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ADDIS ABABA UNIVERSITY

**COLLEGE OF NATURAL AND COMPUTATIONAL
SCIENCES**

SCHOOL OF INFORMATION SCIENCE

**The Effects of Knowledge Management Practices on
Organizational Performance: The Case of Ethiopian
Airlines Group (ETG)**

By

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June 2023

Addis Ababa, Ethiopia

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The Effects of Knowledge Management Practices on
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Airlines Group (ETG)

A thesis submitted to the College of Natural and Computational Sciences of Addis Ababa University in partial fulfillment of the requirements for the degree of Master of Science in Information Systems

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This is a declaration that the Mesfin Shifera thesis, The Effects of knowledge management practices on organizational performance: the Case of Ethiopian Airlines Group (ETG), submitted in partial fulfillment of the requirements for the Degree of Master of Science (Information Science), comply with the rules of the University and meets the established standards with respect to originality and quality.

Name and signature of members of the examining board

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2. **Examiner:** _____ **Signature** _____ **Date** _____
3. **Advisor:** _____ **Signature** _____ **Date** _____

DEDICATION

*This work is dedicated to my lovely wife **አይገዩ** and my sons:
Makriyana Mesfin, and **Sofoniyas Mesfin**, they add a unique and
wonderful flavor to my life!*

Most importantly, to the supreme God!

ACKNOWLEDGEMENT

I want to say thank God for allowing me to go through all of this. The Almighty God, who has given me countless blessings, insights, and opportunities, is to be praised and thanked first and foremost for enabling me to finally complete the thesis. I will keep on trusting you for my future. Thank you, God! Amen!

In order to complete this work, I must acknowledge and extend my warmest thanks to my advisor, Dr. Temtim Assefa. I was able to complete all the stages of writing my thesis thanks to his unreserved support and guidance. Without his encouragement and guidance, this thesis would not have materialized. Thank you so much, Dr. Temtim.

I thank you for Dr Lemma Lessa's guidance and assistance with my thesis' title selection. I'm grateful, Dr. Lemma.

For this study to be successful, I would like to express my gratitude to all Ethiopian Airlines Group employees who took part and offered their open feedback during the survey questionnaire. Many thanks, dears!

Finally, I would like to take this opportunity to extend a sincere word of thanks to my dear family. My wife, Aynalem Tekleyesus, you have always provided me with your unwavering support for my success. You were the reason I was able to continue my effort, and I don't have enough words to thank you. Thank you, my wife for your support by filling the gap with my children. My sweet kids Makriyana, and Sofoniyas, thank you for allowing me to steal your time to the extent taking up my responsibilities. Thank you, Ababa and Emama, for always telling me how wonderful and strong I am! I have made it this far thanks to your prayer for me I genuinely appreciate everything you do for me, Wubadelegn, and Ayde, my brothers! I am grateful for your constant support and help.

DECLARATION

I declare that the thesis is my own original work and hasn't previously been offered at any other university.

By: Mesfin Shifera

Signature: - _____

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Date: - _____

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LIST OFACRONYMS

ATA	American Trans Air
ETG	Ethiopian Airlines Group
ET	Ethiopian Airlines
EAL	Ethiopian Airiness
HCM	Human capital management
HR	Human Resources
IT	Information technology
KM	Knowledge management
MRO	Maintenance and repair overhaul
OP	Organizational performance
SPSS	Statistical package for social Sciences

ABSTRACT

In today's highly competitive, uncertain, and rapidly changing business environment, knowledge management (KM) is critical. The objective of this study is to investigate the effects of knowledge management practices (knowledge creation, knowledge storage, knowledge sharing, and knowledge application) on the organizational performance of the Ethiopian Airlines Group.

In this study, 403 employees were the target population. The samples were selected using probability sampling technique. This study's general methodology is a case study in which information is gathered and analyzed using a quantitative data analysis method.

In this study, the researcher investigated how organizational performance is impacted by knowledge management practices, using employee capability as a mediating factor. The findings of this study show that practices of knowledge management have a significant positive impact on employee capability. Additionally, it shows that employee capability has a big effect on how well an organization performs. The study concludes that KM practices have an effect on organizational performance.

The study's findings showed that there is significant evidence that knowledge creation, knowledge storage, and knowledge sharing have a positive effect on organizational performance that is statistically significant. The outcomes also showed the importance of the knowledge management practices to organizational performance. However, the study's findings show that ETG lacks sufficient knowledge creation, storage, sharing, and application practices. At ETG, knowledge management is not frequently used, and the company has poor KM practices.

Key words: KM, Knowledge Creation, Knowledge storage, Knowledge sharing, Knowledge application, Organizational performance, Employee capability

CHAPTER ONE

1. Introduction

1.1. Research Background

In recent years, the business environment has become more competitive, and all organizations now place a high priority on achieving a competitive advantage. The majority of firms currently, however, confront several problems and difficulties as a result of a variety of circumstances, such as globalization and the ensuing escalation of competition between organizations. Governments and non-governmental organizations are working to invest in the people, research, and equipment needed to address these issues. One of these sectors is the aviation industry. Since local airlines are finding it more and more difficult to operate successful operations as a result of competition from other corporations or airlines and their incursion [1].

The aviation industry is one of the most important service sectors in the world. Air transport has become the most important factor in the economic development of a nation. Whether domestically or internationally, it is essential in the movement of people and goods, particularly when great distances are involved. Air transport enables the quick and efficient movement of millions of people and billions of dollars' worth of goods to markets around the world in a community and marketplace that are becoming more and more global. The primary competitive advantage for an airline's profitability and long-term growth is the provision of high-quality services to passengers in a highly competitive environment [2].

Knowledge management is acknowledged as the primary tool for organizations to achieve a competitive advantage in the aggressive global competition by competing and offering better services that satisfy customers [3]. In the current competitive and unprecedented economic environment, knowledge has been seen as an organization's primary strategic advantage, particularly in the vulnerable airline industry. Measuring organizational readiness for knowledge management (KM) is crucial in this regard [4]. Today's businesses understand that knowledge, in the form of competence and expertise, is their most valuable asset and that the availability and quality of that knowledge affect every aspect of the business. Through the knowledge management process, businesses produce, archive, distribute, and use their institutional or collective knowledge assets[5].

The utilization of knowledge to obtain a competitive advantage has grown to be a serious concern for all firms in today's fiercely competitive business environment. However, the shift to a knowledge-based economy has had a more significant impact on some industries than others. Although more research is being conducted on knowledge management (KM), few studies have been conducted on this concept in the airline industry[1].

In order to more effectively manage and apply organizations' tangible and intangible knowledge assets, particularly the professional knowledge, experience, and competencies of staff, knowledge management is used in institutions. Knowledge management practices have a variety of effects on how well an organization performs, including knowledgeable employees, better decision-making within the company, better client service, lower operational costs, and increased organizational competitiveness[6].

Ethiopian Airlines Group faces intense competition from global alliances, regional alliances in Africa and the Middle East, and potent independent airlines from those regions in Europe, the Middle East, and Africa. The implications could be harsh if the airline does not plan ahead and create a strategy to combat the impending competition threat[7].

An organization must be aware of how to create, share, and use knowledge within the organization as well as how to integrate it into the organizational process if it hopes to maintain a competitive advantage over its rivals. A manager must also know what knowledge to seek in order to improve organizational performance and gain a long-term competitive advantage[8].

Due to the increased significance of knowledge management and employee capability, such research into knowledge management challenges is a crucial concern for airline organizations. Consequently, this study examines knowledge management practice effects on the performance of the Ethiopian Airlines Group (ETG).

1.2.Ethiopian Airlines: Background

Despite its humble beginnings, Ethiopian Airlines (EAL) has completed more than 75 years of successful journeys, making it the top airline in Africa. The airline has made a name for itself as a pioneer in every area of the aviation industry over the years, including network development, technology leadership, and aviation mentoring. In 1946, Ethiopian Airlines launched its operations with five C-47 aircraft and completed its debut flight from to Cairo via Asmara. It has since grown quickly and continued to incorporate cutting-edge aviation systems and technology. Ethiopian played a significant part in introducing new aircraft types to Africa as a pioneer in aviation technology, including the first jet and the B767, B777-200LR, B787 Dreamliner, and 787-9. When it came to operate the first Airbus A350 XWB in Africa, Ethiopian took the lead. With an average fleet age of five years, the airline currently operates a fleet of more than 144 contemporary aircraft. 31 cutting-edge aircraft are also currently on order. Ethiopian has built transcontinental and pan-African air connectivity networks connecting its main hub, Addis Ababa, to the rest of the world, living up to its motto of "Bringing Africa Together and Beyond." The airline operates daily and multiple flights with a minimum layover in Addis Ababa to 131 international passenger and cargo destinations, including 63 African cities. Ethiopian has outlined a more ambitious strategic roadmap called Vision 2035 to support its ongoing growth after completing its 15-year strategic plan, Vision 2025, ahead of schedule. By joining Star Alliance, the biggest airline alliance in the world, in December 2011, Ethiopian took a significant step forward on its successful journey. The multi-award-winning airline has accumulated a long list of prestigious honors and awards over the years, including the Four-Star Airline certification from Skytrax, the Best Airline in Africa title for five consecutive years, and the overall Excellence for outstanding crisis leadership award in 2020, the name just a few. Averaging a 25% growth rate in the seven years prior to the COVID-19 pandemic, Ethiopian Airlines has built on its history of success.

1

¹ Ethiopian airlines official website
<https://corporate.ethiopianairlines.com/AboutEthiopian/Overview>(accessed Oct. 01, 2022)

1.3.Statement of the Problem

In the aviation industry, knowledge must be scientifically managed to ensure sustainable growth and to remain competitive in a complex and dynamic world. According to Rahimli (2012), the airline industry is well known for its intense global competition. Seble (2015) evaluated the knowledge management practices used by Ethiopian Airlines to ascertain their KM maturity level. The results of that assessment revealed that ICT growth is still not fully matured in all respects, and the KM policy and strategy are not well-defined. Knowledge exchange among staff did not yet meet industry standards. However, she did not investigate the knowledge management practice effect on organizational performance.

Temtim et al. (2014) conducted a study that led to the creation of a knowledge-sharing model for the commercial bank of Ethiopia using a qualitative case study and design science research methods. However, because the airline industry is distinct from the banking sector, the research finding is not directly applicable to ETG. Furthermore, their study did not examine how knowledge management practices affect organizational performance.

Saeed (2017) assessed how knowledge management practices at Halabja University affected organizational performance using a case study. This study demonstrated how crucial knowledge management processes on the growth and success of an organization. As the airline industry is distinct from the education sector, however, this research cannot also be generalized to ETG.

Knowledge management's role in the improvement of organizational performance is crucial for the firm and must be put into practice to organize for a competitive advantage. When faced with different economic, social, and cognitive pressures to develop, it is crucial to retain competitiveness and productivity because these factors have more sustainability[9].

Ethiopian Airlines Group (ETG) recognizes the importance of its knowledge resources but, there is no clearly defined policy/strategy for how knowledge management processes must be carried out and how to use the knowledge resources to accomplish overall organizational goals.

The Ethiopian Airlines Group continues to make investments in knowledge management infrastructure, including databases, ICT infrastructure, and internet connectivity. It is crucial for the airline to have an integrated, formal strategy that offers a suitable framework to ensure the greatest utilization of the knowledge already in existence and employee capability in order to give

the company a competitive edge. However, there is a lack of an integrated, formal strategy. The airline has losing of knowledge of experienced staff who have left the organization as a result. This loss of knowledge due to staff leaving or retirement reduces the organization and employees' ability to perform well which aids in the creation, storage, and application of relevant knowledge.

Thus, the lack of an integrated, formal knowledge management strategy becomes a challenge for the ETG's performance. Because it lacks a comprehensive knowledge management strategy, ETG finds it difficult to effectively create, store, share, and apply knowledge for the advancement of the airline.

The Ethiopian Airlines Group employs many people in a variety of fields, and it plays a significant role in the staff's development from the time it starts induction till the staff becomes ready to work. It is a major loss for the ETG when staff members leave, after going through this process. The Ethiopian Airlines Group needs to focus on employee retention, knowledge storage, transfer, and sharing. As was already mentioned, ETG is a global organization with a sizable workforce. To make wise decisions for ETG, those employees require easy access to organizational knowledge resources.

The researcher has noted that there are issues that organizations are dealing with, such as people who are unwilling to share their knowledge of their jobs and who are also angry with the company (due to a lack of time, executives don't provide such knowledge culture, making them fear that it will cost them their jobs). Additionally, because most employees' tasks are not repetitive, they are unable to apply the genuine learning that executives provide. The majority of newly hired workers find it challenging to adjust to the organizational process for the aforementioned reasons.

1.4. Research Questions

The research inquiries in this study are:

RQ1. What effect do KM practices have on ETG organizational performance?

RQ2. What kind of relationship exists between KM practices and ETG organizational performance?

RQ3. What is the effect of employee capability on ETG organizational performance?

1.5. Objective of the study

1.5.1. General objective

This study's main objective was to examine knowledge management practices and how they affected the Ethiopian Airlines Group's organizational performance.

1.5.2. Specific objective

- ✓ To evaluate the effect of existing knowledge management practices on Ethiopian Airlines Group performance (ETG).
- ✓ To evaluate the effect of employee capabilities on Ethiopian Airlines Group performance (ETG).

1.6. The significance of the study

Given that the ability to learn and continuously acquire new knowledge is the most crucial process to survive and grow, organizations are becoming more and more required to be learning systems if they intend to prosper in a dynamic business environment. Furthermore, in today's highly competitive business environment, organizational knowledge is viewed as a valuable asset for gaining a competitive advantage[1].

The significance of this study is therefore derived from the significance of knowledge management as a strategic organizational tool and the effect of knowledge management processes on the overall performance of the organization. For modern businesses, knowledge is a crucial strategic resource. KM is a rising issue, and currently, it is a hot study topic for many academics.

However, the research on how knowledge management practices affect organizational performance is insufficient in the context of Ethiopia. Therefore, this research is significant for ETG practitioners and staff as well as those employed by other airlines operating in the same industry. Additionally, it can provide information for other industries that use knowledge as a competitive advantage in reaching strategic goals.

This study provides insight into the significance of knowledge management for organizations and organizational leaders. The use of knowledge management can increase productivity among organizational staff, better service quality, speed up internal processes, and the development of a

customer-first mindset can all follow from this. Most importantly, increased productivity results in increased revenue and decreased costs.

The results of this study will also be useful to knowledge management researchers, particularly those in the aviation industry who are measuring how knowledge management practices affect organizational performance. In other words, the researchers can gain a better understanding of how knowledge management practices effect organizational performance. Additionally, the findings of this study will provide direction for upcoming academics and academicians who wish to further their understanding of the issue by conducting related research in the future. In general, various carriers may make use of the study's findings and recommendations to guide decisions and better comprehend how knowledge management practices effect organizational performance.

The study will also assist participants in becoming familiar with various methods for assessing the effect of KM practices on OP as they look to apply one to a specific circumstance. Researchers can use the same data as a starting point for new research on a different organization or new research on the same organization from different perspectives in order to accomplish this.

1.7. Scope of the research

This study focuses on how KM practices affect the Ethiopian Airlines Group's performance and makes suggestions for improvement. Therefore, the study's primary goal is to investigate how knowledge management practices affect the performance of the Ethiopian Airlines Group and then analyze the results to develop improvement suggestions. To do this, the study uses input data that is only available from Ethiopian Airlines' corporate headquarters employees (Ethiopian Airlines Group IT, Marketing, MRO, and HCM) staff members who actively participate to manage organizational knowledge. As a result, based on the information gathered from a sample of employees at EAL Headquarters, the pertinent data analysis and conclusions are made.

1.8. Definition of key terms

Knowledge Management	a practice by which an organization gathers, organizes, analyzes, and shares individual and group knowledge across the organization in ways that directly impact performance[10].
Knowledge Creation	it is the process of continuous combination, transfer, and conversion of various types of knowledge. As users converse, exercise, and learn, this happens[11].
Knowledge Sharing	is the act of exchanging information, skills, or expertise among individuals, groups of people, families, communities, or between or within organizations[12].
Knowledge Application	describes how an organization quickly adapts to technological change by incorporating the knowledge and technology created into new processes and products[13].
Knowledge Storage	It means organizing and formatting explicit knowledge in an information technology system for distribution[14].
Organizational Performance	refers to the degree to which an organization can effectively position itself in the market for businesses with the aid of some informational, financial, and human resources[15].
Employee capability	refers to their ability to complete tasks to required standards, considering their skill, health, aptitude, and job-related qualities[16].

1.9. Organization of the thesis

This paper is organized into five chapters. The first chapter, introduction, is discussed here above with sections including the background, problem statement, objective, significance, and scope of the study. In the second chapter, discussions of knowledge, KM, KM practices, and organizational performance (OP) in the current literature and related works are presented.

In chapter III the research methodology is presented. Chapter four focused on the results of the data analysis of the thesis and finally chapter five focused on a summary of findings, conclusions, and recommendations of the study.

CHAPTER TWO

2. Literature Review

2.1 Introduction

Organizations are expected to manage their knowledge in a methodical and well-organized way in order to maintain their competitive advantages in the modern knowledge-based economy. This is so because knowledge was identified by the knowledge-based view theory as the dominant force in how organizations conduct business[17]. Knowledge management has developed into a crucial subject for managers as a result of globalization and the growing complexity of business processes. Managing knowledge in organizations has an impact on a variety of business aspects, including the development of an organizational strategy and the enhancement of customer experiences. Knowledge management has a particularly significant impact on the airline industry because of the size and complexity of the sector's operations[18].

This chapter provides a comprehensive overview of the prior research and the literature review so that the reader can comprehend the justification for choosing to conduct this study. This chapter is organized into six subsections. Section one presents the definition of knowledge. The second section discusses knowledge management in organizations as it is presented in recent literature. Section three presented knowledge management cycles/practices, which include knowledge creation, storage, sharing, and application. Organizational performance and knowledge management are discussed in Section Four. Section five discussed Knowledge management practice and organizational performance, and the review of related literature is covered in Section Six.

2.2 Review of the theoretical literature

2.2.1 Knowledge

In today's world, the availability of information has exploded, and everyone has access to an endless supply. Although the terms we use are often unclear, we talk about the information society and how knowledge is a valuable resource for organizations. We must first define the knowledge and explain how the various terms used relate to one another and to this study before we can

consider how information and knowledge might be managed more effectively in the target organization.

There is no single definition of knowledge that everyone agrees on. Davenport (2000) defines knowledge as a "flexible mixture of values, framed experiences, contextual information, and expert insight that serves as a framework for the assessment and assimilation of new experiences and information." It originates in the ideas of the knowledgeable, who then put them to use. It frequently combines with organizational routines, practices, norms, and archives as well as records.

The two types of knowledge are explicit knowledge and tacit knowledge. Explicit knowledge can be expressed in formal and systematic language and can be shared in the form of data, scientific formulas, manuals, specifications, and the like. It is fairly easy to transmit, store, and process. On the other hand, tacit knowledge is highly individualized and difficult to codify. This type of knowledge includes instincts, hunches, and personal revelations. Action, routines, protocols, dedication, ideals, values, and emotions have a big impact on tacit knowledge. Tacit knowledge is an analog process that necessitates some kind of simultaneous processing, making it challenging to transfer to others [19].

For all organizations today, especially those with a business focus, knowledge is crucial and a trustworthy source of competitive advantage. It is argued that successful organizations are those that consistently produce new knowledge, disseminate it throughout the organization, and incorporate it into technologies, products, and services in an era of rapid change and uncertainty. Although the value of knowledge as a source of competitive advantage is widely acknowledged, little is understood about how organizations actually create and manage knowledge dynamically. Knowledge is created by an organization through the interactions between explicit and tacit knowledge[19].

Nonaka et al. [13] propose four essential stages of knowledge conversion and further, assert that knowledge is fundamentally convertible. SECI is what these are (externalization, socialization, combination, and internalization). A spiral that develops from this SECI process is the knowledge creation process.

- Socialization is the transformation of new tacit knowledge through the sharing of experiences. New tacit knowledge is being created by adapting implicit knowledge.

is the intentional and methodical alignment of an organization's technology, people, business operations, and organizational structure with the goal of creating value through innovation and reuse. To achieve this coordination, knowledge is created, shared, and used. In order to support ongoing organizational learning, it also entails keeping track of the best practices and lessons learned.

Knowledge management, according to [18], is the process of locating, gathering, storing, retrieving, and transforming information and knowledge assets (intangible) into knowledge that is easily accessible to improve an organization's performance.

Dadashkarimi et al.'s (2013) study define knowledge management as a new way of thinking about the organization and sharing its creative and intellectual resources. It includes all of the techniques used by the organization to manage its knowledge-based assets, such as knowledge creation, storage, transmission, use, and updating. In addition to continuous innovation, knowledge management is a rapidly expanding approach that places a strong emphasis on the most recent challenges to improve the effectiveness and efficiency of business-related processes.

Knowledge management is a concept that includes several tactics and procedures, for capturing, creating, storing, and disseminating expertise within an organization. The failure to create and nurture a culture in an organization that values learning, sharing, changing, and improving knowledge is one of the key challenges of knowledge management[6]. Getting the appropriate knowledge to the appropriate person at the appropriate time is the fundamental tenet of knowledge management. This might not seem difficult on its own, but it necessitates close ties to corporate strategy, familiarity with knowledge sources and forms, the creation of cross-functional processes, and confirmation that initiatives are embraced and supported by the organization's members. It's possible for knowledge management to limit itself to sharing, storing, and enhancing already-existing knowledge[21].

The ability to manage knowledge is becoming more and more crucial in today's knowledge economy. Knowledge creation and dissemination are now crucial components of competitiveness. Collecting, organizing, and sharing the knowledge that already exists within organizations have been the main objectives of many knowledge management (KM) initiatives. There is broad agreement regarding the objectives of an organization that uses knowledge management, despite the fact that there is still disagreement over what makes a good definition of knowledge management[22].

Knowledge management is the methodical management of an organization's knowledge assets with the goal of enhancing value and meeting tactical and strategic requirements. It consists of the policies, practices, strategies, and mechanisms that facilitate and enhance the discovery, evaluation, and exchange of new knowledge. Knowledge management (KM) entails the management of knowledge that is valuable to the organization and useful for a particular purpose; as a result, it implies a close connection to organizational objectives and strategy[21]. Knowledge management is significantly impacted by organizational performance. Therefore, knowledge management would consequently spread more widely, enhancing organizational performance[23]. To manage and empower knowledge assets for organizational excellence, a process called knowledge management (KM) must be used[24].

Business organizations view knowledge as their most valuable and strategic resource. They are aware that maintaining competitiveness requires explicitly managing their intellectual resources and capabilities. To accomplish this, numerous organizations have launched a range of knowledge management initiatives. The main objective of these efforts has been the creation of new information technology (IT) applications to support the digital capture, storage, retrieval, and distribution of an organization's explicitly documented knowledge. There is currently a lot of interest in knowledge management due to the potential for advanced information and communication technology (ICT) to support the gathering and exchange of information in large, dispersed organizations[25].

Creating tools and environments that support the processes of knowledge creation, storage, dissemination, and application within an organization is the goal of knowledge management, which is more than just a knowledge management process. Knowledge management also describes a systematic effort to promote and facilitate the flow of knowledge within the organization in an effort to speed up the process of organizational learning[24].

Implementing knowledge management (KM) is both a challenge and a huge opportunity for businesses across many industries worldwide. Practitioners and academics are still debating whether knowledge management is a worthwhile application due to claims that it improves business opportunities and performance. However, challenges with knowledge management's complex foundation are raised by issues implementing it in a way that takes into account people's behaviors, beliefs, and practices[20].

The COVID-19 pandemic has accelerated business process digitalization, which is changing how organizations manage customer experiences and efficiency. This trend is becoming more pronounced in the world's business environment. Knowledge management strategies can be helpful for managing and gaining access to crucial knowledge resources, defining core competencies, and defining the dynamic capabilities of organizations. This is especially true when it comes to how businesses use a more digital approach to global marketing to reach out to markets[26].

According to Dalkir (2011), four key business factors are driving today's increased interest in and use of KM:

- **Business globalization:** Multinational, multilingual, multi-site, and multicultural organizations are becoming more common in today's businesses.
- **Leaner organizations:** In addition to working harder and faster, we must also work smarter because we are knowledge workers.
- **"Corporate amnesia."** Our more mobile workforce presents challenges for the organization in terms of knowledge continuity, and knowledge workers must constantly pick up new skills. Our expectation of spending our entire careers with one company has changed.
- **Technological advances:** Modern technology has increased our connectivity. Information technology advancements have fundamentally changed expectations in addition to enabling universal connectivity. Response times are now measured in minutes as opposed to weeks, and we are expected to be available at all times.

Therefore, according to Dalkir (2011) the workplace of today is more complex because we must now regularly address the rise in the number of subjective knowledge items. It is advisable to follow time management guidelines and filtering rules when filtering more than 200 emails, faxes, and voicemails per day.

Some of the most important KM challenges include effective content management, collaboration, helping knowledge workers find and connect with experts, and helping the organization learn from and make decisions based on thorough, trustworthy, and well-interpreted data, information, and knowledge[22].

Further, Wiig (2015) stated that for managing knowledge four factors are particularly important. These are namely, 1) a commitment to producing, acquiring, and utilizing knowledge that is competitively advantageous in order to maintain leadership; 2) daily knowledge management to run the business efficiently and intelligently; 3) enhancing enterprise knowledge to take benefit from innovation, an increased experience, and the capacity to pursue new opportunities; 4) the necessity of having a detailed overview of the company's knowledge assets.

2.2.3 Knowledge Management Cycles/practices

Dalkir (2011) discussed various KM cycle approaches before introducing an integrated KM cycle with three main stages.

- Knowledge creation.
- Sharing and disseminating knowledge
- Application and acquisition knowledge

The knowledge content is assessed during the transition from knowledge creation to knowledge sharing and dissemination. Contextualization is then applied to knowledge so that it can be understood ("acquisition") and used ("application"). This stage then feeds back into the first one to update the knowledge content (See below figure 2.2-3).

Knowledge capture is the process of locating and then encoding existing (typically previously unnoticed) internal knowledge and know-how within the company as well as external knowledge from the environment. Knowledge creation is the development of fresh insights and innovations in knowledge that were previously unheard of within the organization. Following such an inventory of knowledge, it is crucial to present an evaluation against selection criteria that closely resemble the organizational goals. In order to better adapt the content to a variety of users, contextualization also entails identifying the key characteristics of the content.

The critical processes in the KM cycle include contextualizing content to better match with a variety of users, evaluating the value of content in light of organizational goals, and updating continuously with an emphasis on updating, archiving as necessary, and modifying the scope of each knowledge object.

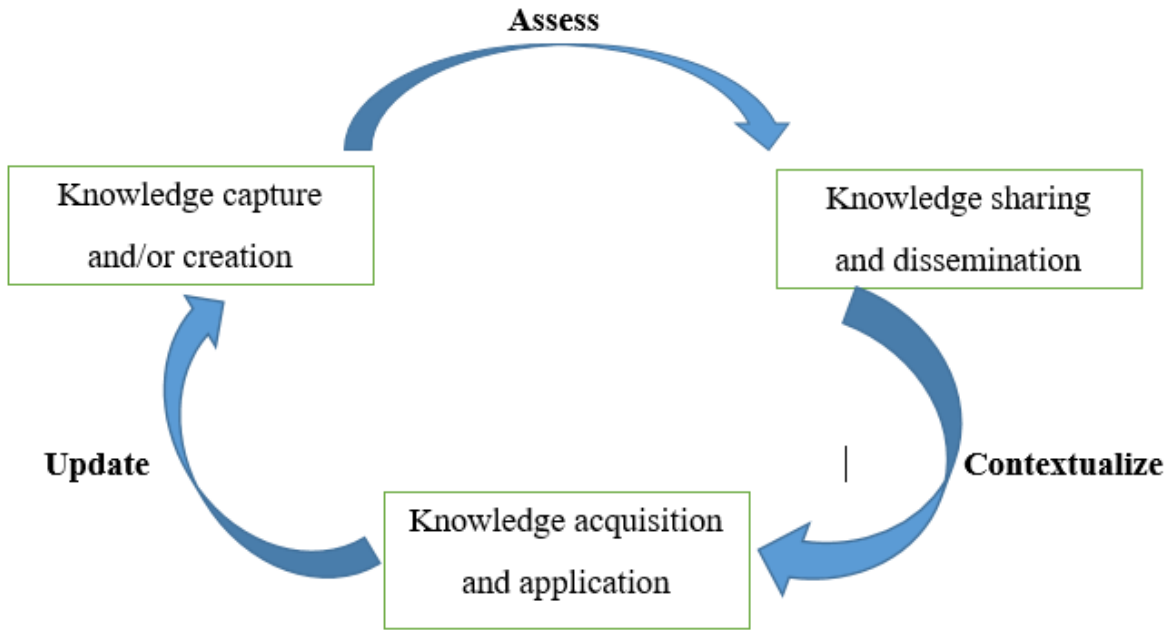


Figure 2-2 An integrated KM Cycle

Users then decide how to comprehend and apply the content, and the cycle of knowledge management is repeated. When it becomes outdated or is no longer relevant, the users will confirm its applicability and notify the user base. Users will aid in validating the content's scope or the lessons learned and best practices' potential for generalization. They frequently also produce new content that they can add to the iteration of the following cycle[22].

Most small and large organizations that practice knowledge management would need to participate in each of these knowledge management processes, at least in part, according to Singh (2011) study, followed various researchers. The entire knowledge management process is comprised of four primary processes, and each of these four processes has additional supporting processes.

- Knowledge creation
- Organization and storage of knowledge
- Knowledge application
- The dissemination of knowledge

❖ **Knowledge creation**

It was discussed how knowledge is found, arranged, and shared in previous subsections. These issues, which are relevant to both knowledge creation and knowledge reuse, were discussed from a broad perspective.

It's important to understand that knowledge can either be created internally or acquired externally. Despite the fact that knowledge can originate from both internal and external sources, it usually comes from individuals, groups, or organizational processes. Once extracted, it might be kept in a repository where it could be shared and used by other people or teams inside an organization. In accordance with each source of knowledge, Davenport (1998) proposed the below:

- ✓ The knowledge was acquired from sources outside the organization.
- ✓ Dedicated resources are those that an organization sets aside to develop internally for a specific purpose. Examples of such resources include a department (typically research and development) or a group of employees.
- ✓ Fusion is the creation of knowledge through the collaboration of individuals with various viewpoints on a single undertaking.
- ✓ Knowledge gained from responding to new procedures or technologies that are introduced into the market is known as adaptation.
- ✓ People can exchange information formally or informally through knowledge networking.

According to Nonaka's SECI model of knowledge creation, different types of knowledge are constantly transferred, combined, and converted as users practice, interact, and learn.

The ability to apply knowledge in a setting that encourages collaboration and experimentation is known as knowledge creation. The creative process is fragile, and bureaucracy or strict adherence to rules and regulations can easily ruin it. Similarly, it is important to implement IT systems carefully and avoid trying to replace any processes that are essential to knowledge creation[21].

The creation of knowledge always begins with the individual. For instance, a brilliant researcher might have a revelation that eventually results in a patent. Or a middle manager develops an important new product concept as a result of their intuition about market trends. Similarly to this, a worker on the shop floor uses years of experience to develop a process innovation that helps the business save millions of dollars[27].

❖ **Knowledge storage**

In order to preserve, manage, and utilize organizational memory, knowledge repositories are typically intranets or portals of some sort. Knowledge repositories come in a variety of forms and can be classified into a wide range of categories. A knowledge repository will typically contain more than just records (record management system), documents (document management system), or data (database). A knowledge repository will include valuable information that is a combination of tacit and explicit knowledge based on the distinctive experiences of the people who are or were a part of that company, as well as the know-how that has been tried, tested, and found to be useful in work situations[27].

Prior knowledge is recorded, codified, and formalized through knowledge storage. Establishing an organizational memory for use in potential future opportunities is the goal of this phase. It might involve things like creating organizational procedures or storing knowledge in a company repository. The storage phase, in general, includes all efforts made to register for future use[28].

❖ **Knowledge Sharing**

As was already mentioned, the fundamental goal of knowledge management is to ensure that the right information or sources of knowledge are available to the right people at the right time. Knowledge sharing may be the most important aspect of knowledge management because most KM initiatives depend on it. Knowledge sharing can be described as either a push or a pull. In contrast to the former (such as newsletters and unsolicited publications), which takes place when a knowledge worker looks for information sources on their own, knowledge push is when information is pushed onto the user (like through library research, consulting an expert, working together with a coworker). The habit and willingness of the knowledge worker to look for or be receptive to these knowledge sources depend on knowledge sharing. As a result, the necessary culture, and incentives must exist[21].

The objective of knowledge-sharing communities is to connect the social network of the people who created the knowledge not just to provide access to data and documents. A good knowledge management system should contain data on both the people who created the knowledge and the people who will use it. Speaking with those who have used knowledge effectively has equal value to speaking with the authors of the original works. Making the information visible is one method for encouraging knowledge sharing[27].

Information technology, which is also used for content management, data mining, and text mining, can be advantageous at most stages of the knowledge-sharing process. The dissemination of knowledge must be implicit, and people centered. IT systems, however, are also becoming more helpful in this situation. They can help people who are not physically present communicate with each other, and some tools are designed specifically to record unstructured ideas and thoughts. The crucial thing to keep in mind is that not all tacit knowledge can be made explicit (and may lose some of its richness in the process). As a result, IT systems shouldn't try to perform this process or pretend that they can, but rather they should support current practices in a significant way[21].

Users' needs, as well as the difficulties and potential problems associated with managing knowledge and knowledge sources, must be taken into account by knowledge management (KM). Management must therefore implement the appropriate policies, frameworks, and systems to encourage knowledge sharing. They must also promote a culture of knowledge sharing to guarantee that these investments are used to their full potential[21].

According to Dalkir (2011), there are a variety of barriers that can prevent knowledge sharing within organizations. The first of these barriers is organizational culture, which can either encourage or prevent knowledge sharing. In contrast to one that fosters individual genius, an organizational culture that promotes discovery and innovation will be beneficial. A culture that emphasizes social status will prevent knowledge sharing, whereas a company that rewards teamwork will contribute to the development of a trusting environment. Effective knowledge exchanges cannot take place in the absence of a culture that is open to sharing knowledge. Before efficient knowledge sharing can start, there may need to be major organizational changes.

❖ **Knowledge Application**

The use/reuse objective of knowledge management initiatives is to apply related know how, past experiences, and individual knowledge to new circumstances. A project manager aims to minimize risks, improve accuracy, lower costs, and reduce the project's timeline at this point by drawing on prior knowledge of best practices and mistakes. The use and re-use of knowledge is expected to produce positive outcomes for projects and organizations[28].

By introducing more efficient methods of doing things, knowledge reuse encourages efficiency and innovation. Knowledge application is the actual application of newly created or acquired

knowledge that has been included in the KM cycle. All knowledge workers within the organization eventually have access to knowledge, and it is implicitly assumed that they will make use of it[27].

Applying knowledge may require recontextualizing it, which is the process of adapting a general guide to the particular situation at hand. The knowledge producer, who created or documented the knowledge object, the knowledge intermediary, who is in charge of handling the indexing, sanitization, packaging, and marketing of knowledge objects to make them ready for reuse, and the knowledge reuser, who retrieves, comprehends, and applies it, are the three main roles necessary for knowledge reuse. No one should expect committed individuals to fill all three of these roles simultaneously throughout their knowledge work, as none of them are permanent. Reusing knowledge is a good sign of how well critical content has been preserved and managed in organizational memory management systems[27].

2.2.4 Employee Capability

The aim of capacity enhancement, which has been described in many different ways, is to leave behind more capable and driven individuals, institutions that are responsive and efficient, and a better political environment for pursuing development objectives. In the age of globalization and liberalization, improving employee capabilities is the most inevitable change anticipated. In times of global change, improving human capability leads to better knowledge, skill, and aptitude as well as better business opportunities. Better capacities and capabilities of workers are obviously necessary for the advancement of new technology, manufacturing and development processes, and customer-satisfying methods. This essay tries to concentrate on the evaluation of employee capability, its improvement, and its return to better business opportunities and organizational performance[29].

There is a trend of accelerating change in the organization's capabilities of managing employee capability at the beginning of the organizational capabilities. Achieving a successful transformation of workforce capabilities requires both organizational change readiness and employee receptivity to the program for accelerated capability development. The organizational strategy may aid in reducing confusion and realigning capability development structural patterns to support the new both capability development formulation and implementation plans since the change schemes require extensive intervention measures. An organization's capability developer is essential in guiding change in the desired direction.[29].

2.2.5 Organizational Performance (OP)

Organizational performance refers to the degree to which the organization, with some informational, financial, and human resources, positions itself effectively in the business market. Individual performance can influence the performance of the entire organization in the short, medium, or long term in a positive or negative direction[15].

A measurement of the change in an organization's financial situation or the financial effects of management decisions and the execution of those decisions by organization members is referred to as performance in the context of organizational financial performance. Because the perception of these outcomes is context-dependent, the measures used to represent performance are selected based on the circumstances of the organization(s) being observed. The metrics selected reflect the outcomes, whether positive or negative[30].

Senior executives are aware that the performance measurement systems used by their organizations have a significant impact on managers' and employees' behavior. They are also inclined to believe that traditional accounting measures can provide false signals for continuous improvement and innovation, so they cannot rely on one set of measures at the expense of the others. No one measure can clearly define a performance target or focus attention to the crucial components of a company. Financial measures must be integrated with operational measures for internal processes or customer satisfaction[31].

Traditional measurement methods are out of date, and performance measurement is essential for influencing managers' and employees' professional conduct. Nowadays, financial indicators are combined with other significant non-financial indicators, providing managers with new perspectives. Nevertheless, a company should concentrate on a small number of measures, typically those that determine whether the company will survive or not, as using too many indicators can be detrimental to that company[31].

The term "financial measures" refers to metrics that are based on the financial data displayed in income statements, balance sheets, and cash flow statements. Financial measures also fall under the subcategories of profitability, growth, leverage, liquidity, cash flow, and efficiency. Operational measures include variables that show how the organization is doing on non-financial issues. Some of these factors include market share, modifications to intangible assets like patents

or human resource skills and abilities, customer satisfaction, product innovation, productivity, quality, and stakeholder performance[30].

The three primary financial statements are the income statement, balance sheet, and statement of cash flows. We must consider all three statements in order to properly comprehend and evaluate financial performance. Before assessing a company's present performance and value, it is necessary to combine the financial statements with important financial ratios and ultimately gain an understanding of the market, the company's competitive position in the industry, and its strategy[32].

2.3 Theories of knowledge management

2.3.1 Knowledge-based Theory of the Firm.

Knowledge-based theory of the firm claims that knowledge-based resource, intellectual capital, is a central factor contributing to sustainable competitive advantage via lower cost, innovation and creativity, efficiencies, and customer benefits and considered as a whole organizational performance[33].

A strategic asset is one that is rare, valuable, imperfectly imitable, and non-substitutable, according to the firm's resource-based view (RBV). Knowledge is considered to be a strategic asset and a source of competitive advantage for an organization[34].

The Resource-Based View (RBV) analyzes and interprets internal organizational resources to produce sustainable competitive advantages. This approach helps businesses make strategic decisions based on their capabilities, including new products, markets, and customer value chains. While not all resources are strategic, RBV suggests that competitive advantage occurs only when there is a specific situation[35].

Knowledge management involves three theoretical ideas, of which two—intellectual capital theory and intellectual property theory—are essential for valuing organizational assets and are influenced by information economics research. Core competence management is the third theoretical concept that emerged from organizational strategy research. Theories explaining the importance of knowledge management have been developed based on these perspectives from research in economics and strategy[36].

Information economics

Intellectual capital: This legal concept embodies a theory that gives knowledge a high priority for an organization. The physical capital of an organization is less significant for gaining a competitive advantage than intangible assets like expertise and individual sales networks. The difference between a company's book value and the buyer's willingness to pay for it is referred to as intellectual capital. It includes assets that are regarded as organizational assets, including trademarks, customer loyalty, patents, copyrights, corporate culture, structure, IT style, and employees' knowledge [36].

Intellectual property: Intellectual property is a term that broadly refers to the legal rights that result from intellectual activity in the business, scientific, literary, and artistic fields[37].

Knowledge economy

In response to concerns about knowledge management, this theoretical concept is emerging as a significant extension of information economics. It essentially discusses the knowledge product life cycle and applies it to the market for professional knowledge, whether it be the external market or the internal market within an organization. This point of view contends that expert knowledge is a valuable resource, making managing the knowledge economy within a company essential[36].

2.3.2 Knowledge-based viewpoint

In order for businesses to remain competitive in the more intensely competitive environment in which they now operate, process improvement is essential. Businesses, on the other hand, may no longer be able to develop entirely from internally generated ideas. The firms must conduct research and look at ways to improve processes and learn new information at the individual level in light of the knowledge that people already have and can create as well as broader trends toward more micro-views of the firm[38].

The knowledge-based view of the firm is a more recent development of the resource-based view of the firm that is perfectly suited to the current business climate. Knowledge is viewed as a very special type of strategic resource with increasing returns that does not deteriorate over time like more conventional economic productive factors do. The majority of knowledge-based resources are intangible and dynamic by nature, permitting idiosyncratic growth through causal ambiguity and path dependency, which form the basis of the mechanism for generating economic rent in the

knowledge-based view of the firm[39]. Knowledge has drawn more attention foundation for analyzing variations in firm performance. However, there are currently no unifying, conclusive theories that can be used to explain the knowledge-based view of the firm in strategic management[40].

2.4 Related Literature

As knowledge management becomes more significant within organizations, numerous researchers have attempted to quantify its effects on various aspects of organizational performance. In this regard, a number of researchers' works were evaluated and summarized in (table 2.4-2).

Seble (2015) conducted research on the topic in order to assess the maturity level of the Ethiopian Airlines Group's knowledge management practices and identify potential areas for improvement. Her research sought to assess ETG's knowledge management maturity level while taking into account ICT, knowledge management principles, policy and strategy, and knowledge exchange in order to alert the organization to any gaps and necessary corrective measures.

The study by Seble (2015) assessed the knowledge management practices at Ethiopian Airlines to ascertain their maturity level and found that ICT growth is not yet fully matured in all regards, a KM policy and strategy are not well-defined, and also, knowledge exchange between organizations and among its staff revealed that it is not mature enough to meet industry expectations.

Shah Alam and Selangor (2016) studied the effects of KM practices on organizational performance in Malaysian government institutions. The study aims to investigate how KM is used and how well the organization performs when implementing modernization strategies for Malaysian public services. Their study identified four knowledge management practice factors: culture, structure, people, and technology, based on a review of the literature. According to the study's findings, the factors of cultural issues, structural issues, and people (human resources) all had medium-high scores, with the factor of information technology infrastructure having the highest mean.

In Saeed's 2017 research, he explored how organizational performance in the field of education is impacted by knowledge management practices. The primary goal of the study was to analyze how the Ministry of Higher Education in the Kurdistan Regional Government in Northern Iraq used knowledge management practices to improve employee performance and customer satisfaction at Halabja University as a sample. The theoretical parts and experimental parts make up this study.

The theoretical one relates to higher education, employee performance, customer satisfaction, IT performance, knowledge management, and knowledge management practices. In the empirical part, the researcher used a group of experts and staff from the university using a questionnaire.

The results of the study showed that there is strong evidence that knowledge creation, sharing, storage, and application have a positive effect on employee performance, IT performance, and customer satisfaction which is statistically significant. The findings also demonstrated the significance of the knowledge management mechanism to the growth and success of organizations. Significant changes have been brought about by the knowledge management process, particularly in the field of industries, and as a result, there is an increased need for nations across all regions of the world to improve their capacities for research and knowledge production. Finally, the analysis process has proven the significant role of knowledge management in developing and enhancing organizational performance.

Khanal and Paudyal (2018) have conducted research on how KM practices affect the performance of Nepalese financial institutions. Their study, which used a quantitative research design, demonstrated that various KM processes and practices have a big impact on how well financial institutions perform. However, because this study focused on financial institutions rather than the airline industry, ETG is unable to use the paper. While financial institutions are any establishments engaged in the business of providing financial services to clients who maintain a credit, deposit, trust, or other financial accounts with the institution, the airline industry refers to businesses that provide air transportation services to paying clients.

Knowledge management practices and their effects on organizational innovation are examined by Asnakech (2020), who used the intellectual capital case study of the Ethiopian Civil Service University (ECSU) as a moderator. Her research revealed that intellectual capital has a significant mediating effect on innovation, knowledge sharing, and application as well as significant direct effects on organizational innovation and a significant gap in the practice of KM (knowledge acquisition, sharing, and application). She used a mixed methods approach (quantitative and qualitative). However, because the airline industry is distinct from the educational sector, her research cannot be generalized to Ethiopian Airlines. Additionally, she did not examine how knowledge management affects organizational performance in her research.

In the case of Panafric Global Plc, Tizita (2021) conducted research on the effect of knowledge management on organizational performance. The study's conclusions, which were supported by quantitative techniques, show a significant link between knowledge management practices and organizational performance. However, her research is not generalizable to Ethiopian Airlines as the airline industry is wide and different from PLC. In addition, her research also did not investigate the effect of intellectual capital on organizational performance.

Author, Year & Title	Objective	Methodologies	Key Findings	Recommendation & Future Work	Remark
Knowledge Management Maturity at Ethiopian Airlines, Seble Abera (2015)	Assess Ethiopian Airlines' KM maturity in relation to the company's KM principles, knowledge policy, KM strategy, ICT, and pervasive knowledge in order to establish the maturity level and provide recommendations for any identified improvement areas.	Methods both quantitative and qualitative have been employed.	<ul style="list-style-type: none"> ➤ ICT growth is not yet fully matured in all regards, ➤ A KM policy and strategy are not well-defined, ➤ knowledge exchange between organizations and among its staff revealed that it is not mature enough to meet industry expectations. 	<ul style="list-style-type: none"> ➤ Outside interaction: Establish productive alliances and partnerships to promote knowledge flow across boundaries. ➤ KM Policy and Strategy: top management commitment must be strengthened. ➤ Training and awareness: Introduce formal KM training. ➤ ICT infrastructure: Improve ICT and IM infrastructure of ETG. 	The study is not comprehensive as it focuses on KM Maturity at Ethiopian Airlines. The study did not show how KM practice affected organizational performance or how far the recommendations were expected to raise it.

Author, Year & Title	Objective	Methodologies	Key Findings	Recommendation & Future Work	Remark
Saeed (2017) The effects of knowledge management practices on organizational performance: A case study of Halabja university	At Halabja University in northern Iraq, a study looked at how knowledge management techniques affected customer satisfaction, IT performance, and employee performance.	Literature review and organizational analysis/questionnaire.	According to the study's findings, there is significant evidence that knowledge creation, sharing, storage, and application have a positive effect on employee productivity, IT performance, and customer satisfaction.	By integrating KM into an innovation strategy, the university has the chance to succeed over the long term. Managers must encourage knowledge workers and foster collaborative and creative work environments. The management of knowledge belongs to everyone.	The study is not comprehensive as it focuses on education sector.
Selangor & Alam (2016) Organizational Performance and Knowledge Management Practices in Malaysian Government Institutions.	The goal of this study is to investigate the organizational performance and knowledge management (KM) practices at one leading organization that is implementing modernization strategies for Malaysian public services.	Literature review and data gathering instrument (a questionnaire was used).	The study's findings showed that the factor of information technology infrastructure had the highest mean, followed by the factors of cultural issues, structural issues, and people.	Not defined.	The study only covered the Malaysian public services.

Author, Year & Title	Objective	Methodologies	Key Findings	Recommendation & Future Work	Remark
Asnakech (2020), Knowledge Management Practices and Their Effects on Organizational Innovation with the Mediating Effect of Intellectual Capital the Case of Ethiopian Civil Service University.	The purpose of this study is to investigate KM practices and their impacts on organizational innovation at Ethiopian Civil Service University, with intellectual capital serving as a mediating factor (ECSU).	An explanatory cross-sectional survey research design was used, as well as a mixed-methods approach quantitative and qualitative data collected via questionnaires and interviews were employed.	The practice of KM knowledge acquisition, sharing, and application has a significant gap and intellectual capital significantly mediates innovation. Additionally, the application and sharing of knowledge significantly influence organizational innovation.	<ul style="list-style-type: none"> ➤ The university needs well-established KM policies and procedures, so it is better for the university to create a framework for policies and procedures that apply to the entire university. ➤ The university administration should use an open communication system, effective ICT use for KM processes, assign more skilled ICT workers, and inform all staff members of the benefits of knowledge sharing and the methods used in knowledge sharing. 	The study only covered the education sector.

Author, Year & Title	Objective	Methodologies	Key Findings	Recommendation & Future Work	Remark
Khanal and Paudyal (2018) Knowledge management practices' effect on the performance of financial institutions in Nepal.	Assessment of the effect of knowledge management practices on the performance of Nepal's financial institutions is the main objective of the study.	Quantitative research design.	The various KM processes and practices have a significant impact on the performance of any financial institution.	This study's sole focus is on Nepal's financial sector. Studies may also focus on other industries, including tourism, education, manufacturing, and so forth, in a variety of contexts.	This study limited on Nepalese financial institutions.
Dadashkarimi and Asl (2013) A Study on the Relation between Knowledge Management Strategies and Organization Performance (Case Study: ATA Airlines)	The purpose of this study is to investigate the performance of ATA Airlines and its knowledge management strategies.	The current study's methodology was a descriptive survey because it provides a description of a situation or set of circumstances. Finally, field	Organizational performance is directly and significantly correlated with knowledge sharing, innovation, reward schemes, human resources, information technology, management strategy, customer and employee satisfaction, organizational effectiveness, and financial and market results indices.	Organizational effectiveness, financial and market results, and customer and employee satisfaction were used in this study to measure and assess the performance of the organization. Future research should make use of models like EFQM, MALCOLM BALDRIGE, etc. to examine the	The study didn't show the effects of KM practices on OP.

		<p>research techniques have been used for data collection (interviews and questionnaires)</p> <p>.</p>		<p>relationship between knowledge management strategies as the independent variable and organizational performance as the dependent variable.</p>	
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Table 2.4-1 The related work summary

CHAPTER THREE

3. Research Methodology

3.1. Introduction

The research methodology and design that were used to carry out this study are discussed in this chapter. The methodology used to accomplish the study's objective is presented in this chapter. The general research strategy is first described. Following that, a discussion of the data collection tool, study's population, sampling strategies, sample size, and data collection process follows. The methodology used for data analysis and presentation, as well as the quality of the research, are presented in the final section.

3.2. Research Design

The overall methodology of this study is a case study, in which data are gathered and analyzed using a quantitative method.

The researcher was able to conduct a survey using the quantitative approach by sending questionnaires to a significant number of respondents quickly. Additionally, this strategy was found to be simple to analyze and present. The foundation of quantitative research is the idea that gathering large amounts of quantitative data using a variety of measurements and expressions is an essential tool for learning new things[41].

A quantitative approach makes it easier to reach more people in a shorter amount of time than a qualitative approach. As a result, it offers the opportunity to accurately mine large amounts of data from large populations. In order to perform a quantitative analysis, a survey using a questionnaire is carried out to look into how knowledge management practices affect organizational performance within the Ethiopian Airlines Group.

A survey using a questionnaire is carried out to look into the knowledge management practices currently used by Ethiopian Airlines to make use of its knowledge resources and the gaps in those practices to make use of its internal and external knowledge resources.

3.3. Research Model

The study by Gautzm (2021) found that knowledge management significantly and positively impacts organizational performance. According to the researcher's summary of the study, knowledge management positively affects the firm's performance in terms of innovation through its acquisition, sharing, and application. Through effective knowledge management, organizations will be able to transform knowledge into innovative products, services, and processes, leading to better organizational outcomes. As a result, KM practices are crucial to achieving overall organizational effectiveness. KM also serves as a key performance driver and is essential to maintaining a competitive advantage. Performance is the outcome achieved by the organization's members (Gibson et al., 2012). According to Mahsun (2007), performance refers to the extent to which a program or activity has been accomplished in order to materialize the organization's objectives, targets, and vision guided by strategic planning.

The Gautzm study (2021) examined at a broader set of evidence regarding the relationship between knowledge management (KM) and organizational performance. The study asserts that while performance in and of itself is a useful metric, the ability to support an organization's competitive strategy is the ultimate measure of value. The field of organizational knowledge management spans a variety of domains, including sociocultural, organizational, behavioral, and technical aspects. A broad range of behavioral tactics (such as learning organizations and communities of practice), information-based methods (such as best practices and competitive intelligence), and technological tools fall under the category of knowledge management (e.g. data mining and knowledge repositories). The concepts of knowledge and knowledge management are not new. The invention, acquisition, accumulation, and application of knowledge are ongoing activities for organizations[42].

The purpose of this study is to investigate the effects of KM practices on organizational performance. In order to better understand the relationship between independent variables like Knowledge creation, Knowledge sharing, Knowledge Storage, and Knowledge Application with the dependent variable organizational performance, the researcher primarily used knowledge based theory of the firm. To conduct the research model for this thesis, the dependent variables (organizational performance), independent variables were identified (knowledge management practices), and the mediating variable (employee capability) from the literature review.

The value statements that are highlighted on ETG's strategic roadmap also emphasize the significance of knowledge management (EAL, 2009). To this end, EAL is attempting to implement a number of initiatives in an effort to keep up with the airline's volatile market and competition, including but not limited to developing employees' knowledge by implementing best practices, promoting organizational culture, and acquiring and disseminating knowledge through both electronic and manual channels. The company additionally makes an effort to make knowledge resources accessible through its website, on-the-job training (OJT), refreshment courses, induction training, ACE (achieving competitive excellence) intranet (a corporate portal), mentoring and coaching programs/practical log book/, successor training, mandatory training, and crew meetings.

A research model is a theoretical representation of the study subject. The relationships between ideas can be described or explained using a model, which can be verbal, physical, or both. The conceptual model for the effects of KM practices on employee capability and organizational performance in ETG has been developed after reviewing various types of literature.

The discussion up to this point has shown that there is enough conceptual and empirical data to support the claim that knowledge management practices that is, the creation, storage, sharing, and application of knowledge have a positive, significant effect on organizational performance.

In light of this, the task is to empirically ascertain whether KM practice has an effect on organizational performance in the context of the current study. In order to do this, a conceptual framework that illustrates the potential effect of four KM dimensions on organizational performance was created see figure 3.3-2. This framework was developed on the basis of the discussions that have gone before. Three fundamental constructs—KM practices, organizational performance, and employee capability—were the focus of this study's conceptual framework. This framework was used to describe the relationship between KM practices (knowledge creation, sharing, storage, and application), organizational performance (financial measures and operational measures), and employee capability. KM practices were framed as independent variables, organizational performance was framed as a dependent variable, and employee capability was framed as a mediating variable.

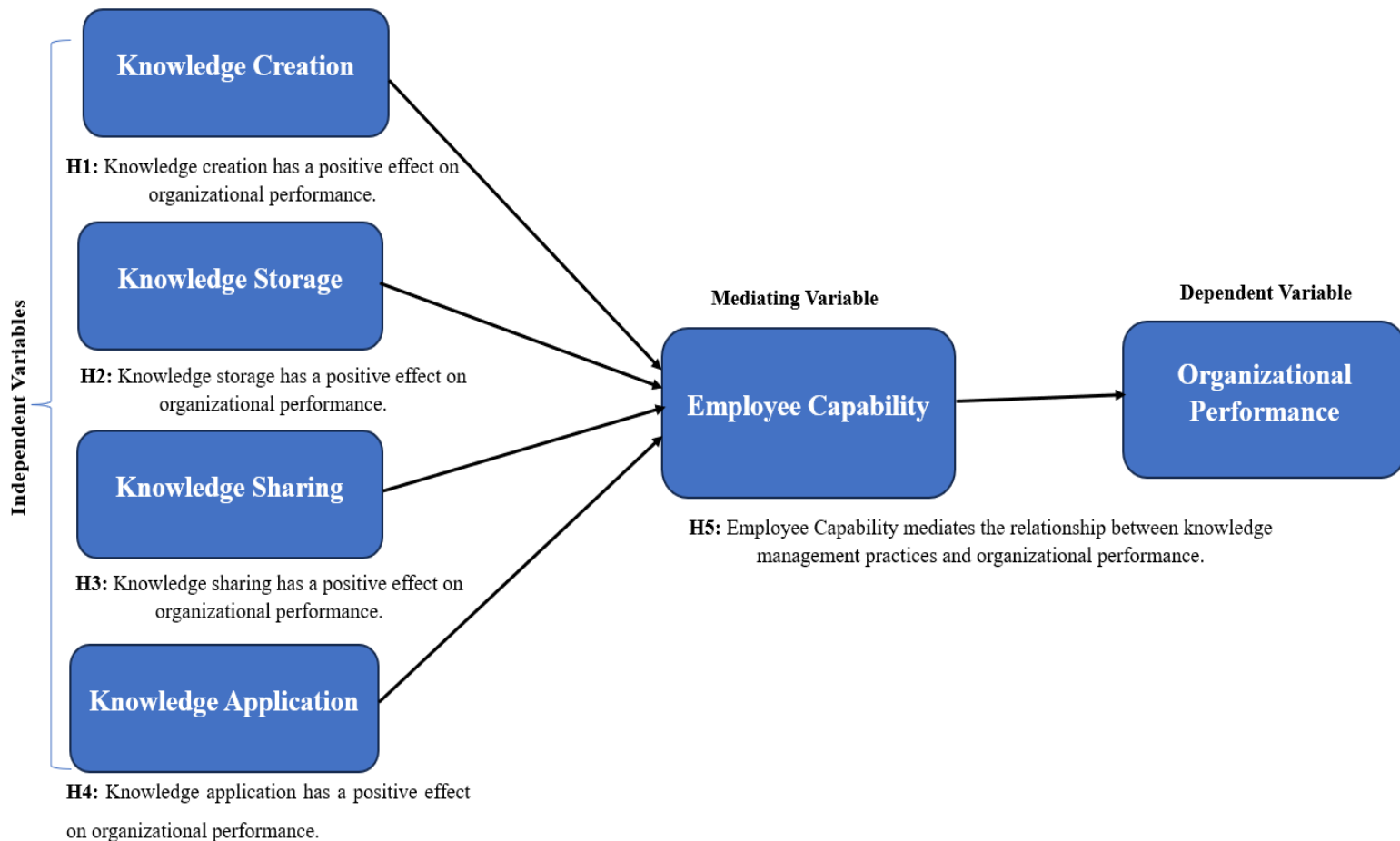


Figure 3.3-1 Research model

3.3.1 Research Hypothesis

Relationship between knowledge creation and organizational performance

The creation of knowledge is the first stage of the knowledge management cycle and is essential to its implementation. To extract explicit knowledge to create new ones and organize all knowledge in a systematic way, a variety of methods, techniques, and tools can be used. Encoding, the process of translating knowledge into an explicit or understandable form, makes it easier to carry out other knowledge management tasks like knowledge storage or dissemination[43].

Nonaka and Takeuchi also propose that the conversion of tacit knowledge into explicit knowledge, known as externalization, and the exchange of tacit knowledge through direct human-to-human contact, known as socialization, are essential processes for knowledge creation. When all global organizations can use a specific body of knowledge simultaneously and repeatedly, it increases efficiency, value, and opportunities for the development of new knowledge. For instance, millions

of people access the knowledge that is embedded in the knowledge networks of Yahoo!, eBay, and Amazon every day without consuming it[44]. Thus, knowledge creation and organizational performance in a business organization are positively correlated.

H1: Knowledge creation has a positive effect on organizational performance.

Relationship between Knowledge storage and organizational performance

Knowledge storage means organizing and formatting explicit knowledge in an information technology system for distribution. Organizations have viewed knowledge as a strategic resource for improving both individual and organizational performance. Organizations encourage employees to record knowledge related to their jobs, which is then kept in repositories where it can be easily accessed and used by anyone who needs it inside the company [45].

Prior knowledge can be documented, codified, and formalized thanks to knowledge storage. Creating an organizational memory that can be used for potential future opportunities is the goal of this phase. Establishing organizational procedures or maintaining knowledge in a repository for the company may be involved. In general, all operations involving registering for future use fall under the storage phase. The primary objective of retention is the reuse of knowledge. The preservation of knowledge is also crucial for organizational performance. The integrity of the knowledge could be at stake without security measures. The knowledge that is incorrect is just as harmful as the knowledge that is inaccessible[46].

Organizations have viewed knowledge as a strategic resource for improving both individual and organizational performance. Organizations encourage employees to document work-related knowledge, which is then stored in repositories where it can be easily accessed and used by anyone who needs it within the organization. For an organization to perform well, knowledge access and appropriate knowledge storage are essential[45]. By taking into account knowledge-storage practices, the researcher tested the hypothesis that there is a relationship between knowledge storage and ETG performance.

H2: Knowledge storage has a positive effect on organizational performance.

Relationship between Knowledge sharing and organizational performance

The exchange of knowledge, skills, and experiences among employees is referred to as knowledge sharing. It guarantees that employees have access to internal knowledge whenever they need it, and its advantages include maintaining intellectual assets and increasing productivity[47].

Knowledge sharing from individuals to groups or vice versa significantly affects the growth of employees' knowledge and skills because knowledge is a unique resource that helps organizations ensure sustainable competitive advantages. In turn, this boosts employee potential and enhances organizational effectiveness. The researcher investigated the hypothesis that knowledge sharing is associated with ETG performance by taking into account knowledge-sharing practices.

H3: Knowledge sharing has a positive effect on organizational performance.

Relationship between Knowledge application and organizational performance

Knowledge application is the timely adaptation of an organization to technological change through the development of new products and processes using the knowledge and technology generated. The application of knowledge is crucial for the creation of successful new products[48]. The application of knowledge effectively has helped companies increase productivity and reduce costs. If an organization can find the right knowledge in the right form, it can gain a competitive advantage, unless it makes it difficult to prove effectiveness[46].

The performance of individuals and, consequently the organization as a whole is primarily driven by knowledge. By enabling people to take wise and useful actions, knowledge affects performance. Knowledge applications open up opportunities for improved performance[49].

H4: Knowledge application has a positive effect on organizational performance.

Relationship between Employee capability and Organizational Performance

The ability of an employee to complete the tasks required of them to the required standards is referred to as capability. An employee's skill, health, aptitude, or any other mental or physical quality in relation to the job that they are employed to do may be taken into consideration when making this assessment. In accordance with this guidance, underperformance is also referred to as a lack of capability when an employee fails to carry out their duties to the required standard. When an employee's performance appears to be affected more by their ability to perform their duties than by their conduct or behavior, the Capability Policy offers a framework for dealing with the

situation[50]. Organizational excellence depends on employee development. Employee development starts with a need in the organization, then there is planning, design, and strategy implementation. The abilities, talents, and skills of an organization's workforce/employees are largely what determines its level of excellence. In any organization, employee development is a continuous process. Employee development cannot be made overnight, it is a systematic process that involves planning the needs of the organization, designing, and formulating strategies for employee development, and sharpening employees' capabilities to increase productivity and achieve organizational excellence[51].

Employee development helps employees acquire new knowledge and skills, which helps them become more effective in this dynamic work environment. Additionally, it enhances their perception of importance in all decision-making processes[51]. Without labor, which is more valuable than equipment, supplies, and even money, no organization can function. Staff training and development are crucial to keep them current with the current competitive environment because humans are dynamic beings. Employee performance is the essential factor and fundamental element that improves an organization's overall performance[52].

A sustainable competitive advantage for the organization can be achieved by utilizing knowledge base resources. practices for knowledge management are crucial because they have the potential to improve working abilities and teams' ability to share knowledge and tools more effectively. The improvement in organizational performance that knowledge management has on businesses is one of its main advantages[53]. By taking employee capability into account, the researcher tested the relationship between KM practices and employee capability as well as the theory that there is a relationship between employee capability and ETG performance.

H5: Employee Capability mediates the relationship between knowledge management practices and organizational performance.

3.4. Data Collection Instrument

Questionnaire Design

The researcher will make use of primary data sources to collect relevant information. The primary data is first-hand information about the effects of knowledge management on organizational

performance that was gathered from respondents among the company's employees. The survey was created using Google Classroom online and disseminated through email and Telegram (social media).

As shown in Appendix I, the questionnaires were broken down into three categories: knowledge management process/practice, organizational performance (OP), and employee capability. Additionally, the questionnaires asked about participants' demographics (age, educational background, gender, marital status, current job title, and years of experience).

3.5. Sample Population

The study's target population consists of Ethiopian Airlines Group IT, Marketing, MRO, and HCM staff members who actively participate to manage organizational knowledge. Operational-level employees and team leaders who participated in the survey to use organizational knowledge for core business activities of their respective business areas as a decision-making tool are the respondents.

According to Ethiopian Airlines' HCM data, 17000 employees are listed as MRO, Marketing, IT, and HCM staff. Among these employees, 435 are IT staff who manage and support the system to actively facilitate the KM practice in addition to using the knowledge. The HCM team manages employee knowledge and makes competitive use of it for the organization. MRO employees put their knowledge to use in their daily work and decision-making.

3.5.1. Techniques of sampling and sample size

There was survey questionnaire used to gather primary data. Information technology (IT), Marketing, maintenance, repair and overhaul (MRO), and Human Capital Management (HCM) division employees of the Ethiopian Airlines Group provided the data. The target population for the study was made up of ETG employees who were employed in various job types managed by ETG because the study's context was a knowledge management environment in an organization. The researcher thinks that because HR staff manages or controls employee capability, they have the general knowledge, experience, practice, and activities of a knowledge management practice. Technology is being used by the IT staff to support the knowledge management practice.

Employees who work in a routine operation unit (MRO) have been included in the survey or are taking part in it.

To give everyone in the population an equal chance of being chosen for one of the four departments of ETG, the researcher distributed questionnaires using the probability sampling technique, which is just random sampling. The following method was used to determine the sample size for the current study. The sample size for a finite population can be calculated using the formula below (Cochran, 1977).

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

n = the size of sample for a finite population

N = Study participants overall /17000/

e = is a constant for the margin of error (permissible error).

According to the aforementioned formula, a 5% margin of error (the maximum amount of error a researcher can accept) and a 95% level of confidence (which shows how confident the researcher can be) from a population of 17000 people working for ETG permanently constitute the accepted sample size for this study, which is 391.

$$n = \frac{17000}{1 + 17000(0.05)^2}$$

n=390.8045977 approximately 391

To accomplish the goal of the study, the data collection tool was primarily developed from a synthesis of important literature. Using a 5-point Likert scale questionnaire, the data was gathered from the HR, Marketing, MRO, and IT staff of the Ethiopian Airlines Group. Thus, the scales ranged from 1 for strongly disagreeing to 5 for strongly agreeing.

Level	Strongly agree	Agree	Neutral	disagree	Strongly disagree
Points	5	4	3	2	1

Table 3.5-1 Likert scale

3.6. Data Collection Procedure

A research permit was obtained from the Ethiopian Airlines Group research department prior to beginning fieldwork. To ensure reasonably adequate responses and increase precision, the distribution was made to a larger group than the determined sample size. Additionally, the questionnaire was distributed using the online Google Classroom platform in order to increase response rates and facilitate faster assignment turnaround times.

Further, some call via phone was made to participants to encourage them to participate and answer any questions they may have had. Thus, 403 people have responded to this survey.

3.6.1. Data analysis and presentation method

Quantitative techniques are used to process and analyze the collected data. It was simple to understand and make inferences based on the findings thanks to the presentation and organization of the data. The data derived from the survey responses were evaluated and examined using SPSS version 25. The responses from the cases were entered into the software after organizing, coding, and defining variables. Descriptive statistics like mean, standard deviation, frequency distribution, and percentages were used to analyze the collected data.

3.7. Validity and Reliability of the Data Collection Instruments

On the basis of its validity and reliability, research can be judged for its quality. The validity and reliability of the study are covered in more detail below.

One of the most popular reliability metrics in the social and organizational sciences is Cronbach's alpha (Cronbach, 1951). The reliability of a sum (or average) of q measurements, where the q measurements may represent q raters, occasions, alternative forms, or questionnaire/test items, is described by Cronbach's alpha reliability. Cronbach's alpha is referred to as a measure of "internal consistency and reliability" when the measurements represent multiple questionnaire/test items, which is the most common application[54]. Researchers evaluate their measurements using two different criteria: reliability and validity. Internal coherence (between items), continuity over time (test-retest reliability), and inter-rater reliability (across researchers). Validity is the extent to which the scores accurately reflect the underlying variable[55].

Although reliability reveals how much random error is absent from a measure, it does not reveal what the measure actually measures. Therefore, useful measured variables must be constructed as valid in addition to being reliable. The degree to which a measured variable accurately represents the conceptual variable (i.e., the construct) that it is intended to measure is referred to as construct validity. Only when a measure measures what we want it to do it have construct validity. While reliability is concerned with a measure's consistency, validity is concerned with a measure's accuracy. Because we adopted a quantitative research strategy for this study, reliability, and validity must be considered as we create the research design, organize our methods, and summarize the result[56].

3.7.1. Reliability

Reliability is the degree to which a set of scores are consistent or correlated. A score is consistent if the measurement tool measures the intended construct accurately. Poor reliability or a lack of correlation between scores is frequently the result of measurement error[57].

Consistency is a synonym for reliability. Does the tool accurately measure what it is designed to measure? The reliability cannot be calculated; The validity of the measure is directly related to reliability. There are a number of significant principles. First, a test may be regarded as valid but not reliable. Furthermore, validity is more crucial than reliability[58].

3.7.2. Validity

Validity refers to how well an instrument performs as intended by its designers and measures the variables it is intended to measure. A percentage is typically used to express an instrument's validity because achieving 100% accuracy is rare, if not nearly impossible. The validation procedure includes data collection and analysis in order to assess an instrument's accuracy. Numerous statistical tests and metrics, most of which involve pilot testing, can be used to assess the validity of quantitative instruments[58].

CHAPTER FOUR

4 Research findings and discussion

4.1 Introduction

The study's findings on how knowledge management practices affect organizational performance at Ethiopian Airlines Group are presented in this chapter. The knowledge management practices selected were knowledge creation, knowledge sharing knowledge application, and knowledge storage. A total of 403 employees from the MRO, Marketing, IT, and HCM departments participated in the survey. Both descriptive and inferential statistics were used to analyze the data with SPSS. The findings are presented in the following sections:

The general aim of this research has been clearly defined from the outset with an objective to investigate the effects of knowledge management practices on employee capability and the organizational performance of Ethiopian Airlines Group. This section includes the presentation, analysis, and discussion of quantitative data.

A total of 403 questionnaires were gathered using an online Google form. Out of which, all of the questionnaires were valid, and none were disqualified. Therefore, to present the findings and draw conclusions, an analysis of 403 questionnaires served as the source of data. To reach the conclusions, more data analysis is done. Further, data analysis is performed to reach the findings.

4.2 Reliability test

Using Cronbach's alpha coefficient, the researcher conducted a reliability test for the questionnaires that were used to gather the data. For each of the variables, Cronbach's alpha was computed, and the overall coefficient was determined. The results are displayed in Table 4-1.

Statistics on reliability		
The variables	Cronbach's alpha	Number of Items
Knowledge creation	.794	7
Knowledge storage	.790	8
Knowledge sharing	.851	9
Knowledge Application	.832	10
Organizational Performance	.880	8
Employee capability	.842	8
Overall Cronbach Coefficient	.936	50

Reliability Statistics	
Cronbach's Alpha	N of Items
.936	50

Table 4-1 Reliability test

The results showed that knowledge storage had a Cronbach alpha coefficient of 0.790 and knowledge creation had an Cronbach alpha coefficient of 0.794. For knowledge application, the Cronbach alpha coefficient was 0.832, while for knowledge sharing, it was 0.851. Employee capability had a Cronbach alpha coefficient of .842 and organizational performance had a Cronbach alpha coefficient of .880. The overall Cronbach coefficient for the study was 0.936, which is above 0.7, indicating the reliability of the research instruments. This is corroborated by Cronbach (1951), who said that a study is considered adequate if the Cronbach alpha is 0.7 or higher.

4.3 Discussion and findings of the survey

Participants in this study came from the ETG headquarters' marketing, human capital management (HCM), maintenance repair and overhaul (MRO), and information technology (IT) departments. The questionnaires were designed on Google Forms, and the online questionnaires' link was sent to targeted ETG employees via different forms (email, telegram, MS Teams, and Lync).

4.4 Demographic Characteristics of Respondents

Using an online Google form, 403 questionnaires were collected in total. Out of which, every questionnaire was valid and there were no questionnaires that were rejected. Therefore, to present the findings and draw conclusions, an analysis of 403 questionnaires served as the source of data.

To reach the conclusions, more data analysis is done. Further, data analysis is performed to reach the findings.

Regarding the group of respondents with the most work experience (number of years of service), the majority (36.0%) had 15–25 years of experience, followed by 28.0% who had 5–10 years, 19.9% who had 10-15 years, 13.6% who had less than 5 years, and the remaining 2.5% who had more than 25 years.

Employee Gender			
	Variable	Frequency	Percentage
Valid	Female	171	42.4%
	Male	232	57.6%
	Total	403	100.0%

Table 4-2 Distribution of demographic variables in gender (N=403)

The respondents' demographic data are shown in above table 4-2. The majority of respondents, or a greater proportion of the sample group, were male, accounting for 57.6% or more of the respondents when we look at the first demographic variable, which is the gender distribution of the respondents. However, women made up 42.4% of the respondents.

Employee Education Level (Academic qualification)			
	Variable	Frequency	Percentage
Valid	Degree (Bachelor)	240	59.6%
	Diploma	12	3.0%
	MSc Degree (Master)	151	37.5%
	Total	403	100.0%

Table 4-3 Distribution of demographic variables in education (N=403)

Table 4-3 above shows that, the majority of respondents have a bachelor's degree, according to the distribution of the second demographic variable, education level. When we see the specific qualification level 37.5% have an MSc degree (Master) qualification, 59.6% of the respondents have a qualification of degree (bachelor), and 3.0% of the respondents have a qualification of diploma.

Employee Department			
	Variable	Frequency	Percentage
Valid	Human Resource (HR)	74	18.4%
	Information technology (IT)	161	40.0%
	Maintenance and Repair Overhaul (MRO)	81	20.1%
	Marketing	87	21.6%
	Total	403	100.0%

Table 4-4 Distribution of demographic variables in department (N=403)

The respondent's department is the other main variable that was answered by them. According to the data in Table 4-4 above, the majority of respondents (40.00%) identified themselves as working in the IT department, followed by 21.6% from the marketing department, 20.1% from the MRO, and 18.4% from the HR department.

Employee Work experience (Number of years of service)			
	Variable	Frequency	Percentage
Valid	less than 5 years	55	13.6%
	From 5 years -10 years	113	28.0%
	Between 10–15 years	80	19.9%
	From 15 years - 25 years	145	36.0%
	More than 25 years	10	2.5%
	Total	403	100.0%

Table 4-5 Distribution of demographic variables in work experience (N=403)

Out of all respondents, respondents with 15 to 25 years of experience in ETG made up the majority (36.00%) of the total respondents. Those with between five and ten years of experience come in second (28%), then. Table 4-5, above, displays this data.

4.5 Quantitative data presentation, analysis and discussion

This section presents employee feedback on the organization's knowledge management procedures. The four elements that make up the independent variables of the knowledge management process

are creation, storage, sharing, and application of knowledge. Organizational performance is the dependent variable, and employee capability is the mediating variable.

4.5.1 Knowledge creation

The respondents' perceptions of the ETG practice of knowledge creation were covered in this section. The consistency of knowledge creation within the organization is assessed using the seven questions listed below. The results of the analysis are shown in Table 4–6.

The findings indicate that these statements have a range, with the smallest mean being 2.16 (Business partners provide a good extent of new knowledge to our employees (e.g., suppliers, and customers)) to the largest mean of 2.36 (My company (ETG) provides an appropriate environment for employees to generate knowledge). The responses of the respondents regarding knowledge creation in the organization can be inferred from the above table. The distribution of responses has an aggregated mean of 2.2531 (SD =.87795). Because the results disagree, the organization clearly does not practice knowledge creation.

Knowledge Creation	Frequency and percentage					Total	Mean	Standard Deviation
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree			
1. My company (ETG) provides an appropriate environment for employees to generate knowledge.	172 42.68%	73 18.11%	26 6.45%	103 25.56%	29 7.20%	403 100.00%	2.36	1.43
2. My organization (ETG), provides rewards or recognition for new idea generation initiatives.	176 43.67%	83 20.60%	33 8.19%	101 25.06%	10 2.48%	403 100.00%	2.22	1.30
3. ETG supports employees who have innovative ideas.	182 45.16%	83 20.60%	34 8.44%	96 23.82%	8 1.99%	403 100.00%	2.17	1.28
4. For the purpose of knowledge creation, ETG has training-related practices.	165 40.94%	81 20.10%	46 11.41%	100 24.81%	11 2.73%	403 100.00%	2.28	1.30
5. Business partners provide a good extent of new knowledge to our employees (e.g., suppliers, and customers).	182 45.16%	76 18.86%	50 12.41%	87 21.59%	8 1.99%	403 100.00%	2.16	1.26
6. My organization has culture to create knowledge.	170 42.18%	75 18.61%	51 12.66%	92 22.83%	15 3.72%	403 100.00%	2.27	1.31
7. We work together with our stakeholders to develop new products or service ideas.	165 40.94%	75 18.61%	50 12.41%	104 25.81%	9 2.23%	403 100.00%	2.30	1.30

Table 4-6 Descriptive statistics Knowledge creation

4.5.2 Knowledge Storage

The respondents' perceptions of the ETG practice of knowledge storage were covered in this section. The consistency of knowledge storage within the organization is assessed using the eight questions listed below. The results of the analysis are shown in Table 4-7.

Knowledge Storage	Frequency and percentage					Total N	Mean	Standard Deviation
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree			
1. To prevent knowledge loss due to employee turnover and retirements ETG implemented a system to preserve employee knowledge.	148 36.7%	121 30.0%	66 16.4%	42 10.4%	26 6.5%	403.00	2.20	1.22
2. Through meetings or training, ETG can save tacit knowledge.	153 38.0%	106 26.3%	69 17.1%	61 15.1%	14 3.5%	403.00	2.20	1.20
3. My organization (ETG) has processes for using stored knowledge in the development of new services.	162 40.2%	86 21.3%	79 19.6%	60 14.9%	16 4.0%	403.00	2.21	1.23
4. In my organization ETG, we have a written knowledge retention practice.	167 41.4%	95 23.6%	70 17.4%	57 14.1%	14 3.5%	403.00	2.15	1.20
5. Electronic databases and archives are used to store organizational knowledge, and all employees have access to them.	168 41.7%	92 22.8%	58 14.4%	64 15.9%	21 5.2%	403.00	2.20	1.28
6. In the practice of ETG, working or operational manuals we use to store knowledge.]	186 46.2%	88 21.8%	56 13.9%	68 16.9%	5 1.2%	403.00	2.05	1.18
7. For the purpose of future learning, my daily tasks and the solutions I offer will be registered.	177 43.9%	97 24.1%	64 15.9%	59 14.6%	6 1.5%	403.00	2.06	1.15
8. Employees at my company record the lessons they've learned from doing their regular work.	161 40.0%	98 24.3%	76 18.9%	57 14.1%	11 2.7%	403.00	2.15	1.17
N=403, Aggregated mean = 2.1523 S. D = .76647								

Table 4-7 Descriptive statistics Knowledge storage

The findings indicate that these claims range from the lowest mean of 2.05 (In the practice of ETG, working or operational manuals we use to store knowledge) to the largest mean of 2.21 (My organization (ETG) has processes for using stored knowledge in the development of new services). The responses of the respondents regarding knowledge storage in the organization can be inferred from the above table. The distribution of responses has an aggregated mean of 2.1523 (SD

=.76647). Because the results are in disagree, the organization clearly does not practice knowledge storage.

4.5.3 Knowledge Sharing

The respondents' perceptions of the ETG practice of knowledge sharing were covered in this section. The consistency of knowledge sharing within the organization is assessed using the nine questions listed below. The results of the analysis are shown in Table 4-8.

Knowledge Sharing	Frequency and percentage					Total N & %	Mean	Standard Deviation
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree			
1. My organization (ETG), works to create a supportive atmosphere that encourage employee knowledge sharing.	274 68.0%	13 3.2%	37 9.2%	76 18.9%	3 0.7%	403 100.0%	1.81	1.25
2. Ethiopian Airlines Group (ETG) provides employees the opportunities to participate in discussions and exchange of ideas.	246 61.0%	7 1.7%	49 12.2%	97 24.1%	4 1.0%	403 100.0%	2.02	1.34
3. Since ETG has a strong communication network and access to technology, its staff can share information more quickly.	226 56.1%	12 3.0%	50 12.4%	111 27.5%	4 1.0%	403 100.0%	2.14	1.36
4. In Ethiopian Airlines Group (ETG), Knowledge is shared through coaching, crew meetings, discussions on telegram groups, and formal training sessions.	228 56.6%	12 3.0%	44 10.9%	116 28.8%	3 0.7%	403 100.0%	2.14	1.37
5. Knowledge sharing among employees has improved Ethiopian Airlines Group's (ETG) performance.	245 60.8%	11 2.7%	41 10.2%	103 25.6%	3 0.7%	403 100.0%	2.03	1.34
	233	22	49	97	2	403	2.04	1.31

6. ETG has formal procedures/written practices in place for sharing knowledge.	57.8%	5.5%	12.2%	24.1%	0.5%	100.0%		
7. There is sufficient time for knowledge sharing within the company.	228 56.6%	33 8.2%	44 10.9%	95 23.6%	3 0.7%	403 100.0%	2.04	1.30
8. Most ETG's employees committed to sharing knowledge continuously.	238 59.1%	24 6.0%	48 11.9%	89 22.1%	4 1.0%	403 100.0%	2.00	1.30
9. My organization (ETG) has formalized training for knowledge-sharing.	234 58.1%	19 4.7%	58 14.4%	87 21.6%	5 1.2%	403 100.0%	2.03	1.30
N=403, Aggregated mean = 2.0284 S. D = .89135								

Table 4-8 Descriptive statistics Knowledge sharing

The findings reveal that these claims have a range from the smallest mean of 1.81 (My organization (ETG), works to create a supportive atmosphere that encourage employee knowledge sharing) to the largest mean of 2.14 (In Ethiopian Airlines Group (ETG), Knowledge is shared through coaching, crew meetings, discussions on telegram groups, and formal training sessions). The responses of the respondents regarding knowledge sharing in the organization can be inferred from the above table. The distribution of responses has an aggregated mean of 2.0284 (S. D = .89135). Because the results are in disagree, the organization clearly does not practice knowledge sharing.

4.5.4 Knowledge Application

The respondents' perceptions of the ETG practice of knowledge application were covered in this section. Regarding the ten questions listed below, the consistency of knowledge application within the organization is evaluated. The analysis's findings are displayed in table 4-9.

Knowledge Application	Frequency and percentage					Total N & %	Mean	Standard Deviation
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree			
1. ETG utilizes existing knowledge to gain a significant competitive advantage.	144 35.7%	119 29.5%	70 17.4%	49 12.2%	21 5.2%	403 100.0%	2.22	1.20
2. ETG uses internal organizational knowledge to solve new problems.	139 34.5%	125 31.0%	75 18.6%	50 12.4%	14 3.5%	403 100.0%	2.19	1.14
3. ETG employs lessons learned in the application of knowledge.	142 35.2%	114 28.3%	73 18.1%	54 13.4%	20 5.0%	403 100.0%	2.25	1.21
4. ETG's management is actively supportive of the knowledge application's practice.	137 34.0%	101 25.1%	89 22.1%	55 13.6%	21 5.2%	403 100.0%	2.31	1.22
5. Utilizing documented knowledge promotes quicker and better decision-making.	152 37.7%	85 21.1%	73 18.1%	81 20.1%	12 3.0%	403 100.0%	2.30	1.24
6. ETG uses knowledge to reduce risk and error.	168 41.7%	80 19.9%	74 18.4%	70 17.4%	11 2.7%	403 100.0%	2.20	1.23
7. The IT infrastructure in my organization makes knowledge applications simpler and more efficient.	183 45.4%	82 20.3%	68 16.9%	61 15.1%	9 2.2%	403 100.0%	2.08	1.19
8. There are procedures in place at my company (ETG) for applying lessons learned from mistakes.	186 46.2%	93 23.1%	67 16.6%	45 11.2%	12 3.0%	403 100.0%	2.02	1.16
9. My company (ETG) has procedures for putting knowledge gained from experiences to use.	194 48.1%	89 22.1%	57 14.1%	53 13.2%	10 2.5%	403 100.0%	2.00	1.17
10. My company, ETG, has procedures in place for utilizing knowledge to address new problems.	195 48.4%	84 20.8%	58 14.4%	59 14.6%	7 1.7%	403 100.0%	2.00	1.17

N=403, Aggregated mean = 2.1561 S. D = .75385

Table 4-9 Descriptive statistics Knowledge application

The findings demonstrate that these claims range from the smallest mean of 2.00 (My company (ETG) has procedures for putting knowledge gained from experiences to use) to the largest mean of 2.31 (ETG's management is actively supportive of the knowledge application's practice). The responses of the respondents regarding knowledge application in the organization can be inferred from the above table. The distribution of responses has an aggregated mean of 2.1561 (S. D = .75385). Because the results are in disagree, the organization clearly does not practice knowledge application.

4.5.5 Descriptive statistics for Employee Capability

The respondents' perceptions of the ETG practice of employee capability were covered in this section. Regarding the eight questions listed below, the consistency of employee capability within the organization is evaluated. The analysis's findings are displayed in table 4-10.

Employee Capability	Frequency and percentage					Total N & %	Mean	Standard Deviation
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree			
1. My seniors and other knowledgeable staff give me a lot of coaching.	157 39.0%	117 29.0%	25 6.2%	81 20.1%	23 5.7%	403 100.0%	2.25	1.31
2. I have access to sufficient opportunities for training and development.	144 35.7%	119 29.5%	40 9.9%	77 19.1%	23 5.7%	403 100.0%	2.30	1.29
3. ETG management is committed to its employees' continuous skill or capability development.	152 37.7%	102 25.3%	55 13.6%	64 15.9%	30 7.4%	403 100.0%	2.30	1.32
4. ETG makes greater investments in enhancing employee capability.	135 33.5%	107 26.6%	63 15.6%	72 17.9%	26 6.5%	403 100.0%	2.37	1.29
5. In my organization (ETG), I have colleagues I can get advice and support.	161 40.0%	92 22.8%	52 12.9%	71 17.6%	27 6.7%	403 100.0%	2.28	1.33
6. My organization (ETG) encourages experienced employees to impart their knowledge to less experienced or newer employees.	168 41.7%	94 23.3%	49 12.2%	65 16.1%	27 6.7%	403 100.0%	2.23	1.32

7. New employees are assigned mentors to help them with personal work and accelerate their learning.	163 40.4%	100 24.8%	43 10.7%	76 18.9%	21 5.2%	403 100.0%	2.24	1.30
8. Usually, I gain knowledge and wisdom from my team members' experiences.	158 39.2%	99 24.6%	42 10.4%	85 21.1%	19 4.7%	403 100.0%	2.28	1.30
N=403, Aggregated mean = 2.2795 S. D = .89859								

Table 4-10 Descriptive statistics employee capability

These statements range in size from the smallest mean of 2.23 (My organization (ETG) encourages experienced employees to impart their knowledge to less experienced or newer employees) to the largest mean of 2.37 (ETG makes greater investments in enhancing employee capability[59]).

We can deduce the respondent's response regarding employee capability in the organization from the above table. The distribution of responses had an aggregated mean of 2.2795 (S. D=.89859), which is in disagreement and suggests that the organization lacks employee capability to manage knowledge.

4.5.6 Organizational performance (OP)

The respondents' perceptions of the ETG practice of organizational performance (OP) were covered in this section. Regarding the eight questions listed below, the consistency of organizational performance (OP) within the organization is evaluated. The analysis's findings are displayed in table 4 -11.

Organizational performance (OP)	Frequency and percentage					Total N & %	Mean	Standard Deviation
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree			
1. My abilities and knowledge improve the quality of products and services for ETG.	262	8	13	119	1	403	1.98	1.37
	65.0%	2.0%	3.2%	29.5%	0.2%	100.0%		
2. ETG's management actively supports KM to improve the organization's performance.	268	11	21	101	2	403	1.90	1.33
	66.5%	2.7%	5.2%	25.1%	0.5%	100.0%		
3. There is remarkable improvement in service quality for beneficiaries, partners, and other parties.	228	8	40	124	3	403	2.17	1.39
	56.6%	2.0%	9.9%	30.8%	0.7%	100.0%		
4. When compared to competitor companies, the organization's (ETG) service quality improved.	212	9	45	133	4	403	2.28	1.41
	52.6%	2.2%	11.2%	33.0%	1.0%	100.0%		
5. My organization (ETG), develops new services that are more innovative and in line with its mission.	223	8	38	130	4	403	2.22	1.41
	55.3%	2.0%	9.4%	32.3%	1.0%	100.0%		
6. My organization (ETG) has improved its asset utilization and profitability.	228	8	38	125	4	403	2.18	1.40
	56.6%	2.0%	9.4%	31.0%	1.0%	100.0%		
7. The market share of my organization (ETG) has increased.	232	9	32	127	3	403	2.16	1.40
	57.6%	2.2%	7.9%	31.5%	0.7%	100.0%		
8. The service is delivered within the standard delivery time set by the Airline.	235	13	28	123	4	403	2.13	1.40
	58.3%	3.2%	6.9%	30.5%	1.0%	100.0%		

N=403, Aggregated mean = 2.1259 S. D = 1.02292

Table 4-11 Descriptive statistics organizational performance (OP)

The research demonstrates that these claims range from the lowest mean of 1.90 (ETG's management actively supports KM to improve the organization's performance) to the largest mean

of 2.28(When compared to competitor companies, the organization's (ETG) service quality improved). We can deduce the respondent's response regarding the organization's performance from the above table. The aggregated mean is 2.1259 (SD is 1.02292), which is in disagreement and shows that the organization's performance is insufficient. The outcome demonstrates how knowledge management best practices effect an organization's performance.

4.6 Regression Analysis

Regression is a technique for assessing how one or more independent variables affect a dependent variable. The purpose of the regression analysis was to ascertain how much the employee capability variables and knowledge management practices impacted the dependent variable (organizational performance).

4.6.1 Multicollinearity test

Multicollinearity is present when two independent variables in a regression model have high correlations with one another and when one independent variable has a linear combination of two or more independent variables that are correlated with another independent variable (Kumar & Paul, 2004). Utilizing the variance inflation factor (VIF) and tolerance, multicollinearity is tested. According to Liu (2010), there is a serious multicollinearity issue if a variable's VIF is greater than 10. If a predictor and another predictor have a strong linear relationship, it is indicated by the VIF (s). A tolerance value of less than 0.1, according to Andy (2006), almost certainly denotes a serious collinearity issue.

Model	Collinearity Statistics	
	Tolerance	VIF
Knowledge Creation	.681	1.467
Knowledge Storage	.509	1.963
Knowledge Sharing	.736	1.360
Knowledge Application	.493	2.027
Employee Capability	.682	1.466
Dependent Variable: Organizational Performance		

Table 4-12 Results of multicollinearity

In this study, it was discovered that every predictor had a tolerance of more than 0.1 and a VIF value under 10. Knowledge creation (.681 tolerance and 1.467 VIF), knowledge application (.493 tolerance and 2.027 VIF), knowledge sharing (.736 tolerance and 1.360 VIF), knowledge storage (.509 tolerance and 1.963 VIF), and employee capability (.682 tolerance and 1.466 VIF) all have values that indicate that multicollinearity is not a problem in this study. Since the results of all variables meet the criteria, it can be said that the variables are correlated.

4.6.2 Multiple Regression Analysis

To assess the effects between the independent variables and the dependent variable, multiple regression analyses were performed. In this study, multiple regression analysis was used to compare organizational performance and knowledge management practices (knowledge creation, storage, sharing, and application).

4.6.2.1 Model Summary

To assess how well a regression model fits the data, the multiple regression models include a table that provides the R, the R-square, the Adjusted R-square, and the standard deviation of the estimate. A significant result of regression analysis is R Square.

Model	R	R Square (R ²)	Adjusted R Square (R ²)	Std. Error of the Estimate
1	.690a	.476	.470	.74504

Table 4-13 Model summary of regression analysis

The adjusted R square, which represents the results of the multiple regressions shown Table 4-13, was calculated to be 0.470, or 47.0%, as the coefficient of determination. Accordingly, 47.0% of the variation in performance can be predicted by KM practices and the KM mediating variable (employee capability). At ETG, the effectiveness of the organization's performance is impacted by this knowledge management practice by a factor of 47.0%. Other variables are responsible for the remaining 53.0% of the performance variation.

4.6.2.2 Anova table

According to the ANOVA table 4-14, where the p-value is less than the significance level of 0.05 for significance, accepting at least one of the ETG practices of knowledge management had a significant relationship with organizational performance measures. Conclusion: The performance of the organization is strongly affected by knowledge management practices.

ANOVA					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	200.270	5	40.054	72.158	.000 ^b
Residual	220.370	397	.555		
Total	420.640	402			
a. Dependent variable: organizational performance					
b. Predictors: Employee capability, Knowledge Sharing, creation, storage, application					

Table 4-14 Anova

4.6.2.3 Coefficients

At a 95% confidence level, the coefficients demonstrate a significant relationship between employee capability, knowledge creation, knowledge storage, knowledge sharing, and ETG's organizational performance (see table 4-15). Considering that their p-values are 0.000, which is below the 0.05 level of significance. However, since the p-value was greater than 0.05, knowledge application had no significant effect on performance (p-values 0.392).

According to these findings, knowledge application is negatively correlated with organizational performance while knowledge creation, storage, sharing, and employee capability are positively correlated.

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	.239	.135		1.773	.077	-.026	.503
Knowledge Creation	.213	.051	.183	4.152	.000	.112	.314
Knowledge Storage	-.241	.068	-.180	-3.544	.000	-.374	-.107
Knowledge Sharing	.648	.049	.564	13.325	.000	.552	.743
Knowledge Application	.060	.070	.044	.857	.392	-.078	.198
Employee Capability	.212	.050	.186	4.225	.000	.113	.310

a. Dependent Variable: organizational performance
b. Predictors: (Constant), Employee capability, Knowledge sharing, creation, storage, application

Table 4-15 Coefficients^a

4.6.3 Hypothesis testing

The standardized coefficients beta and p-value are two methods for testing hypotheses. The results of the test either confirm or reject the hypothesis.

H1: Knowledge creation has a positive effect on organizational performance.

The study clearly demonstrates how knowledge creation affects organizational effectiveness. The performance of an organization is significantly impacted by knowledge creation, as indicated by the standardized coefficient beta (Beta = 0.183). In other words, the organization's performance will improve by 18.3% when knowledge creation is practiced. Additionally, knowledge creation has a p-value of 0.00, indicating that it significantly influences the performance of the organization because $p < 0.05$. The researcher thus concurs with the hypothesis, and it generalized the entire ETG from this hypothesis.

H2: Knowledge storage has a positive effect on organizational performance.

The results of multiple regressions, shown in Table 4-15 above, demonstrate that knowledge storage has a negative effect on an organization's performance, as shown by the standardized coefficient (Beta=-0.180). Since $p < 0.05$, knowledge storage has a p-value of 0.00, indicating that

it significantly affects the performance of the organization. The researcher thus concurs with the hypothesis.

H3: Knowledge sharing has a positive effect on organizational performance.

As presented in Table 4-15, the results of multiple regressions show knowledge sharing affects the performance of the organization positively indicated by the standardized coefficient (Beta=0.564). Knowledge sharing has a p-value of 0.00, which indicates that it has a significant effect on the organization's performance because $p < 0.05$. The hypothesis is therefore accepted by the researcher.

In other words, Beta=.0.564 show that as one unit increases in knowledge sharing, there will be a 56.4% increase in organizational performance. The hypothesis is therefore accepted by the researcher. This indicates knowledge sharing have a positive effect on the organizational performance of ETG.

H4: Knowledge application has a positive effect on organizational performance.

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.239	.135		1.773	.077	-.026	.503
	Knowledge Creation	.213	.051	.183	4.152	.000	.112	.314
	Knowledge Storage	-.241	.068	-.180	-3.544	.000	-.374	-.107
	Knowledge Sharing	.648	.049	.564	13.325	.000	.552	.743
	Knowledge Application	.060	.070	.044	.857	.392	-.078	.198
	Employee Capability	.212	.050	.186	4.225	.000	.113	.310
2	(Constant)	.260	.132		1.969	.050	.000	.520
	Knowledge Creation	.222	.050	.190	4.421	.000	.123	.321
	Knowledge Storage	-.216	.061	-.162	-3.519	.000	-.336	-.095
	Knowledge Sharing	.652	.048	.568	13.484	.000	.557	.747
	Employee Capability	.223	.048	.196	4.609	.000	.128	.318

a. Dependent Variable: Organizational Performance

Excluded Variables ^a						
Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
2	Knowledge Application	.044 ^b	.857	.392	.043	.493
a. Dependent Variable: Organizational Performance						
b. Predictors in the Model: (Constant), Employee Capability, Knowledge Sharing, Creation, Storage						

Table 4-16 Coefficientsa for excluded variable

The study clearly shows how knowledge application affect organizational performance. According to the standardized coefficient beta (Beta = 0.044), knowledge application makes some effect on organization's performance. In other words, when knowledge application was practiced, there will be a 4.4% increase in the performance of the organization. Furthermore, Knowledge application has a p-value of 0.392, which indicates that they have an insignificant effect on the organization's performance because $p > 0.05$. As a result, the researcher rejected the hypothesis.

H5: Employee Capability mediates the relationship between knowledge management practices and organizational performance.

The study clearly shows how employee capability affects organizational performance. According to the standardized coefficient beta (Beta = 0.186), employee capability makes a greater effect on an organization's performance.

In other words, when employee capability was practiced, there will be a 18.6% increase in the performance of the organization. Furthermore, employee capability has a p-value of 0.00, which indicates that it has a significant effect on the organization's performance because $p < 0.05$. The hypothesis is therefore accepted by the researcher.

4.7 Discussion

In this study the researcher investigated the practices of KM and its effects on organizational performance with the mediating role of employee capability and based on the findings the researcher inferred some main conclusions.

At the conclusion of the study, the researcher discovered that the ETG does not effectively utilize KM practices and that the degree to which ETG practices KM processes are not applicable. The company is successful. However, to achieve better results, more abilities and KM practices are required. As a result, every hypothesis has been accepted, with the exception of the knowledge application practice.

Most of the studies on KM that are currently available view the effects of KM practices on organizational performance as a key competitive advantage and a crucial factor in its success and ability to survive in a highly competitive business environment. Since there are different types of KM practices, including knowledge creation, knowledge storage, knowledge sharing, and knowledge application, this study examined the effects of KM practices on organizational performance.

The study's literature review indicates that there is a strong relationship between organizational performance and knowledge creation, sharing, storage, and application. All independent variables also have a statistically significant positive relationship with organizational performance. This study also demonstrates that with the exception of knowledge application practices, KM practices have a significantly positive relationship with organizational performance. Additionally, it demonstrates that organizational performance and employee capability have a strong positive relationship. Additionally, the ETG management team at this company must understand the value of knowledge, as evidenced by the successes they have at work.

Employees have the chance to improve their knowledge, teamwork, and learning from others through knowledge management practices, which will improve their career prospects. And each of these outcomes is a direct result of the employee's increased knowledge, improved skills, and improved functioning. All of this contributes to system-wide improvements in employee capability. There is a great opportunity to cut costs, increase ETG assets, and generate revenue because of the expanding role that knowledge plays in the company's success.

According to literature review of the study indicates a strong relationship between employee capability and organizational performance, and this mediating variable has a statistically significant positive relationship with organizational performance. The sample size and study participants support this conclusion because employee capability plays a significant role in organizational performance.

The findings of this study, which came from the analysis of the collected data, are based on the literature review that was previously mentioned. The findings of the current study's data analysis show that all of the independent variables have a significant relationship with the dependent variables except knowledge application. The results show that all of the study's hypotheses have a strong relationship with the dependent variables except knowledge application. Additionally, all of the hypotheses have been significantly impacted by the dependent variables in order to test the impact-related hypotheses except knowledge application.

4.8 Summary

Knowledge management practices (knowledge creation, storage, and sharing) and employee capability have an effect on organizational performance. Knowledge management practices are observable organizational activities that are related to knowledge management. The KM practice is the main activity of an organization to determine the motivation, retention, and performance of employees. When an organization has effective knowledge management, there is a high likelihood that its employees will be retained for a long time and perform well, which ultimately improves the performance of the organization.

The results show that employee capability helps the ETG's ability to be more flexible in uncertain environments and to be more open to learning best practices. Employee capability is the key factor in determining how well an organization performs, and ETG is utilizing employee capability in the best way possible for knowledge management, which will help it survive despite the competition in the market for goods and services. Supporting employee capability is a crucial component of organizational performance.

CHAPTER FIVE

5 Summary, conclusion, and recommendation

5.1 Introduction

This study's main objective was to evaluate knowledge management practices and look into how they affected Ethiopian Airlines Group's organizational performance (ETG). The objectives and basic research questions stated under Chapter One of the study were developed based on the reviewed literature and conceptual framework, and appropriate research methods and procedures were used for the purpose of data collection and analysis.

The findings of the study, which were discussed and presented in the previous chapter, are summarized in this chapter. Based on the findings, the study conclusions and recommendations are listed; suggestions for further studies are also provided.

5.2 Summary of the Findings

Organizations are aware that knowledge is a strategic imperative. The power of knowledge is well known. Lack of a proper knowledge management culture can lead to brain drain and memory loss within an organization. An organization's performance can be improved and its ability to make wise business decisions supported by effective management of organizational knowledge. As a result, knowledge must be retained and kept up to date in order to be competitive.

The main conclusions of the study are attempted to be summarized in this section.

The research's conclusions in relation to KM practice tell the majority of the staff has a clear understanding of KM practices; however, ETG doesn't have a separate knowledge management department, nor does it have definite KM policies to help it manage its knowledge. Although the staff engages in KM practices, the outcome indicates that KM is not regarded as a critical practice within the organization. According to this study, the initiatives to share knowledge do not acknowledge or rewarded in ETG.

While employees with expert knowledge are willing and motivated to impart it and the effect of knowledge management practices on organizational performance is well understood by senior management teams and other staff members, they do not give much attention to enhancing KM

practices In this section, the researcher outlines the key findings for each variable that was examined and discussed during the study's analysis phase.

Four hundred three questionnaires were collected from the respondent, and they are valid for analysis. According to the findings of the analysis, there were 171 (42.4%) females and 232 (57.6%) males. As a result, there was an unequal distribution of respondents by gender, with fewer females responding than males. Of the total respondents, 240 (59.6%) of them were degree (bachelor) holders, 12 (3.0%) of them were diploma holders, and 151 (37.5%) of them were MSc (master), so most respondents are degree (bachelor) holders. They are thus well qualified respondents.

The aggregated mean for the organizational performance according to the statistical analysis was 2.1259, which is close to disagreement and demonstrates that the organization's performance is insufficient for its employees. According to the findings of the statistical analysis, the subsection of knowledge management practices, or knowledge creation, has a measured aggregated mean of 2.2531, which is almost disagreeable. Considering these findings, it can be concluded that knowledge creation was not a frequent practice within the organization.

According to a study on knowledge storage, ETG does not adopt knowledge storage practices in the organization for future use, as evidenced by the aggregated mean of 2.1523, which is almost disagreeable.

The aggregate mean of the responses from knowledge-sharing results was 2.0284. It almost seems to disagree, which shows that there are no knowledge-sharing practices in place at the organization (ETG) for its employees.

The aggregate mean of the responses to the knowledge application was 2.1561. The almost incongruent result indicates that the organization does not properly implement knowledge application practices. The statistical analysis's findings indicated that employee capability, or the knowledge management mediating variable, was represented by the aggregate mean of the distribution of responses, which was 2.2795. The almost contradictory results show that ETG does not have an organizational environment that supports employees' ability to manage knowledge.

The findings of this study, which came from the analysis of the collected data, are based on the literature review that was previously mentioned. The findings of the current study's data analysis show that all of the independent variables have a significant relationship with the dependent

variables except knowledge application. The results show that all of the study's hypotheses have a strong relationship with the dependent variables except knowledge application. Additionally, all of the hypotheses have been significantly impacted by the dependent variables in order to test the impact-related hypotheses except knowledge application.

5.3 Conclusion

The conclusion responds to the stated research question in light of the study findings. The purpose of the study was to determine how ETG currently managed its information. According to the aforementioned research findings, knowledge creation, knowledge storage, knowledge sharing, and knowledge application were all practiced at a disagree level. Therefore, KM is not a common practice at ETG. It has a poor knowledge management practice. As a result, the researcher draws the conclusion that ETG does not applied KM practices.

In this study, the researcher investigated how organizational performance is impacted by knowledge management practices, using employee capability as a mediating factor. The researcher advanced a few important conclusions considering the findings. The researcher collected data from 403 respondents in order to meet the research objectives, then used SPSS for descriptive analysis and all necessary data quality checks for reliability through Cronbach's alpha.

The conclusion responds to the stated research question in light of the research findings. The purpose of the study was to evaluate how knowledge management practices at ETG influence organizational performance. According to the above research findings, knowledge creation, storage, sharing, and application were all practiced among the organization employees are disagreeing levels. As a result, knowledge management is not a common practice at ETG. It has a poor knowledge management practice. As a result, the researcher draws the conclusion that ETG does not effectively implement KM practices.

5.4 Recommendations

Based on the summary of findings and conclusion, the following recommendations are made:

The company should regularly evaluate its current knowledge management procedures. The organization should work to keep up the KM practice because the results are poor. It should be enhanced through KM practice.

To facilitate the effect of the organization's performance, organizational policies and strategies need to be revised. Offering employees training in soft skills like collaboration, teamwork, critical thinking, decision-making, and communication in business-critical areas can help organizations make significant improvements in a number of workplace areas. The company must establish a supportive environment that is conducive to employee development in order to encourage open communication and knowledge management among individuals and groups.

The management should actively implement strategies and plans to strengthen the weak link between knowledge storage and knowledge management. By implementing newly adopted technology infrastructure to store knowledge for future use. The company should also use technologies that are simple for the staff to use.

The study examines the effects of knowledge management on organizational effectiveness. ETG employees are dissatisfied with the company's overall performance level. At ETG, knowledge management was subpar. The business should therefore work harder to improve knowledge management practices and ensure their effectiveness.

Therefore, the following activities are listed as the recommendations:

- ❖ The company must establish a supportive environment that is conducive to employee development to encourage open communication and knowledge management among individuals and groups.
- ❖ ETG should implement in place a knowledge management strategy to enable creating, storing, sharing, and applying knowledge.
- ❖ The study recommends that the organization enhance its knowledge management practices (creation, storage, sharing, and application of knowledge).
- ❖ It is recommended that the management team has to give attention to the use of KM to improve organizational performance and to improve employee capability.
- ❖ It is advised that there be a reward or recognition system for employee knowledge-sharing initiatives.
- ❖ It is advised that the organization create a separate knowledge management department to oversee KM operations full-time.

5.5 Suggestions for Further Studies

The results of the multiple regressions shown in Table 4-18 above the coefficient of determination, i.e., the adjusted R square, was calculated to be 0.470, or 47.0%. This implies that the KM practices (knowledge creation, storage, sharing, and application) and the KM mediating variable (employee capability) can predict 47.0% of the variation in performance. At ETG, that knowledge management practice has a 47.0% effect on how well the organization's performance. The remaining 53.0% of the variation in performance can be attributed to other variables.

According to the above analysis, this study is believed to measure the effects of knowledge management practices (creation, storage, sharing, and application of knowledge) on organizational performance. Nevertheless, further research is needed by including the remaining variables (different KM practices) and different factors (external and internal factors).

The current study had an adjusted coefficient of R² of 0.470 and a residual of 53.0%, which can be explained by other variables outside the current study's scope and suggest on which future researchers should concentrate. The primary goal of the study was to measure how knowledge management practices influenced the Ethiopian Airlines Group's organizational performance. Future researchers should conduct comparable studies in other organizations or industries.

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APPENDICES

Appendix I: AAU supporting letter.

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Addis Ababa University
College of Natural Science
School of Information Science

Date: November 2, 2022
Ref No. SIS/77/2022/15

To: - Ethiopian Airlines
Addis Ababa

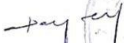
Subject:- Student Mesfin Shifera

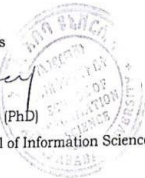
Dear Sir /Madam,

Student Mesfin Shifera (ID.No GSE/3258/13) is a graduate student at the School of Information Science, Addis Ababa University. He is currently conducting M.Sc. Thesis research under the title "The Effects of Knowledge Management Practice on Organization Performance: In the Case of Ethiopian Airlines ."

I would like to thank you in advance for all the assistance that you would provide to the student.

With Regards


Dereje Teferi (PhD)
Head, School of Information Science



☎: 1176 Email: information_cci_cns@aau.edu.et ☎: +251-(11)-122-91-91

Appendix II: Questionnaire

Dear Colleague

Greetings!!

I'm Mesfin Shifera Yifra, a graduate student in the School of Information Science at Addis Ababa University. I'm currently working on research for my Master's in Information Systems (Science) program on "The effects of knowledge management practices on organizational performance: the case of Ethiopian Airlines Group." As a result, I kindly request you to complete the questionnaire. I can assure you that the data collected will only be used for academic research and all the responses will be kept completely private.

Your participation in this survey is voluntary.

You can contact the researcher, Mesfin Shifera, with any unclear questions about the survey (+1 2519 123 70216 or shifera.mesfin@gmail.com). Please allow 15 minutes to complete the questionnaire.

I sincerely appreciate your cooperation in advance!

Kind regards,

Mesfin Shifera

GENERAL INSTRUCTIONS

Put X mark for option you selected as correct response in your opinion to the respective questions.

Part I: Demographic Information (Please put a mark in the box that best describes you)

Gender

Male	Female
------	--------

Marital status

Single	Married
--------	---------

Age

Less than 25 years	From 25-35 years	From 35-45 years	More than 50 Years
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Education Level (Academic qualification):

Diploma	Degree (Bachelor)	MSc Degree (Master)	Ph.D.
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Your department

Information technology (IT)	Marketing	Human Resource (HR)	Maintenance and Repair Overhaul (MRO)
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Work experience (Number of years of service)

5 years	From 5 -10 years	From 10–15 years	From 15-25 years	More than 25 years
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Current job title: _____

Part II: Questions related to actual knowledge management practices (KMP):**Instructions:**

Please select the value ranging from 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree, for each item in the table which asks for your level of agreement regarding how knowledge management is practiced under each of the major elements of KM (knowledge creation, knowledge storage, knowledge sharing, and knowledge utilization/application).

A	Knowledge Management Practices:	Levels of agreement				
		1	2	3	4	5
I	Knowledge Creation					
1	My company (ETG) provides an appropriate environment for employees to generate knowledge.					
2	My organization (ETG), provides rewards or recognition for new idea generation initiatives.					
3	ETG supports employees who have innovative ideas.					
4	For the purpose of knowledge creation, ETG has training-related practices[60].					
5	Business partners provide a good extent of new knowledge to our employees (e.g., suppliers, and customers)[61].					
6	My organization has culture to create knowledge[40].					

7	We work together with our stakeholders to develop new products or service ideas[40].					
II	Knowledge Storage					
1	To prevent knowledge loss due to employee turnover and retirements ETG implemented a system to preserve employee knowledge [48].					
2	Through meetings or training, ETG can save tacit knowledge.					
3	My organization (ETG) has processes for using stored knowledge in the development of new services[62].					
4	In my organization ETG, we have a written knowledge retention practice[60].					
5	Electronic databases and archives are used to store organizational knowledge, and all employees have access to them[60].					
6	In the practice of ETG, working or operational manuals we use to store knowledge[60].					
7	For the purpose of future learning, my daily tasks and the solutions I offer will be registered [31].					
8	Employees at my company record the lessons they've learned from doing their regular work[61].					
III	Knowledge Sharing					
1	My organization (ETG), works to create a supportive atmosphere that encourage employee knowledge sharing.					
2	Ethiopian Airlines Group (ETG) provides employees the opportunities to participate in discussions and exchange of ideas.					
3	Since ETG has a strong communication network and access to technology, its staff can share information more quickly.					
4	In Ethiopian Airlines Group (ETG), Knowledge is shared through coaching, crew meetings, discussions on telegram groups, and formal training sessions.					
5	Knowledge sharing among employees has improved Ethiopian Airlines Group's (ETG) performance.					
6	ETG has formal procedures/written practices in place for sharing knowledge[60].					
7	There is sufficient time for knowledge sharing within the company [60].					
8	Most ETG's employees committed to sharing knowledge continuously[60].					
9	My organization (ETG) has formalized training for knowledge-sharing [49].					
IV	Knowledge Application	1	2	3	4	5
1	ETG utilizes existing knowledge to gain a significant competitive advantage[17].					
2	ETG uses internal organizational knowledge to solve new problems[63]					
3	ETG employs lessons learned in the application of knowledge[17].					
4	ETG's management is actively supportive of the knowledge application's practice[63].					
5	Utilizing documented knowledge promotes quicker and better decision-making[64].					
6	ETG uses knowledge to reduce risk and error[63].					

7	The IT infrastructure in my organization makes knowledge applications simpler and more efficient [61].					
8	There are procedures in place at my company (ETG) for applying lessons learned from mistakes [62].					
9	My company (ETG) has procedures for putting knowledge gained from experiences to use [62].					
10	My company, ETG, has procedures in place for utilizing knowledge to address new problems [62].					
		1	2	3	4	5
C	Employee Capability					
1	My seniors and other knowledgeable staff give me a lot of coaching[65].					
2	I have access to sufficient opportunities for training and development[59].					
3	ETG management is committed to its employees' continuous skill or capability development[59].					
4	ETG makes greater investments in enhancing employee capability[59].					
5	In my organization (ETG), I have colleagues I can get advice and support[59].					
6	My organization (ETG) encourages experienced employees to impart their knowledge to less experienced or newer employees [66].					
7	New employees are assigned mentors to help them with personal work and accelerate their learning[62].					
8	Usually, I gain knowledge and wisdom from my team members' experiences [67].					
		Levels of agreement				
B	Organizational performance (OP)	1	2	3	4	5
1	My abilities and knowledge improve the quality of products and services for ETG[60].					
2	ETG's management actively supports KM to improve the organization's performance[63].					
3	There is remarkable improvement in service quality for beneficiaries, partners, and other parties[68].					
4	When compared to competitor companies, the organization's (ETG) service quality improved[60].					
5	My organization (ETG), develops new services that are more innovative and in line with its mission[62].					
6	My organization (ETG) has improved its asset utilization and profitability[62].					
7	The market share of my organization (ETG) has increased[62].					
8	The service is delivered within the standard delivery time set by the Airline[69].					