and statistical necessities of each painting's duties and selection methods. A procedure to degree and enhance the greatness and manipulation of all organizations, paintings, and selection methods is described and followed. Comprehensive expertise control techniques (e.g., for expertise loss hazard assessment) are documented and in use. Knowledge control methods and techniques are prolonged to providers and technical help organizations (Davis, 2015; Pandita & Singh, 2016; Garfield, 2021).

Information management-related knowledge management practices are the descriptive statistics and graphs and charts for the construct of information management related to knowledge management practices that includes the following:

Licensing documents, layout foundation documents, procedures, specifications, drawings, and schooling substances are as up-to-date as possible to cope with modifications and are maintained below configuration management. Logs, data, and records must be accurate, full, meaningful, and

easily available (e.g., logs, minutes, and a glance at results). Data requirements metadata, record codes, situation indexes, and submitting structures are extensively used to allow green statistics correlation, storage, and retrieval (Fu, 2015; Gupta & George, 2016; Stergiou et al., 2018).

Organizational performance management-related knowledge management practices are descriptive statistics and graphs and charts for the construct of operational performance management related to knowledge management practices that include the following:

Independent outdoor peer assessment tests are achieved frequently. Self-tests are notably used to stimulate reading and beautify performance (e.g., benchmarking closer to highly satisfactory practices). Performance dreams are set up and monitored for all levels and areas of a business enterprise (collectively with expertise strategies). Performance dreams for operations, maintenance, and reading strategies are based almost totally on dreams set up through a business enterprise's highly satisfactory practice. The effectiveness of the manipulation system (collectively with expertise manipulating components) is frequently reviewed. Ongoing techniques for operational experience capture, review, analysis, and corrective movement are defined and followed. The effectiveness of the manipulated system (collectively with expertise business enterprise components) is frequently reviewed on an ongoing basis. Ongoing techniques for operational experience capture, review, analysis, and corrective movement are defined and followed (Davis, 2015; Pandita & Singh, 2016; Garfield, 2021). Training related to knowledge management practices is the descriptive statistics and graphs and charts for the construct of training-related knowledge management practices, which includes the following measures:

A corporation contains standards of the systematic method to education online structures in education programs. Training fabric is reviewed to make sure it displays a lesson learned from

running enjoy consents with documentation. Sufficient education is furnished to reap and keep the specified stage of competence for all activity positions. Collaboration with universities and faculties guarantees the perfect delivery of recent graduates. Other strategies are used for education (e.g., idea mapping, pre-activity briefings, casual seminars, and mentoring programs) (Botha et al., 2014; Davis, 2015; Bai, 2015; Bustelo, 2015; Pandita & Singh, 2016; Garfield, 2021; Staal, 2022).

The following revisions to the question and questionnaire are recommended to be incorporated in the next knowledge management survey for the ministry or public sector:

CHANGE THE SUBJECT

Change the subject from “Expertise control practices and challenges: The case of IT-primarily based total expertise control” to “The effect of expertise control capabilities, organizational performance, organizational dedication, and expertise-employee performance: The evaluation of organizational expertise property within the public sector.”

Part 1 H1: An individual’s consciousness of online groups and social networks has a fine impact on non-public norms in online groups and social networks. New question: “How are enough good technical facts and statistics generated to help evaluate structures and components?”

Part 1 H2: An individual’s ascription of duty on online groups and social networks discount has a fine impact on his/her non-public norm on online groups and social networks discount. New question: “Is there a sturdy expectation for non-stop studying and worker improvement during the organization?”

Part 1 H3: Personal norm of online groups and social networks discount mediate the relationships amongst ascription of obligation to online groups and social networks, discount, and purpose to lessen online groups and social networks. New question: “How does an experienced workforce proportion a robust feel for obligation for improvement of the junior workforce?”.

Part 1 H4: Attitude toward online groups and social networks discount has an effective effect on the purpose of lessening online groups and social networks. New question: “Employees who proportion their understanding and mentor others aren't actually valued and preferred during the organization (to be reverse coded).

Part 2 H6: Number of years of usage of net services. New question: “How long-time period making plans for gadget life cycle and asset control is powerful and properly factored into monetary finances plans?”

Part 2 H7: Online groups and social networks are used daily. New question: “Learning methods, programs, and approaches such as great warranty and non-stop development structures want development (to be reverse coded).

Part 2 H8: How awful a lot of non-public cash did you make investments on social networks? New question: “ Do operating situations of systems and additives aren't efficiently monitored and maintained to be gaining knowledge of processes?” (to be reverse coded).

Part 2 H9: Does your company have a know-how control department? New question: “Is technical selection making supported via way of evaluation and effectiveness?”

Conclusions

Knowledge manipulation is a method for dealing with expertise and facts for an employer, thinking of the growth and refinement of strategies through which expertise flows and contributing to the end of organizational fees together with innovation and competitive advantage (Grant, 2011). While few professionals are aware of the shift in the foundations of groups' natural reasserts to highbrow and the ensuing feature of expertise as a tactical combination and source of competitive advantage in the expertise (Grant, 2011), others declare that expertise manipulation is at best a

passing fad and is a manipulative concept that has been sustained and is vital to groups from the additives of every competitive advantage and the bottom line (Grant, 2011). When carried out well, expertise manipulation has a top-notch impact on competitiveness and monetary performance. In their findings, Andreeva & Kianto (2012) and Grant (2011) display the importance of the right implementation for expertise. manipulate. Andreeva & Kianto (2012) located a top-notch link among beneficial human aid manipulation and facts and verbal exchange-generation practices that understand manipulation implementation. Additional findings, not like those said above, display that the elements are synergistic and that even the best use can nonetheless definitely have a terrible impact on an employer's performance.

In this study, a researcher notes that there can be little steering in literature about what records share the sincere way and what direct and quantifiable organizational effects are. The intention of this is to find out the relationships between record sharing, innovation, and employee overall performance. Several authors provide a literature evaluation that lays the inspiration for this investigation (Yip et al., 2012; Lukic et al., 2015). They determined the literature describing the versions among specific express and tacit records, together with those varieties of records shared within the workplace. A dozen hypotheses are proposed concerning the impact of innovation on overall performance and record sharing on employer overall performance. Those who are involved and actively engaged in record-managing projects in their businesses are starting to understand the importance of getting employees involved with record-managing projects (Yip et al., 2012; Lukic et al., 2015; Davis, 2015).

However, with the exponential increase in the quantity of expertise in businesses,. There can be a preference to reconsider how expertise management is done. As expertise management has matured, it has grown to be clean in order that it does not genuinely rely on technology. As a substitute, it emphasizes and requires collaboration amongst a good-sized variety of participants in an organization (Yip et al., 2012; Lukic et al., 2015; Davis, 2015). Collocated and virtual businesses may be particularly vulnerable to stressful conditions in collaboration and expertise sharing for several reasons. First, growing and preserving interest in, expertise, sharing, and information of various groups of individuals can be an undertaking while group individuals are not in close physical proximity (Lukic et al., 2015; Pinjani & Palvia, 2013; Davis, 2015). Organizations that place pressure on management ought to force over time in order for his or her expertise of managing implementations to live powerfully. Second, green management of an organization's expertise has been discovered to decorate each organization's typical overall performance and competitiveness. Lastly, the powerful use of expertise allows businesses to carry out extra work correctly and effectively, lowering expenses and developing revenue.

A critical problem in the adoption of knowledge manipulation obligations is the preliminary training of agencies to accept, adopt, and make use of new knowledge manipulation processes. Many groups nevertheless view knowledge manipulation as launching some software program applications without interest in their organizational tendencies to make certain the fulfillment of their knowledge manipulation obligations. Wei et al. (2020) studies the connection between stages of knowledge and manipulated implementation within an agency and the corresponding boom in performance of the organisation. Therefore, the objective of this commentary is to provide a conceptual framework to provide an explanation for knowledge manipulation dimensions and address its relationship with

organizational performance (Nattapol et al., 2010; Yip et al., 2012; Wei et al., 2020). The effects show that there may be an excellent correlation between knowledge manipulation capabilities and organizational performance. There are several findings in this commentary that could be really well worth mentioning. Initially, outstanding knowledge is demonstrated to be substantially patron connected to delight. These findings observed that the outstanding knowledge in the ministry has an excellent direct effect on the users' delight. Second, those observers decided that the outstanding use of the system with the aid of the ministry has, moreover, undoubtedly affected users' delight. This evidence demonstrates that outstanding inferiority to knowledge devices inside the context of preceding technologies and complicated patron interfaces and unreliable functions will truly have an impact on the users' delight with the system. Third, carriers' outstanding knowledge devices have turned out to be decided to have a massive, excellent impact on patron delight. Furthermore, this study's results demonstrated that the fulfilment of users' knowledge manipulations energises them, and vice versa

Knowledge management has continuously completed a critical characteristic in building lasting consumer relationships. It identifies crucial understanding, stores and organizes it, and enables easy exchange of records amongst humans of relevance. This will grow consumer satisfaction and supplement consumer interactions. Several researchers showed that businesses should prioritize consumer satisfaction with respect to expenses and their miles. Clients who stress any employer, because of the reality, via greater consumer understanding, managers can study what is and isn't doing well with their products or services within the entity's team (Badwan et al., 2017; Davis, 2015; Nndru & Rentala, 2019; Fussell & Truong, 2022). We discovered that consumer satisfaction shows how satisfied or dissatisfied a

consumer is with the employer or service. It consists of a consumer's address, logo, experience, and perception of it. Customer satisfaction can be derived from the terrific price and expectations the employer offers to customers. Additionally, the collection and exam of this information show how customers view the employer logo, whether or not they still resonate with it, and the logo and the manner in which they have interacted with it. For example, the most frequently used metric for diploma consumer satisfaction works on the rating given by customers concerning service, product, or experience. The scale of rating tiers is between 1 and 5 because of the reality that smaller scales are better for understanding, and the scores are better, particularly in terms of terrific service. This method is easy and derives the maximum results. By the use of understanding, managers of businesses can decorate their consumer relationships and increase consumer satisfaction. Creating loyal customers through the manner of amassing consumer understanding permits businesses to customize their products, services, and verbal exchange and develop profits (Davis, 2015; Badwan et al., 2017; Nndru & Rentala, 2019; Fussell & Truong, 2022).

Knowledge sharing may be mentioned in a social interplay culture regarding the alternation of individual information, insights, and competencies in the course of the complete organization. Knowledge sharing incorporates a tough and speedy sharing of understandings related to offering employees proper access to relevant facts and building and using information networks within organizations (Hogel et al., 2003; Badwan et al., 2017). Enabling inexperienced information sharing is not easy. Designing conditions is often related to motivating human beings to share information, identifying the crucial elements for human beings to share their information, organizing the existing information, and making information

accessible without trouble. The present findings examine information-sharing practices and the usage of information-sharing practices. The extra ranking in the information practice scale implies a higher degree of information sharing. In the context of the manipulation manual, the findings from this affirmed that the manual given to the government team from the ministry has verified a high exceptional impact on purchaser satisfaction of the information manipulation gadget they used. This technique that manipulates manuals should facilitate the use of information-manipulated gadgets via diverse ministry staff and be able to upgrade the quantity of contentment with the diverse clients of the gadget.

Visualization performs a pivotal role in information in marketing and marketing and advertising. With the assistance of appealing visuals, summary competence can be converted into tangible fee propositions. In order to market their abilities and experiences, agencies now rely not on symbols, together with information brands, but, moreover, use seen representations of their information to signal competence (Ibrahim et al ., 2015; Stergiou et al., 2018; Fussell & Triong, 2022). Knowledge maps and metaphors seem particularly apt. Due to that, they make new material to be had via acquainted structures. Some marketers apprehend Web 2.0 as a danger to their dominant position inside the conversation techniques; logos ensures they become hard to get in the course, and the persuasive electricity of mass marketing and marketing and advertising is weakening (Ibrahim et al ., 2015; Stergiou et al., 2018; Yzer, 2017; Fussell & Triong, 2022).

The reputation of social media has been boosted via low value. Broadband connectivity allows the fast and trouble-free use of new, exciting, interactive, and complex programs. The findings show the perception of clients that Web 2.0 is a delivery of empowerment for clients

as people of the market approach and, moreover, the fact that for growing internet clients, Web 2.0 has grown to be an essential element of their social environment. The uncommon vicinity parameter of every detail is the ability of Web 2.0 programs to address people's needs to proportion information, information and creativity, and fun in new approaches (Ibrahim et al ., 2015; Stergiou et al., 2018; Fussell & Triong, 2022). In masses of personal needs, like communicating, getting to know, and socializing. Social elements of this percentage equal outcomes due to technical elements wherein the outcomes of every customer's pleasure in employer information manage machines inside the public sector.

Organizational information can have an effect on typical organizational overall performance under few circumstances. Therefore, managers should take a few measures to develop the company, mastering if you want to link statistics, manipulation, and partnerships to typical overall performance. For example, institutional work, managerial willpower, mastering orientation, and openness to new ideas. This study has to observe and give interest to the relationship among statistics manipulation, organizational typical overall performance, company willpower, and organizational mastering (Raza et al., 2021; Phillipo, 2018; Hubackova, 2015). A company is capable of remodeling organization, attending to discover approximately the engine of statistics creation, and aiming at building a competitive advantage. Moreover, it can also emerge as mastering a company. Organization information can also additionally be defined as a mastering machine through social media interactions on organization and company levels. They have a take and observe; have a take and observe. The very end result of all these statistics being manipulated is an intrusion into the company's conduct through clarifying the essential courting among capability behavior patterns and

measures of typical organizational overall performance and consequences in more complete investigations. From Garvin's angle, mastering the company, mastering the manner of movement, and movement mode extrude. Garvin, Edmondson, and groups are able to diplomize the depth of organizational mastering. The authors advise that there are three creation blocks of organizational information companies: a supportive mastering environment and concrete attention to discovering strategies and practices and control that sell learning (Raza et al., 2021; Phillip, 2018; Peter & Edward, 2016).

Applications of social structures: the getting-to-know precept, in which researchers can use the precept to understand how aggressiveness and violence can be transferred through observational getting to know new. For this, looking at the precept can further be used to investigate how first-class function models can foster best behaviors and promote social change. The know-how of getting to know theories lets a manipulated workforce and practitioners hook up with all one-of-a-kind forms of employees (Fussell & Truong, 2022; Pandita & Singh, 2016; Islam, 2016). Management corporations of people can apprehend one-of-a-kind getting-to-know styles to achieve one-of-a-kind employees in one-of-a-kind regions. Growing education that focuses without delay on employees' desires and aptitudes (practitioners hook up with all one-of-a-kind forms of employees) (Pandita & Singh, 2016; Islam, 2016; Nandru & Rental, 2019; Fussell & Truong, 2022). Management corporations of people can apprehend one-of-a-kind getting-to-know styles to achieve one-of-a-kind.

In this study, knowledge of the workplace makes fact-sharing part of the corporation as usual. It is vital to make fact-sharing a critical part of the process. Descriptions for employees make fact sharing more friendly and lead to the useful resource of the usage of examples and

percentage-relevant facts. Managers employ social getting to know to decrease undesirable behaviors, improve the frequency of perfect behavior, and beautify the capabilities of the employees (Fussell & Truong, 2022; Lee et al., 2020; Nandru & Rentala, 2019).

Digital marketing and marketing and advertising are forms of marketing and advertising that are widely used to promote products or services through digital generation so they may attract and maintain customers. With digital media, customers can access information each time and anywhere they want. Researchers posited that, consistent with the data, through the manner of approach in 2016, the Internet has grown to be used by 3.5 billion people, and in 2000, this wide range had become the simplest four hundred million, which represents a growth rate of 87.5% (Ahmad, 2016; Muller et al., 2018; Petit et al., 2019; Felix et al., 2017). Along with the growth of Internet use, there has been a growth in digital marketing and marketing and advertising. We positioned the advertising and marketing possibilities on the Internet as a social network because of the reality that it lets an organization connect with the customers who are present, and moreover, employees can use weblogs, content material clothing communities, social networks, forums/bulletin forums, and content material cloth aggregators for people who access and keep track of those types of information. Researchers posited that there is a choice for expertise in digital marketing and marketing and advertising competencies all throughout the organization and the damage that can be performed if the skill set is missing (Dwivedi et al., 2019; Petit et al., 2019; Felix et al., 2017).

Knowledge manipulates gadget infrastructure, and investment is hard and fast. Degrees and centers are aimed towards securing a non-preventive transfer of understanding amongst employees in the organization, operation, and use of the infrastructure. In an organizational context, understanding manipulated infrastructure includes principal components like organization culture,

organization structure, the organization's information-era infrastructure, commonplace vicinity expertise, and physical environment (Becerra-Fernandez & Sabherwal, 2010). Infrastructure investments assist in improving productiveness and growth, offering opportunity and connectivity, and promoting monetary device inclusion. The findings that public infrastructure investment boosts the productivity of private capital and labor, leading to better output. However, this fine effect can be offset if the investment is financed with more borrowing authority. Several researchers referred to the most important advantages of infrastructure as a company as scalability, cost-effectiveness, pay-on-name for utilities, location independence, redundancy, and the protection of data (Yoshino, 2019; Becerra-Fernandez & Sabherwal, 2010). The cutting-edge expertise manipulates infrastructures, deals with formal expertise, and manipulates approaches in which expertise is created, stored, assimilated, and disseminated. Such activities, however, are designed to be carried out outside of the organization's process. Knowledge infrastructures are expected to be more effective when they encompass unique real-time know-how approaches that are integrated into the operational flow of an understood manipulated infrastructure framework for boosting understanding of full-size organization approaches.

Organizational willpower can be categorized into classes' specific personal traits, pastime satisfaction, organizational justice, function states, and employee perceptions (Chughtai & Zafar, 2006; Mathieu & Zajac, 1990; Meyer & Allen, 1997). Personal traits, which consist of age, gender, and self-efficacy, grew to become more positioned to be influential towards employees' organizational willpower. For instance, Arya, Sharma, and Singh (2012) finished studies spotting the correlation between organizational willpower and self-efficacy with gender function orientation due to the moderator. The give-up result confirmed that there can be a first-rate enclosure among

organizational willpower and self-efficacy. This research observes organizational willpower, which, in part, mediates the relationship between information manipulation practices and information painting's general overall performance. The public region coverage makers are strongly counselled to position impact information manipulated gadgets and practices that permit us to decorate our general overall performance similarly to organizational willpower (Nandru & Rentala, 2019; Mathieu & Zajac, 1990; Meyer & Allen, 1997; Chen & Liang, 2010).

Currently, they are looking at having a take on observing people who are moreover positioned there. There can be a connection or bond between the employees and their employer (the organization). When they finish, they often must stay in an enterprise due to the fact their blessings or career possibilities are restricted to their modern-day job. When employees are pleased with their extrinsic advantages, supervisor support, co-worker support, autonomy, training, and participation in the choice-making process, they may have a higher degree of affective and normative willpower (An et al., 2016a, 2016b; Yzer, 2017; Agarwal & Islam, 2015). Employees who attended on-the-job training are discovered to have a higher goal for life.

Organizational general overall performance incorporates the actual output or consequences of a corporation as measured in opposition to its meant outputs (or goals and objectives). Organizational general overall performance and the achievement of employees' surrender of programs or tasks as expected. Researchers mentioned the bureaucracy of organizational general overall performance measures, especially human useful resource outcomes, organizational outcomes, economic accounting outcomes, and capital marketplace outcomes (Silva et al., 2017; Berberoglu, 2018; Li & Lalani, 2020). For the contemporary look of it, we discovered that information management techniques have a nice and top-notch impact regarding dynamic talents,

similarly to having a top-notch impact on general organizational overall performance. Moreover, consequences indicated that dynamic talents in components mediate the remote courtroom docket practices of general organizational overall performance.

Knowledge management systems are era solutions, combined with strategies and people that keep and set up knowledge so groups can collaborate, stay aligned, and do their excellent work. This is a vast definition, and there are various examples of knowledge management tool sorts at the side of organizations or departments: big knowledge management systems, research and insights libraries, client provider knowledge bases, mastering management systems, and online community forums (Alyoubi, 2015; Abdulla & Mheiri, 2014). The control help of an organization offers systems to put up and set up organizational, departmental, or product client knowledge in order that essential facts are not constantly bought or lost. While era is at the center of knowledge managing devices, the systems require people to constantly increase and leverage an organization's knowledge base. In this research, we determined that excellent knowledge management systems will make it easy for clients to not clearly get the proper access to, however, have interplay with knowledge through a method of turning it proper right into a renewable resource (Mathieu & Zajac, 1990; Meyer & Allen, 1997; Alyoubi, 2015; Abdulla & Mheiri, 2014). We, moreover, determined that a knowledge management tool combines eras, strategies, and people to centralize and set up facts with the purpose of improving knowledge, collaboration, productivity, and alignment. Common programs for comprehending managing systems include:

Onboarding and ongoing training. A knowledge management system may house training materials, including videos, learning series, and checkpoint quizzes, which employees can access on demand (Ibrahim et al., 2015; Pandita & Singh, 2016; Yzer, 2017; Fussell & Truong, 2022). This

on-demand access allows new hires to get up to speed faster and helps all employees stay informed and grow professionally.

Sharing the knowledge of subject matter experts. A knowledge management system gives subject matter experts a central, highly visible place to share their knowledge so that they do not have to answer the same questions over and over again (Ibrahim et al., 2015; Pandita & Singh, 2016; Yzer, 2017; Ganguly et al., 2019; Fussell & Truong, 2022). This makes it easier to connect employees with expertise and preserves the knowledge of employees when they leave the organization.

Organizing research and final documents for easy access. In many organizations, there is research and documentation that may benefit a broad audience but that is only shared within one department or line of the organization. A knowledge management system democratizes this content to maximize its value to the organization (Ibrahim et al., 2015; Pandita & Singh, 2016; Yzer, 2017; Fussell & Truong, 2022).

Answering the questions of employees and consumers. Chances are that if employees or consumers have a question, they are not the only ones. A knowledge management system with a Q&A component allows users to publish questions and get answers from across the organization (Ibrahim et al., 2015; Pandita & Singh, 2016; Yzer, 2017; Fussell & Truong, 2022). That information then becomes searchable so that other users can benefit from it. These types of knowledge management systems can be used internally for employees or externally for consumers.

A knowledge management machine is the technique for gathering, organizing, and sharing records with an organization, and the generation used to govern one process. Knowledge management is vital because it allows clients to self-serve, improves agent efficiency, and breaks down internal silos. Researchers found that by inspiring outlet Sharing records with an organization and the generation used to govern one process. Knowledge management is vital because it allows clients to self-serve, improves agent efficiency, and breaks down internal silos. Researchers found that by inspiring an outlet, a know-how of the competitive manipulation framework allows businesses to get the right facts about the right human beings at the right time. In numerous investigations, the researchers found that the short charge at which consumers' expectancies and the business enterprise landscape change, defining the right facts, the right person, and the right time can be tricky, even now not impossible (Rahimli, 2012; Patman, 2017). The findings of this update content materials based on clients' needs, private income, and a valuable opportunity to observe its clients and decorate its organization technique as a whole (Husain, 2022; Darino, 2020; Fussell & Truong, 2022). They want to train their employees in the event that they need to correctly use and interact with different employees from their branches and super regions.

Organizational effectiveness is the final result of understanding. Overall, overall performance is verified in a large number of domains, and the broadest concept shows common overall performance in the research on strategic management and organization theory. Organizational effectiveness includes multiple requirements or predictors. Profitability (Mitchell et al. 2012), operational efficacy, and marketplace share (Mitchell et al. 2012; Oluleye & Oyetunji, 2010), for example, are essentially referred to as the quantity with which an organization achieves its strategic goals. There is no absolute dimensional matrix in the literature to lower the success of understanding

at an organization even though there are a number of measures in practice. The researchers decided that there are distinct factors for understanding packages like customer satisfaction and economic advantage for the effectiveness of the organization's processes, capability to hold innovation and changes, and improvement through organizational learning and quantifying critical success factors (Fu, 2015; An et al., 2016a, 2016b; Islam, 2016; Yzer, 2017).

The organization additionally developed accounting processes for valuing intangible assets of the organization, similarly to incorporating models of intellectual capital in some methods to quantify the cost of innovation and the development of center competitiveness. The statement showed the right know-how, and the answer allows companies to present and communicate spherically on organizational records without being inside the same building, and moreover, an organization can expand their companies with appropriate candidates, irrespective of who they're gaining an extra hand in hiring the high-quality to ensure organizational success. An entity's greatest asset is their human beings. When the right organization is sharing the right expertise, the competitive component is evidence. Retaining human beings is the difficult part. Those who make an agency a success additionally are folks who are seeking out the opportunity to broaden their careers (Rahimli, 2012; Ribeiro, 2018; Gautzm, 2022). They are go-getters, want to get transport, and control companies want to help. They do that with the useful resource of doing away with organizational hierarchies through flattening verbal exchange and allowing all people to get proper access to information. Team individuals can depend upon and have a look at from the understanding of others, from all degrees of the agency update content materials based on clients' needs, private income, and a valuable opportunity to observe its clients and decorate its organization technique as a whole (Husain, 2022; Darino, 2020; Fussell & Truong, 2022). They want to train their employees in the

event that they need to correctly use and interact with different employees from their branches and super regions.

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The organization additionally developed accounting processes for valuing intangible assets of the organization, similarly to incorporating models of intellectual capital in some methods to quantify the cost of innovation and the development of center competitiveness. Having the right subculture and tools inside the region to help them locate information will permit them to broaden within the agency (Mitchell et al. 2012; Oluleye & Oyetunji, 2010; Nandru & Rentala, 2019; Fussell & Truong, 2022). Also, a recording tool. Understanding the management tool factors assists organizational competencies, and additionally, expertise in management and its application can help businesses to attain viable benefits in competition with competitors.

The best way to get personnel to include an understanding gadget is ease of use. An enterprise wants to undertake a gadget that integrates into place of business equipment or to put into effect structures that combine into the equipment personnel already use. To put into effect, understanding possession exercise enterprise can also additionally connect their names to the understanding they offer, which will encourage personnel to be diligent in adhering to understanding control policies and in presenting well-organized, credible, accurate information (Oluleye & Oyetunji, 2010; Nandru & Rentala, 2019; Fussell & Truong, 2022). For instance, without difficulty, accessible, applicable understanding improves the overall performance of an enterprise-extensive through stopping repeated missteps, guiding product development, and sharing inner and outside feedback.

Knowledge control software Knowledge control inside the ministry is the way to enhance communication with their providers, vendors, and team of workers. They undertake online understanding-sharing sports along with developing a digital network that involves each provider, vendor, and the organization's team of workers in touch in an interactive manner. The most common demanding situations of understanding control relate to out-of-date generation, worker motivation,

and making generation smooth to be found. Obsolete generation, whilst storing records, uses far more extra time eating than has to be, or personnel keep away from the use of the device altogether due to its archaic nature (Oluleye & Oyetunji, 2010; Nandru & Rentala, 2019; Fussell & Truong, 2022). The program also gives an entity an aggressive area and expedites commercial enterprise decisions.

Employee motivation is another problem of understanding control in organizations. Obviously, the cost of an understanding control device depends on what personnel pick to share. For example, it's far more crucial for organization leaders to set goals, track progress, and implement compliance with regard to understanding control. In essence, putting expectations and then comparing whether or not personnel have met them is the key. Lastly, making records smooth to find, an understanding control undertaking that arises on every occasion seeking capability is incomplete, outdated, or irrelevant (Oluleye & Oyetunji, 2010; Nandru & Rentala, 2019; Fussell & Truong, 2022). Moreover, that is frequently resolved with the right understanding of control, too. It is important to spend money on a powerful, nicely designed understanding control device that may assist an organization to upward thrust above these demanding situations.

Knowledge management tools may be too complex for workers to comprehend, necessitating the need for costly training. Using knowledge management tools incorrectly can waste time and money, preventing operational efficiency. Ultimately, problems such as this one can even go so far as to jeopardize an entity's standing in the marketplace. Without a vision of how the collected information will help achieve an organization's goals, a knowledge management system may be vastly underutilized, essentially rendering it useless (Oluleye & Oyetunji, 2010; Nandru & Rentala, 2019; Fussell & Truong, 2022). Although these disadvantages of knowledge management should not

be overlooked, they also should not prevent organizations from investing in knowledge management tools. Implementing a know-how control gadget is both hard and rewarding. This kind of gadget permits maintaining know-how of each worker and makes it reachable to different people inside the organization. With that information, personnel have a one-forestall save in which they are able to research best practices, get admission to schooling materials, and discern the way to troubleshoot common issues (Oluleye & Oyetunji, 2010; Nandru & Rentala, 2019; Fussell & Truong, 2022). With technology advances and corporations enforcing new systems, personnel can grow to be crushed and like to do things in "the vintage manner." Once personnel have a specific way of finishing their work, they frequently do not need to veer from that process (Oluleye & Oyetunji, 2010; Nandru & Rentala, 2019; Fussell & Truong, 2022).

A subculture of expertise engagement began to evolve from the pinnacle down. However, senior leaders can also be sluggish to undertake new generation, as they are now no longer into their everyday daily responsibilities. Executives have a tendency to focus on big-picture approach objects and can expect that expertise control does now no longer follow their roles (Oluleye & Oyetunji, 2010; Nandru & Rentala, 2019; Fussell & Truong, 2022). Additionally, while personnel observe that leaders and bosses are not the use of the generation, they might also additionally comply with suit, displaying the general generation adoption. As generations advance and personnel are continuously requested to examine new systems, they can experience generation fatigue. Many people discover it is hard to pay attention to their process responsibilities and entire correctness whilst they're constantly being requested to replace contemporary generation and undertake new tools (Nandru & Rentala, 2019; Fu, 2015; An et al., 2016a, 2016b). However, the more content material is saved inside the platform, the more difficult it may grow to be for personnel to quickly discover the records

they need.

One of the most essential elements of keeping an information control gadget is making sure that information inside it is up-to-date. If time-sensitive content material isn't frequently up to date or archived, personnel may also turn out to be gaining access to and the usage of previous resources (Nandru & Rentala, 2019; Fu, 2015; An et al., 2016a, 2016b; Islam, 2016). Thus, this will be specifically dangerous if personnel proportion that incorrect information with career providers. Once that happens, people may also lose interest in the gadget and emerge as hesitant to use it on an everyday basis. Although extruding can be tough on the subject of imposing information control platforms, the advantages outweigh the challenges (Fu, 2015; An et al., 2016a, 2016b; Islam, 2016). By selecting the proper platform and clearly speaking of its advantages, correctly keep organizational information and equip personnel for success.

Knowledge control advanced organizational agility, higher and quicker selection making, faster problem solving, and improved fee of innovation, supported employee growth and development, sharing of expert expertise, higher communication, and advanced enterprise processes (Fu, 2015; An et al., 2016a, 2016b; Islam, 2016; Yzer, 2017). A suitable understanding control devicewill make it smooth to discover and reuse applicable data and assets throughout an organization. This, in turn, can assist in creating higher merchandise, and resourceful collaboration will deliver more views, diverse critiques, and sundry reviews to a technique of selection making, supporting an entity to make choices primarily based totally on collective understanding and expertise (Fu, 2015; An et al., 2016a, 2016b; Islam, 2016; Yzer, 2017; Fussell & Truong, 2022). To keep the budget in mind, the method and educational desires for any new understanding control device, and additionally, to keep in mind alternate control techniques for introducing new KM practices.

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APPENDICES

Appendix A



UREC's Decision

Student's Name: Mancholu Esther Molemohi

Student's ID #: R1810D6450677

Supervisor's Name: Dr Abhishek Tripathi

Program of Study: UUZ: DBA Doctoral of Business Administration

Offer ID /Group ID: O18623G18380

Dissertation Stage: 1

Research Project Title: ASSESSING DETERMINANTS OF KNOWLEDGE MANAGEMENT
CAPABILITY DEVELOPMENT

Comments:

- Student's ID is wrong
- Program of study is wrong. Please choose UUZ: DBA Doctoral of Business administration
- 4b: The sentence is incomplete. Please add: Excluding people with mental disabilities. Only those who can provide the informed consent for themselves will participate in the research.

Decision: B. Approved with comments for minor revision

Date: 8.10.2020

Appendix B



UREC Decision, Version 2.0

Unicaf University Research Ethics Committee Decision

Student's Name: Mancholu Esther Molemohi

Student's ID #: R1810D6450677

Supervisor's Name: Dr Abhishek Tripathi

Program of Study: Choose from the list

Offer ID /Group ID: O28102G29137

Dissertation Stage: Choose from the list

Research Project Title: Assessing Determinants of Knowledge Management Capability Development

KNOWLEDGE MANAGEMENT PRACTICES AND CHALLENGES:
THE CASE OF IT-BASED KNOWLEDGE MANAGEMENT

Comments:

REAF:

b - please clarify/revise the following: 'pretend to be good and therefore hides their personality', 'disclosing his/her perverse', 'catch glimpses of natural behavior'. How the observation list will help to collect this kind of information? The observation tool should provide information related to research question and purpose of the study.

b- 'filled the questionnaires was 330' - kindly note that the student should not proceed to data collection prior to UREC approval.

informed consent form: The date is in the past. Kindly note that the student should not proceed with data collection prior to UREC approval. explain why and how you have chosen this person to participate in this research. Do not exceed the word limit of 150 words.

art 2 - leave empty.

Unicaf University Recruitment Advertisement - please clarify why you are providing the monetary compensation to the participants?

provide the research tools: Face to Face Questionnaires, Online Questionnaires, observation list.

PPENDIX C ONLINE QUESTIONNAIRE MINISTRY BACKGROUND
INFORMATION OF EMPLOYEES

Decision*: B. Provisionally approved with comments for minor revision

Date: 09/12/2021

*Provisional approval provided at the Dissertation Stage 1, whereas the final approval is provided at the Dissertation stage 3. The student is allowed to proceed to data collection following the final approval.

Gatekeeper Letter



UU_GL - Version 2.0



Gatekeeper letter

Address: Sekamaneng- Khubetsoane- Maseru

Date: 9/08/2021

Subject: accessing study setting and participants

Dear Malimabe,

I am a doctoral student at Unicaf University Zambia.

As part of my degree I am carrying out a study on knowledge management practices and challenges: The case of IT-based knowledge management as a marketing strategy .

I am writing to enquire whether you would be interested in/willing to participate, allowing the researcher to use an organization website to post online questionnaire and use the premises to distribute paper based questionnaires and further in granting permission to recruit study participants in this research.

A gatekeeper stands between the data collector and a potential response. The research as a rule will need some form of ethics review. The researcher would seek advice when in doubt about the boundary between quality assurance, evaluation and evaluation research exist on a continuum of activity, irrespective of whether an activity is quality assurance, evaluation or research, the activity must be conducted in a way that is ethical. Within this process, a gatekeeper have a key role to ensure an investigator gain access to potential participants and sites for research. Positive influences of the gatekeeper can be invaluable to the research process by facilitating the smooth running of research activity to completion. The work relationship to a respondent, are able to control who has access, and when, to the respondent.

The purpose of this study is to investigate the determinants affecting utilization of online communities and social networks that act as a generic template of practising knowledge management in the organization. Furthermore, this study will attempt to assess and find the key organizational elements and their interrelationships impacting knowledge management development. Additionally, will contribute to the field of knowledge management to bridge the gap among theories and practices that develop principles, methods and processes of practising knowledge management. The consideration of different types of Web 2.0 applications and some of the common marketing strategy objectives such as to identify two main ways of engaging the social media as part of the marketing strategy like the Passive and the Active way. The Web 2.0 applications and their role are part of the marketing strategy . knowledge management practices and challenges: A case of IT-based knowledge management. Dr. Abhishek Tripathi is my supervisor.

A gatekeeper to send an email on behalf of the researcher for the permission to recruit study participants and by virtue of their personal or work relationship to a respondent, are able to control who has access, and when, to the respondent. From 26 th August to 09 th January, 2022.

Thank you in advance for your time and for your consideration of this project. Kindly please let me know if you require any further information or need any further clarifications.

Yours Sincerely,

Student's Name: Mancholu Esther Molemohi

Student's E-mail: mancholu@webmail.co.za

Student's Address and Telephone: machabeng Hospital Area Qacha' S Nek Lesotho +266 63122344

Supervisor's Title and Name: Dr. Dr. Abhishek Tripathi

Supervisor's Position: Teacher

Supervisor's E-mail: a.tripathi@unicaf.org

Informed Consent Form



UU_IC - Version 2.1

**Informed Consent Form****Part 1: Debriefing of Participants****Student's Name:****Student's E-mail Address:****Student ID #:****Supervisor's Name:****University Campus:** Choose from the list**Program of Study:****Research Project Title:****Date:**

Provide a short description (purpose, aim and significance) of the research project, and explain why and how you have chosen this person to participate in this research (maximum 150 words).

The above named Student is committed in ensuring participant's voluntarily participation in the research project and guaranteeing there are no potential risks and/or harms to the participants.

Participants have the right to withdraw at any stage (prior or post the completion) of the research without any consequences and without providing any explanation. In these cases, data collected will be deleted.

All data and information collected will be coded and will not be accessible to anyone outside this research. Data described and included in dissemination activities will only refer to coded information ensuring beyond the bounds of possibility participant identification.

I, , ensure that all information stated above is true and that all conditions have been met.

Student's Signature: _____

Informed Consent Form**Part 2: Certificate of Consent**

This section is mandatory and should to be signed by the participant(s)

Student's Name:

Student's E-mail Address:

Student ID #:

Supervisor's Name:

University Campus: Choose from the list

Program of Study:

Research Project Title:

I have read the foregoing information about this study, or it has been read to me. I have had the opportunity to ask questions and discuss about it. I have received satisfactory answers to all my questions and I have received enough information about this study. I understand that I am free to withdraw from this study at any time without giving a reason for withdrawing and without negative consequences. I consent to the use of multimedia (e.g. audio recordings, video recordings) for the purposes of my participation to this study. I understand that my data will remain anonymous and confidential, unless stated otherwise. I consent voluntarily to be a participant in this study.

Participant's Print name:

Participant's Signature: _____

Date:

If the Participant is illiterate:

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had an opportunity to ask questions. I confirm that the aforementioned individual has given consent freely.

Witness's Print name:

Witness's Signature: _____

Date:

Appendix E

Online Questionnaire

Background Information of Employees

1. Kindly state your gender, age and marital status by ticking the appropriate box.

Male ☐ (Please tick)

Female ☐

2. Age 16-25 ☐

26-35 ☐

36-40 ☐

46 and older ☐

3. Marital status

Married ☐

Widowed ☐

Divorced ☐

Separated ☐

4. How long have you been working for the Ministry of Foreign Affairs and International Relations?

0-5 years ☐

6-10 years ☐

11-15 years ☐

16-20 year ☐

Over 21 years ☐

5. I use social media every day in my workplace?

a) Strongly disagree ☐

b) Strongly agree ☐

c) Disagree ☐

- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

6. I am allowed to use social media in my job.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

7. I often visit and access information from knowledge department?

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

8. Knowledge management services has helped me with performance management?

- a) Strongly disagree () (Please tick)
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

9. I am involved in decision making about improving knowledge management services.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

10. Organization structure facilitates employees to accomplish their tasks based on knowledge management systems.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

11. We often have discussions and meetings centered around new concepts and ideas.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

12. There is a free flow of information within the organization.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()

- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

13. Staff innovative ideas are always applauded by Management.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

14. My supervisor is very helpful when I am stack with a particular.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

15. We exchange information freely among each other irrespective of the department.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

16. I am satisfied by the knowledge provide to me by the Government.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

17. The organization has experts in different facets who are very willing to share knowledge

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

18. The structure at Lesotho Ministry of Foreign Affairs support knowledge Management.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

19. The culture and values of Lesotho Ministry of Foreign Affairs support.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()

e) Slightly agree ()

f) Agree ()

20. The ICT department has qualified staff to support the use of technology in storing and retrieving knowledge.

a) Strongly disagree ()

b) Strongly agree ()

c) Disagree ()

d) Slightly disagree ()

e) Slightly agree ()

f) Agree ()

21. My organization provides proper security on online communities and social networks.

a) Strongly disagree ()

b) Strongly agree ()

c) Disagree ()

d) Slightly disagree ()

e) Slightly agree ()

f) Agree ()

22. I am influenced by colleagues in the organization to use online communities and social networks Friend.

a) Strongly disagree ()

b) Strongly agree ()

c) Disagree ()

d) Slightly disagree ()

e) Slightly agree ()

f) Agree ()

23. I have resources, knowledge and ability to use online communities and social networks.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

24. We are very sensitive to security so much that our knowledgeManagement practice is both manual and through Automation.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

25. I believe resistance to change is one of the biggest problem to proper integration of knowledge management at Lesotho Foreign Affairs Ministry.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

26. Online communities and social networks meet My needs.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()

- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

27. The policies at Lesotho Ministry of Foreign Affairs support of Knowledge Management.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

28. Management at Lesotho Ministry of Foreign Affairs encourages knowledge sharing and management.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

29. We often time knowledge sharing groups using ICT.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

30. Since I started using online platforms, my productivity level has increased.

- a) Strongly disagree ()
- b) Strongly agree ()
- c) Disagree ()
- d) Slightly disagree ()
- e) Slightly agree ()
- f) Agree ()

Appendix F

Face-to-face Questionnaire

The questionnaires for both service providers and technical and management staff which are providing services in technical issues on online communities and online networks to consumers.

1. What type of services are you providing on online communities and social networks?

2. Web Logs ()

Content Communities ()

Social Networks ()

Forums/Bulletin Boards ()

Content/Aggregators ()

3. How does your organization connected to internet?

DSL ()

Dial-up ()

Broadband ()

Cable ()

4. Is firewalls and other securities hardware and software in place?

Yes ()

No ()

5. Is your organization hardware well protected from failures or some kind of internet failures?

Yes ()

No ()

6. Is internet well fitted in your long-term strategy?

Yes ()

No ()

7. Do internet one well according to your expectations?

Yes ()

No ()

8. Do you advertise your organization on other websites?

Yes ()

No ()

If yes, which.....

9. How website maintenance is done by your organization?

Weekly ()

Monthly ()

Quarterly ()

Yearly ()

10. Do your competitors also provide similar services with respect to you?

Yes ()

No ()

11. Do you provide what type of training programme to your employees to promote more on internet and online communities and social networks?

Yes ()

No ()

12. Does your organization sponsor blogs?

Yes ()

No ()

13. Is the security often updated any fraudulent or theft?

Yes ()

No ()

Approval Letter

Appendix G



Ministry of Foreign Affairs and International Relations

P.O Box 1387

Maseru 100

10/12/2018

Unicaf Doctoral Studies

Plot 193, Roma Park

Kasangula Rd, Lusaka

Zambia

Dear Sir/ Madam

This is to certify that we have allowed 'Mancholu Esther Molemohi to conduct her study on knowledge Management Practices the Case based on Information Technology Knowledge Management by the Lesotho Government. She is authorized to use all information regarding the Ministry of Foreign Affairs and International Relations to accomplish her thesis.

Respectfully.

A handwritten signature in black ink is written over a dashed line.