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**Assessment of Knowledge Management Practices in Business Process
Automation Projects: The Case of Administration and Human Resource
Directorate in African Union**

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**A Project Work Submitted to
The Department of Project Management**

**Presented in Partial Fulfillment of the Requirements for the Degree of
Master of Arts (Project Management)**

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Addis Ababa, Ethiopia**

March 2021

Addis Ababa University
School of Graduate Studies

This is to certify that the thesis prepared by Samrawit Kinfemichael, entitled: Assessment of Knowledge Management Practices in Business Process Automation Projects: The Case of Administration and Human Resource Directorate in African Union and submitted in partial fulfillment of the requirements for the degree of Degree of Master of Arts (Project management) complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

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Abstract

The aim of this study was to assess the level of current knowledge management practice to provide input on improving the KM practice of the Administration and Human Resource Directorate in the African Union. The study considers the four KM pillars: leadership, organization, learning, and technology factors to examine the perception of managers and staff on the existing KM practice of the directorate. The techniques used for data collection were interviews and close-ended questionnaires and the sample of the study was the whole 60 staff members of the selected directorate. The interview questions were distributed to 5 division heads, and the remaining 55 close-ended questionnaires were distributed to staff members. The result of the study revealed that among the four pillars in respect to the KM practices in the directorate, the use of technology is above the average score, and satisfactory, but leadership, learning, and organization pillars of the directorate are below the average score. So, the directorate has to assess its problems that impede the process of knowledge management practices and create an appropriate management system. In addition, the directorate has to follow the provided recommendations to manage and improve, the current underprivileged handling of KM practice implementation.

Keywords: Knowledge Management, leadership, learning, organization, technology and Project Knowledge Management

Acknowledgments

First and foremost, I would like to thank Almighty God who gave me the strength to work through this paper starting from the conception up to its completion.

I would like to thank my advisor Dr. Wubeshet Bekaluwho helped in guiding the way and constructive ideas throughout the work.

Finally, I am thankful for all of my families Mulatu Kebede ,Yoseph Mulatu and Lulit Seleshi for their support and help through the program. I am also grateful to all respondents for their honest cooperation.

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Acronyms/Abbreviations

AHRMDU	Administration of Human Resource Management Directorate of the Union
AU	African Union
BPA	Business Process Automation
CRM	Customer Relationship Manager
ECM	Enterprise Content Management
ERP	Enterprise Resource Management
HRM	Human Resource Management
HRMDU	Human Resource Management Directorate of the Union
ICT	Information & Communication Technology
IT	Information Technology
CKO	Chief Knowledge Officer
KM	Knowledge Management
KMS	Knowledge Management System
MIS	Management Information System
OAU	Organization of African Union
OPM	Organizational Project Management
PKM	Project Knowledge Management
PM	Project Management
R&D	Research and Development
RDBMS	Relational Database Management System
SPSS	Statistical Package of Social Science

CHAPTER ONE

1. INTRODUCTION

1.1. Background of the Study

Knowledge is increasingly seen as an organization's most valuable resource, many firms and organizations have implemented knowledge-management and sharing systems in an effort to capture, store, and disseminate knowledge across the firm (Alavi and Leidner, 2001). Jones, (2003) pointed out that KM is an integrated, systematic approach to identify, manage, and share all of the department's information and knowledge assets, including databases, documents, policies and procedures, as well as previously unarticulated expertise and experience resident in individual officers. Besides, Theriou et al., (2010) mentioned that KM enables the existing individual knowledge to be captured and transformed into organizational knowledge, which in turn should be diffused and shared among many employees

Organizational knowledge is created through a continuous dialogue between the tacit and explicit knowledge of employees. In making sure that all employees have access to the overall expertise held within the organization, a smarter workforce is built who are abler to make quick, informed decisions that benefit the company. A successful system of an organization also improves the overall effectiveness of the institute while providing a means to externally enhance competitive performance, raise responsiveness to customers, and sustain strategic initiatives.

Similarly, Park(2005) supported, managing an enterprise's knowledge assets can be more effectively achieved by creating knowledge management programs using a defined framework of key elements. In any project-based organization, sound knowledge husbandry is central to the delivery of current and future project performance. KM requires the integration and balancing of leadership, organization, learning, and technology in an enterprise-wide setting. In addition, the success of the KM project depends on the involvement and contribution of all the parties, especially strong initiative and passionate top management and an integrated view must be adopted. Love et al., (2003) state that knowledge is a vital resource in project-based industries and that

managing this resource is a new and challenging process for these industries. And the major issues for knowledge management in a project environment are the poor project success analysis and the lack of proper documentation on the results of the previous projects.

Organizational project management (OPM) is a new sphere of management where dynamic structures in firms are articulated as a means to implement corporate objectives through projects in order to maximize value (Alexander, 2010). In addition, the most important assessment unit in organizational project management is the identification of using best practices.

In today's knowledge based economy, there is a dire need for modern organizations to integrate Knowledge Management (KM) practice in their organization process and structure in order to extend their success and values for sustainable organizational development and competency. Organizations are highly investing on organizing and use of their intellectual capital (David,1997). This is due the reason that utilizing the organizational knowledge determines the success and maintains competitive advantage of a given organization. In this regard, Knowledge Management (KM) is created as a tool for this purpose (Senge, 1990).

This study focused on assessing the knowledge management practice on business process automation project in five divisions within the administration and human resource directorate considering leadership, organization, learning, and technology factors. Business Process Automation (BPA), also known as business automation or digital transformation is the technology-enabled automation of complex business processes (Tharp, 2019). BPA can streamline a business for simplicity, achieve digital transformation, increase service quality, improve service delivery or contain costs. It consists of integrating applications, restructuring labor resources and using software applications throughout the organization (Otar, 2021). Today, it is evident that business process automation is essential for operational growth.

In addition, it reduces costs and overhead by diminishing errors and improving employee efficiency, companies often see a decrease in expenditures while simultaneously

improving revenue. Business process automation solutions save companies money and labor by eliminating paper-based file management.

All divisions have their own projects on business process automation projects to update their working processes and to achieve their goals. The “Implementation of SAP Human Capital Management Module” project is planned by Human Resource Management Division to automate the human resource division administrative processes such as employee master data maintenance, leave administration, payroll, performance evaluation, and recruitment processes

The implementation of a central help desk system through solar winds” project is aimed by Management of Information Systems Division (MIS) to automate the IT support and information desk with a helpdesk system which serves a wide range of employees support activities by organizing messages and exchange information with a single point of contact.

A project proposed by Administration and Facility Management Division (AFMD)“develop and implement a computer automated facility management system” is targeted to automate the facility management division business processes by deploying and customizing the ARCHIFM enterprise with five modules mainly maintenance management, office space management, meeting room reservation, contract and lease agreement management and area and asset management modules.

Also the project suggested by the Procurement, Travel and Store Division (PTSD)“centralized vendor management” is planned to automating the vendor management process by having a clean Vendor Master Database to ensure Vendor management is streamlined and consistent within the organization. In addition, to enhance the relationship between AUC and Vendors for better collaboration.FinallySafety and Security Services Division (SSSD its aims to automate the process to better organize the AU accreditation system handle the “New accreditation system for AUC summits and events – FM1” project. Before every major Events, a complex logistical system is implemented to: Identify each participant according to list of embassies, governments, VIP, to identify the access level of each participant with various

colors and train the security unit to allow or refuse access to participant according to the card.

1.2. Statements of the Problem

A lack of proper knowledge management practice limits the competitive advantage of an organization (Donate & de Pablo, 2015). Moreover, the recent studies in different areas show that long-term organizational efficiency depends on the implementation of knowledge management practice to support its daily operations.

The major obstacle for the development of many organizations is a key point that is the absence or minimal of awareness to the concept of KM and respective associated benefits of this system. In addition, a major problem is how to convince, coerce, direct or otherwise get people within organizations to share their information. A major change management problem poses serious leadership challenges to a chief information officer or chief knowledge office. In the absence of information and knowledge, organizations cannot determine their destinations let alone craft strategies to sustain and achieve organizational competitive advantage (Kok, 2003).

AU is supposed to be a knowledge organization, but it currently does not have any of the traits of the knowledge organization. Thus, the administration and human resource directorate of the organization has a problem of a planned and documented approach to managing the knowledge of the institution and making it available to staff in order to improve information service provision. Moreover, employees do not pass on knowledge to their colleagues that they gained from training and other presentations for dissemination of knowledge. Despite the growing awareness of the benefits of knowledge sharing, the accessibility of knowledge in the directorate is limited because most knowledge resides with individuals or in documents or repositories not readily accessible to others.

Today, the competitiveness of organizations has increased thus they do not have a choice other than to manage and upgrade their knowledge management practice in order to

improve their working force. Thus, as the administration and human resource directorate is a part of a highly responsible African Union; it has to shift regularly its KM practices to enhanced knowledge creation and better services. This study is aimed to investigate the current level of directorate's KM practices, to recommend an attainable system of knowledge management, and to fill the research gap.

1.3. Research Questions

The following questions were covered by the research

- What is the current status of knowledge management practice of the directorate with regard to the four knowledge management pillars (leadership, learning, organization, and technology)?
- What is the level of knowledge management implementations from the perspective of the directorate?
- How could KM systems be implemented in the directorate in a successful way?

1.4. Objectives of the Study

1.4.1. General Objective

The general objective of this research is to assess the role of knowledge management practices among other projects in relation to the Administration of Human Resource Management Directorate.

1.4.2. Specific Objectives

The following specific objectives of the study were addressed:

- To assess and distinguish the current KM practice of the directorate considering the four KM pillars.
- To identify a proficient knowledge management practice that renovates the existing practice of the Directorate.
- To provide a critical implementation processes that can help to strengthen the knowledge management practices within the directorate

1.5. Scope of the Study

The structure of AU is wide to cover different affairs both continentally and internationally. The study was carried out at the selected administration and human resource directorate within five divisions of the directorate, namely human resource, management information system, administration and facility, safety and security, and procurement.

The directorate is selected because the majority of the organizations, about 60 staff are found in this area and the Directorate oversees the management of administrative services and human resource matters for the AU. Its roles include developing rules, procedures, and policies on human resources; managing AU information systems; facilities, property, and inventory systems; and overseeing safety and security, travel, transport, and procurement matters.

1.6. Significance of the Study

This study assessed the implementation of KM practices in many organizations and the administration and human resource directorate of AU. Knowledge management practice is a key process for strengthening the competitiveness and survival of any enterprise. The findings of the study can help the directorate to establish enhanced KM practice and to implement it by referring to the provided recommendations that can help to strengthen the knowledge management practices within the directorate. In addition, the study could be a source for other researchers who intended to do further study in this area or field.

1.7. Limitation of the Study

The limitation of this study is that it was conducted only in a selected directorate. Ideally, it should have been conducted in the organization. The purposive sampling procedure decreases the generalizability of findings (Creswell, 2003). It will therefore not be possible to generalize the finding to the organization.

Other limitations of this study were the ban on the use of recording equipment for interviews, and the restrictions of Covid-19.

1.8. Organization of the Study

The thesis was organized into five chapters. It starts with the introduction which includes a background of the study, statement of the problem, research questions, objectives of the study, significance of the study, scope of the study, limitation of the study, and organization of the study. The second chapter reviewed literature that relates to the topic of the study. The third chapter presented a methodological approach to the study including sampling techniques, methods of data collection, and tools for data analysis. In the fourth chapter offered results and discussion and the fifth chapter conclusion and recommendation, which covered summary of findings, conclusion, recommendations and suggestion for further research.

CHAPTER TWO

2. LITERATURE REVIEW

2.1. Theoretical Literature Review

This chapter establishes the theoretical basis for the research and aims to deepen the understanding of the notions touched upon in the research questions.

2.1.1 What is Project Knowledge Management?

Project knowledge management (PKM) refers to a systematic sequence of activities for organizing and distributing knowledge, developing and training teams, and implementing and maintaining technologies to ensure that relevant and filtered information is being properly used and accurately shared across employees. Thus, many researchers have PKM frameworks, which generally refer to the set of processes or practice of developing in an organization capable to create, acquire, capture, store, maintain and disseminate the organization's knowledge (Rezaie1 et al., 2009).

PKM enables organizations to consistently perform projects successfully and their objectives, thus many organizations implement different projects to produce the desired outcome or to reach specific goals. Knowledge management and project management are practices that can work hand-in-hand to improve organizational performance. Applying KM techniques to project management practices can result in enhanced communication and better project integration, improved decision-making, reduced risks, and continuous improvement in project performance (Stephanie, 2012).

The logic of managing project knowledge includes the idea for grouping the multiple project processes and transferring the knowledge to create a system that helps arrange project information and simplifies access and use of project data by the team. Through implementing project knowledge transfer methodologies you can leverage existing knowledge in terms of completed projects and then connect your employees with the existing information technology space of your organization to automatically save time and deliver the current projects faster and with better results (Daniel, 2011).

2.1.2 The Implementation Process of Knowledge Management

An implementation plan can be considered as transforming an actual condition into a target state, as an idea spread into new areas of application or as the replacement of an old concept by a new one (Reiss, 1995). One characteristic of an implementation process is that a part of a new concept is embedded in an existing system or environment. The aim is to compatibly integrate plans, models or concepts while taking into account different conditions in an existing system. The implementation is considered successful if, after completing all the necessary implementation measures, the desired application level takes place (Bauermann, 1988). Since implementations usually do not run smoothly, but are confronted with various obstacles, a standardized implementation process should be developed considering various situations, influences and conditions of different organizations to ensure a successful implementation process. The implementation process comprises four main phases that complement each other. Phase 1 involves a knowledge management diagnosis, including a differentiated needs analysis concerning knowledge management domains. It is fundamental to analyze the specific needs for such a system and to make sure that there are appropriate context conditions with regards to content, organizational and technical aspects. Furthermore, it is necessary to define a task force to distribute responsibilities concerning the implementation of the knowledge management involvement. Phase 2 is concerned about the design. To design an acceptance-oriented knowledge management involvement, a specific content analysis should be conducted making visible the actual situation and the desired goals of the planned knowledge management involvement. Using the results of the content analysis, a differentiated concept concerning individual, organizational and technical aspects can be developed. Phase 3 is concerned about the realization of the involvement, based on the conceptualization, considering individual, organizational and technical aspects. In phase 4, the rollout of the involvement takes place. It should follow a well-elaborated communication strategy, which takes into account the communication before, in-between and after the rollout and should be evaluated according to the goal setting with regard to the effects.

2.1.3. Types of Knowledge

Knowledge is intangible, dynamic, and difficult to measure. It is classified into tacit and explicit knowledge. Tacit knowledge is subjective, difficult to transmit, and is informal, learned with experience over time, and usually applies to a specific situation. It covers the experience, thinking, competence, commitment, and deed. But explicit knowledge is objective and easy to communicate. The reason why it is easy to communicate is that; it is easily retrievable while tacit knowledge is locked in the head of an individual and becomes complex to obtain (Oghenemarho, 2015). Explicit knowledge covers topics that are easy to systematically document and share out at scale. These types of explicit knowledge are all things that have traditionally been what has been captured in a knowledge base or as part of a KM strategy. It formalized data, information, documents, records, and file. Nevertheless, knowledge can be transformed between these two forms because they are complementary.

In summary, tacit knowledge refers to the internalized knowledge that individuals in an organization possess and where he or she might not be aware that they have the knowledge about how they accomplish particular tasks. On the other hand, explicit knowledge is the knowledge that individuals in organizations know that they have and are conscious of it.

Table 1. Comparison Properties of Tacit Knowledge and Explicit Knowledge

Tacit Knowledge	Explicit Knowledge
Ability to adapt, to deal with new and exceptional situations	Ability to disseminate, to reproduce, to access, and to reapply throughout the organization
Expertise, know-how, know-why and care-why	Ability to teach, to train
Ability to collaborate, to share a vision, to transmit a culture	Ability to organize, to systematize; to translate a vision into a mission statement, into operational guidelines
Coaching and mentoring to transfer experiential knowledge on a one-to-one, face- to-face basis	Transfer of knowledge via products, services, and documented processes.

Adopted from: (Kimiz, 2005). Knowledge Management in Theory and Practice

2.1.4. The Role of Knowledge in Organizations

The everyday life of any individual or organization consists of numerous decisions and choices for which obtaining relevant knowledge and creating a new one is essential. The source of competitive advantage lies within the firm in the form of its people and their knowledge, not in how it positions itself in the market. Thus, knowledge is increasingly recognized to underlie the success of all enterprises. It is the agent that generates visions, the ingredient that drives people's reasoning, and the capability that leads to intelligent behavior. Knowledge is the factor that creates value for the organization and it is judged to be the most valuable asset that an organization has. However, there is still no absolute measurement matrix in the literature to measure the success of a KM effort at an organization, though there are various measures in practice.

To manage knowledge, employees need to know "enough" about it and all the relevant aspects that pertain to identifying its present state, handling any problems, envision and create knowledge-related opportunities, and making the required changes that will bring about the desired results (Prusak, 1996).

The more people know, the easier it is to learn and to provide quality work. Therefore, organizations should provide their employees with better knowledge and insights into what knowledge is and give them a better understanding of thinking about thinking. These capabilities help individuals and organizations alike and can lead to:

- Improved learning and ability to stay ahead of competition and changes in the world.
- Better problem solving and decision-making.
- More innovation and greater creativity.
- Higher quality knowledge work.
- Improved knowledge embedded in products and services.

- More effective networking & collaboration.
- Greater vigilance and energetic behavior.

Thus, organizations must identify, generate, acquire, diffuse, and capture the benefits of knowledge that provide a strategic advantage to that organization and must always organize, direct, facilitate, and monitor knowledge-related practices and activities.

2.1.5. The Four Pillars of Knowledge Management

The pillars of the KM include leadership, organization, technology, and learning and the success of an organization depends principally on these pillars.

Leadership develops operational strategies to survive and position for success in today's dynamic environment. In addition, the management of the organization plays a role of leadership through identifying the knowledge, and based on the knowledge, set a vision, mission, and strategies. This is all about setting the road map or directions, based on the knowledge regarding the internal and external factors. Leadership actually helps to make the cultural changes in the organization to integrate with the new trends and a good leader identifies what is required at the right time and accordingly executes the strategies.

Organization process within an organization which modulates and shapes its performance. It organizes a support values for the KM and also develops the relative people's engagement. The organization of knowledge creation and collaboration should be intertwined throughout the organization and also operational processes must align with KM framework and strategy, including all performance metrics and objectives. The application of this pillar of KM is critical for the organization because it helps in organizing the knowledge for better performance of the organization.

Technology enables and provides the entire infrastructure and tools to support KM within an enterprise. While cultural and organizational changes are vital to achieving a KM strategy. Collecting and connecting the knowledge in an organization is the main function of this particular pillar. Technology is the main sources

in the modern organizations to derive and share the knowledge in a lucrative manner, and accordingly, the management and all key stakeholders are engaged prominently. Moreover, technology can offer great advantages, particularly with the management of explicit knowledge, as a collaboration tool, and as an expert locator. However, technology should not be misused – it is just one important component of a KM strategy. A lack of the proper tools and technology infrastructure can lead to failure.

Learning is the best tool, thus process alone will not achieve a KM strategy. So, people are responsible for using the tools and performing the operations. Organizational learning must be addressed with approaches such as increasing internal communications, promoting cross-functional teams and creating a learning community. Learning is an integral part of KM. In this context, learning can be described as the acquisition of knowledge or a skill through study, experience or instruction.

Enterprises must recognize that people operate and communicate through learning that includes the social processes of collaborating, sharing knowledge and building on each other's ideas.

2.1.6. Knowledge Management Strategies

The evolution of KM theories and learning approaches has its impact on KM strategies adopted by organizations. These KM strategies help to structure the organizational knowledge base and to accumulate strategic knowledge. Building their KM strategies organizations tend to go through similar stages of their strategic vision on how to create the organizational knowledge base and to accumulate strategic knowledge.

The knowledge management activities must have knowledge management strategies to operate; otherwise the activities will not be coordinated and will not produce the expected KM benefits. Nicolas (2004) point out that there are three knowledge management strategies, in particular:

2.1.6.1. Technological KM Strategies

Technological strategy (codification strategy) is designed to structure organizational knowledge in a better way. Individuals have to express explicitly their knowledge in order to transfer it via the database. Codification can be a good mechanism to store large amounts of knowledge and to create an organizational memory for all employees (Goodman & Darr, 1998).

By codification strategy the knowledge is shared through integrating processes between individuals and groups, sharing prior project documents informally, manuals written voluntarily, processes institutionalized in routines and structure, database of project abstracts, proposals and resumes.

2.1.6.2. Personalization Strategy

In personalization strategy, the knowledge sharing is attached to the person who developed the knowledge, and the experience is shared through direct interaction (Hansen et al., 1999). Personalization as a knowledge sharing mechanism has the inherent flexibility of transmitting tacit knowledge, and allowing for discussions and sharing interpretations that may lead to the development of new knowledge (Prencipe & Tell, 2001).

Knowledge is shared through meetings amongst communities of individuals interested in a particular topic area, meetings amongst high level staff, word of mouth, sharing information through approaching individuals with deep institutional knowledge, informal one-on-one discussions, building a transitive memory, where individuals specialize in different areas, and are referred to for specific expertise.

2.1.6.3. Socialization KM Strategies

This strategy combines both technological and personalization KM strategies. Knowledge communities, that is to say, groups of people inhabiting the same knowledge space and interacting with each other through relationships, represent socialization. Socialization KM strategy is designed to exchange and pool knowledge. Thus, for the evolution of

KM, scholars acknowledge the growing importance of social and cultural factors, as well as attention that needs to be paid to strategic alignment of KM activities with overall organizational needs.

2.1.7. Knowledge Management Practices

The processes of KM involve knowledge acquisition, creation, refinement, storage, transfer, sharing, and utilization. The KM function in the organization operates these processes, develops methodologies and systems to support them, and motivates people to participate in them.

2.1.7.1. Knowledge Capture and Acquisition Practices

According to Schwartz and Brasethvik (2000) knowledge acquisition is concerned with how to collect knowledge from members of the organization or other sources and store that knowledge in an organizational memory. A knowledge acquisition process in an organization aims at obtaining knowledge from both internal and external sources.

Organizations need to identify the knowledge gap and then determine the skills necessary to fill the gap. Then recruit employees who will come in with the knowledge that is required so that it can have a positive effect on organizational performance.

Employees need *training* in their specific areas of specialization. When employees are taken for training they acquire new knowledge. This empowers them to be able to make the right decisions and be innovative besides increasing the organizational memory.

Expert Systems are systems where knowledge of the experts that has been converted from tacit knowledge to explicit knowledge is captured and stored. In the expert system, the knowledge is preserved for future use in performing specific work processes.

Liou (1990) as cited in Wamundila (2008) explains that brainstorming is a group method for developing ideas and exploring their meaning. This usually occurs in boardrooms, through such discussions new ideas are generated and they are usually captured in form of minutes.

Mentoring is a relationship that happens within a work environment where an advanced employee helps a less experienced employee to develop certain areas that may be specified or unspecified.

2.1.7.2. Knowledge Sharing Practice

Turban et al., (2004) define knowledge sharing: as the willful application and transfer of one or more person's ideas, insights, solutions and knowledge to another person(s), either directly or via an intermediary, such as a computer-based system. This definition explains that organizations should have systems in place that help the process of knowledge sharing.

Various practices promote knowledge sharing within the organization, for instance incentives, rewards and communities of practice. Technologies encourage and promote interaction among employees leading to sharing and exchanging knowledge. Besides encouraging interaction, these technologies capture and store the exchanged ideas. The outcome of knowledge sharing is the creation of new knowledge and innovation that will improve organizational performance.

A number of obstacles can hinder knowledge sharing within organizations. The common obstacles are the notion that knowledge is property and ownership and the expectation that the provider is unsure that the receiver will understand and correctly use the knowledge or the recipient is unsure about the credibility of the knowledge in question. Thus maintaining the connection between knowledge and the people who are knowledgeable about it and an organizational culture that encourages discovery and innovation are paramount in any KMS. KM is a complicated process; it is based on the strategies as well as the support of the leadership, culture, assessment and technical factors etc. This is summarized by Tsai et al. (2006) in their proposed model for the exchange of knowledge (see fig. 1).

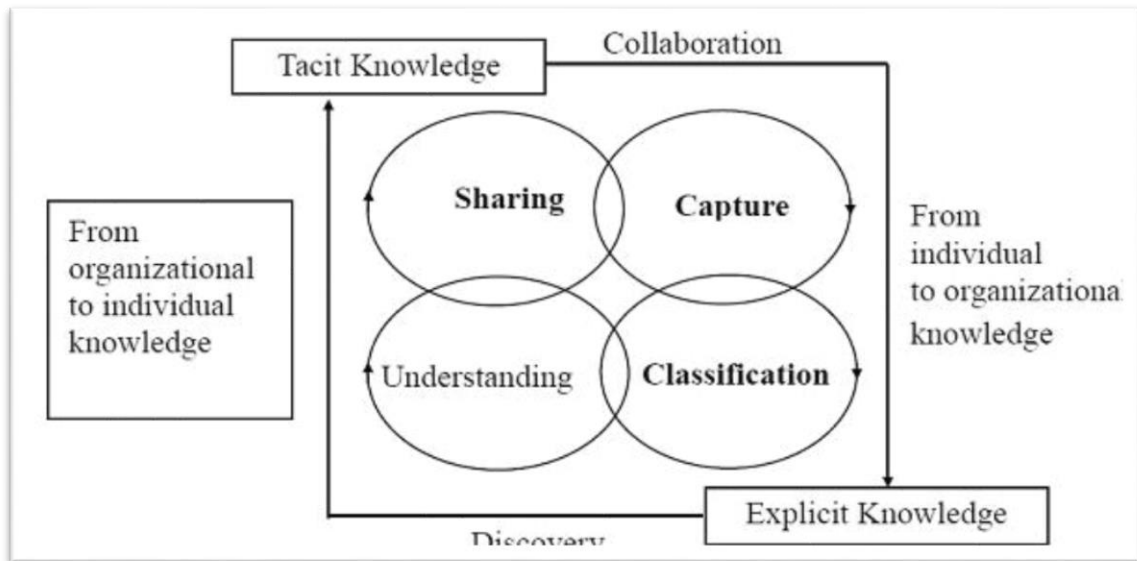


Fig 1. Ovum Structure for Knowledge Exchange and Integration

Adopted from: (Tsai et al, 2006)

2.1.8. Existing Comprehensive Approaches to KM in Project Based Organizations

Regarding project-based KM some studies provide an overview of KMS. Thus, Sense (2004) argues that offering a model or framework for learning in project management (PM) environment can be oversimplification for such complex and dynamic situation. Instead, in order to aid and promote a systematic focus on learning within PM process, he suggests a “learning architecture”, which includes five interdependent elements:

- The learning relationships between participants in the project team;
- project team and how they impact situated learning;
- The KM approaches engaged within a project team;
- The mandate for learning and the on-going support provided by both the project and the organizational environments;
- The pyramid of authority that participants in the project team individually and collectively possess and The understanding of different cognitive styles in operation within the

A new vision in the academic studies with regards to project-based KM was reflected in a model elaborated by Lindner and Wald (2011) who built KMS on three major blocks that are equally important: culture and leadership, organization and processes and information technology(IT) systems. Moreover, the authors acknowledge the importance of both tacit and explicit knowledge and see the conversion of the former into the latter as a crucial and difficult step in the organizational knowledge process (Lindner & Wald, 2011). Similarly, a conceptual framework suggested by Akhavan et al. (2014) also combines the majority of the findings highlighted in the literature review above and divides success factors for project-based KMS into three levels:

- Level one: the culture of an organization, organizational structure and organizational strategy;
- Level two: support of head managers and project managers, project goals, education and technology;
- Level three: factors of motivation, experimentation, evaluation, network expertise, developing R&D and systematic documentation.

2.1.9. The Role of Information Technology in Knowledge Management

In a KM strategy technology is an instrument in a collection of processes that govern the creation, dissemination and utilization of knowledge to fulfill organizational objectives. An information system is a set of people, procedures, and resources that collects, transforms, and disseminates information in an organization (James, 1993). Developing and using information technology can be as difficult and costly as it is beneficial to firms. Thus, it is important to understand concepts such as information resource management and information systems planning, implementation, and control as well as important international and ethical issues in information systems (Ibid).

Effective knowledge management requires appropriate use of organizational strategies as well as IT. The KM strategy must be congruent with the competitive strategy of the

organization (Hansen et al., 1999), and the organization must have the appropriate IT infrastructure for implementing the KM strategy (Alavi and Leidner, 1999). We consider IT to be an essential enabler of organizational KM. While the degree of reliance of a KM initiative on IT is contingent on the KM strategy adopted by the organization, IT is likely to play a crucial role in implementing most KM initiatives. It is, therefore, critical to understand the role of IT in KM.

All IT functions with the exceptions of communication, coordination, and group process support are useful in facilitating combination. Internalization converts explicit knowledge into tacit knowledge. Knowledge location, browsing, filtering and retrieval functions are useful in finding appropriate knowledge, while analysis and presentation functions are useful in assimilating knowledge from its explicit form into tacit form.

2.1.10. Content Management in a Knowledge Management Context

Knowledge management is increasingly becoming an important area for every enterprise; it is the process of creating, sharing, using and managing the knowledge and information of an organization. Today the knowledge is in the form of content generated and used within an organization. Organizations face challenges in collating, tagging, identifying, storing, retrieval, reuse, archival and disposal of this content. Enterprise content management (ECM) aims at managing all of the unstructured information or content in an enterprise. ECM manage content or information that exist in an enterprise in different digital formats viz., text documents, spreadsheets, still images, audio and video files, and many other file types and formats. Content-based solutions involve explicit or well defined and accepted knowledge. They enable asynchronous and synchronous interactions to get knowledge from a source to someone who needs it.

Many models and definitions of KM suggest that a solid foundation of good information management is required. The main outputs of organizations are informational products such as reports and other official documents, as opposed to physical widgets.

Within the heading of information management, the types of information are often broken down further into two groups; *structured information* is the types of information that fit well into the structured environment of rows and columns in a database. This includes the types of information that is presented via Enterprise Resource Planning (ERP), Customer Relationship Manager (CRM) or Human Resources Management (HRM) applications and unstructured information is the types of information that do not fit will into rows and columns. This information includes office documents, audio files, videos, and other complex assets.

An ECM strategy can be seen as a supportive, enabling strategy which also impacts on the other labeled intersections. The diagram below includes human resource management to capture full components of KMS.

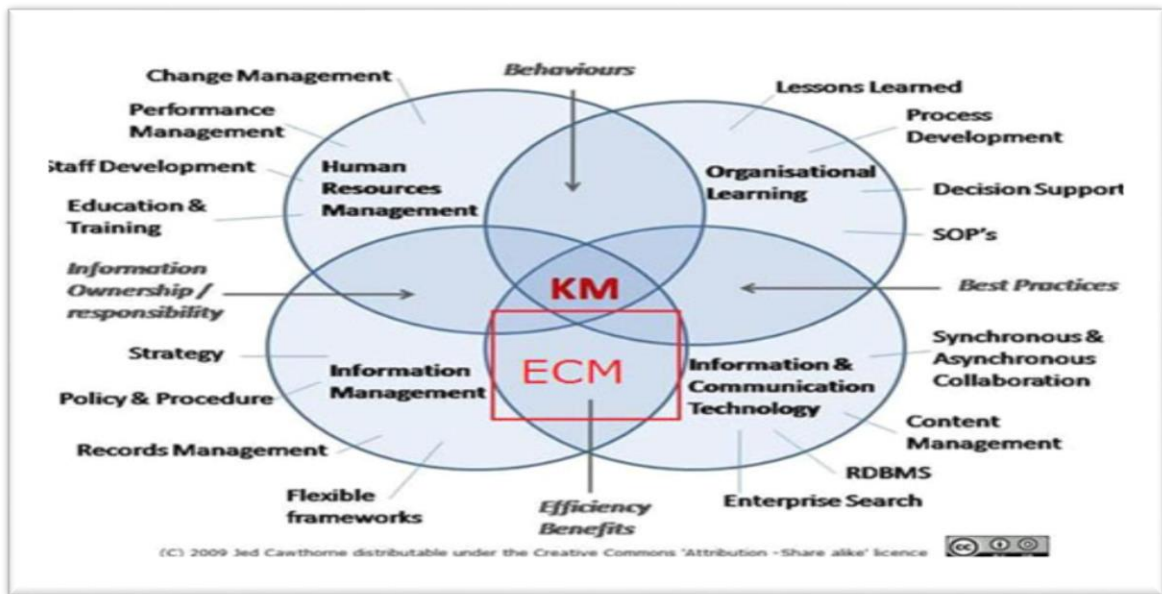


Fig. 2 Enterprise Content Tools Linkage

Adopted from: (Prescient Digital Media, 2012), **Content Management in a KM Context**

2.1.11. Motivation for Knowledge Sharing

Motivation is the process of inducing the employees of an organization to act in a predetermined desired manner so as to achieve organizational goals. Successfully implementing knowledge management systems depends on employee behavior (Park et al, 2004), especially on knowledge sharing among employees. And the role of motivation and commitment of knowledge is being increasingly realized as a critical success for implementation of knowledge management systems. Many researchers have also observed that the motivation to create, share, and use knowledge is an intangible critical success factor for virtually all knowledge management projects.

Many individuals dislike sharing their knowledge, may be due to lack of incentives or they feel that their colleagues do not want to learn something from them. Thus, knowledge management practices must first identify ways to encourage and stimulate the ability of employees to develop new knowledge. A presence of rewarding system in an organization can enhance knowledge sharing within employees.

Rewards can either be extrinsic or intrinsic, material (financial and non-financial) or moral. Financial and recognition rewards are important to encourage employees to put effort in line with organizational objectives. However, this can be a challenge, rewards and recognition have to be carefully planned out in order to take into account the dynamics of intrinsic and extrinsic motivation, and to prevent undesired behaviors.

2.1.12. Problems Related to Implementing KMS in Practice

Skyrme and Amidon (1997) discovered that when trying to reach potential benefits from KM, companies face a number of recurring challenges with justifying the investment, creating a knowledge sharing culture, defining the scope of knowledge initiative, gaining the support from top management, nurturing networks, choosing appropriate technology, and balancing systematization, creativity and innovation in knowledge management. Thus the leaders believed in efficient KM must first identify the core barriers that prevent the implementation of KM of the organization. Ray (2014) suggested the core barriers that can prevent the implementation of KM practice strategies are: a) Time, b)

Organizational culture, c) Teamwork, d) Trust, e) Leadership, f) Lack of employee participation, and g) Lack of project learning resources.

Furthermore, the cultural values of project team members can affect the outcome of projects (Jetu & Riedl, 2013). Thus, organizations should have a culture where employees are aware of the organizational values, and the standards of behavior team members should portray. Beside this, many employees also do not want to share their knowledge because of distrust and suspicion. (Tong et al, 2015) and people want to gain knowledge, but without organizational wide trust, knowledge sharing will not increase among employees (Waheed et al, 2013). Knowledge hiding is another barrier to knowledge sharing. Generally, barriers can negatively affect KM if processes are not in place for improving knowledge barriers (Akhavan et al., 2014). Table 2 illustrates the five dimensions of barriers to knowledge flow.

Table 2 Five Dimensions of Barriers to Knowledge Flow

Dimension	Barriers for knowledge flow
Knowledge characteristics	<ul style="list-style-type: none"> • Ambiguity • Non-validated knowledge
Knowledge source	<ul style="list-style-type: none"> • Unwilling to devote time and resources to sharing knowledge • Low awareness and realization of knowledge sharing • Not adequately rewarded • Lack of trust in people • Lack of absorptive capability • Lack of retentive capacity • Lack of contact time and interaction • Difficult relationships
Contextual factors	Culture and cultural characteristics Organizational structure Poor physical work environment Excessive size of business units Time and resource constraints Lack of organizational incentives Lack of leadership

Context differentiation	Competitiveness Different languages Overly technical terminology
Mechanisms	Lack of tangible mechanisms such as telephones, conference rooms or computer networks Failure to develop a trans-active memory system Lack of intangible mechanisms such as unscheduled meetings, informal seminars, or coffee break conversations Lack of integration of IT systems and processes Lack of training regarding new IT systems

Adopted from: (Lin et al, 2012)

2.2. Empirical Literature Review

2.2.1. International Studies

Dorothy et al (2006) examined that the role of culture in KM approaches, broadly considered to entail either a focus on organizing communities or a focus on the process of knowledge creation, sharing, and distribution. The findings suggest that organizational culture influences the KM approach initially chosen by an organization, the evolution of the KM approach, and the migration of knowledge. Moreover, the findings suggest that KM eventually can become an integral aspect of the organizational culture.

Alexander, (2010) in his research findings indicates organization of outsourced training and common activities between projects teams, organizations appear to be able to bring in new knowledge from outside or to create it inside of the organization. Another finding is related with the theory of organizational change. It was proved in practice that an open problem-solving atmosphere, which could be created by application of brainstorm sessions and openness of upper management, is a positive influence in acceptance of change among employees. According to the results this can be achieved, particularly through revision of knowledge base with previous projects, using of knowledge-based decision-making system, organizing of training programs and collaborative activities among project teams.

Oghenemarho (2015) using both qualitative and quantitative methodologies to capture all the relevant experiences of senior managers his findings revealed a number of KM variables that either facilitated or limited the effectiveness of KM based systems. The framework delineates the key variables that influence KM based systems and highlights how value enhancing practices can be managed and implemented.

The study result of Pearl(2004) reveals that, engaging in KM activities, that is, creating, capturing, sharing and utilizing knowledge to achieve the library goals. KM is a viable means in which academic libraries could improve their services and become more responsive to the needs of users in the university. People gain knowledge from their experiences and their peers' expertise. Academic libraries need to recognize the knowledge its staff and create an environment in which their knowledge can be valued and shared.

2.2.2. Local Studies

Haftamu et al (not rated) using quantitative and qualitative study methods, the finding of the study revealed that the perception level of KM practices among academic and non-academic staffs of the University is different and technology was least problematic. But, leadership is the most problematic from the four pillars (technology, leadership, organization, and learning) with respect to the current KM practices in the University.

Chala et al (2016) using a cross-sectional research design, qualitative and quantitative methods the most predominant and convenient tools for knowledge sharing were face to face communication like review meetings, workshops rather than computer and web based application. The possible reasons could be poor ICT infrastructure and resource, poor attention from management and staffs, lack of familiarity with ICT and lack of skilled personnel in the field of information and KM.

Hermella (not rated) based on the exploratory survey conducted, found that higher it appears that the vast majority of the firms examined are doing at least some initiatives in the levels of organization readiness for KM were indicative of more commitment and less pessimism about KM. The majority of the organizations who participated in this study

recognize the importance of managing knowledge and claim to be making serious attempts to establish active KM initiatives. Despite this enthusiasm, the actual implementation of KM still tends to be conducted on an informal, ad hoc basis with little evidence of effective co-ordination among departments.

Staff and knowledge workers in these organizations are actively involved in sharing information and knowledge resources as and when required for speeding up working processes. This positive attitude towards knowledge sharing with colleagues and stakeholders is a key conducive behavior to boost growth of KM. Staff and knowledge workers in these organizations are actively involved in sharing information and knowledge resources as and when required for speeding up working processes.

2.3. Research Gap

This study aims to review different study areas on the topic and to analyze the primary data collected from respondents to conclude the factors that determine the application of knowledge management practices in expressive detail. There are already considerable studies on the subject of knowledge management practices in different organizations. However, as to the knowledge of the researcher, there is no assessment carried out on the main factors that determine the practices of the selected directorate. Thus, the current level of KM practice at the directorate seems complicated. This study tries to fill the above-mentioned gaps by examining the responses or evidence given by respondents.

2.4. Conceptual Framework of the Study

KM is gained from multiple academic and practitioner sources, thus there is no particular set theorist of the framework. However, the unified framework designed by Oleksii& Ekaterina, (2016) for the knowledge management project-based organizations is selected by the researcher to be a theoretical framework of the study. The effective use of knowledge assets will result from the effective management of systematic, explicit, and deliberate knowledge (Wiig, 1997). Thus, the KM framework is applicable to this research study to explore the KM practice strategies project management business leaders use to improve knowledge sharing in project-based organizations. Even so, the implementation of KM practice strategies for knowledge sharing needs basic

understanding of organizations leader. The critical elements that should be applied in the KM practices are visualized in Figure 1 below.

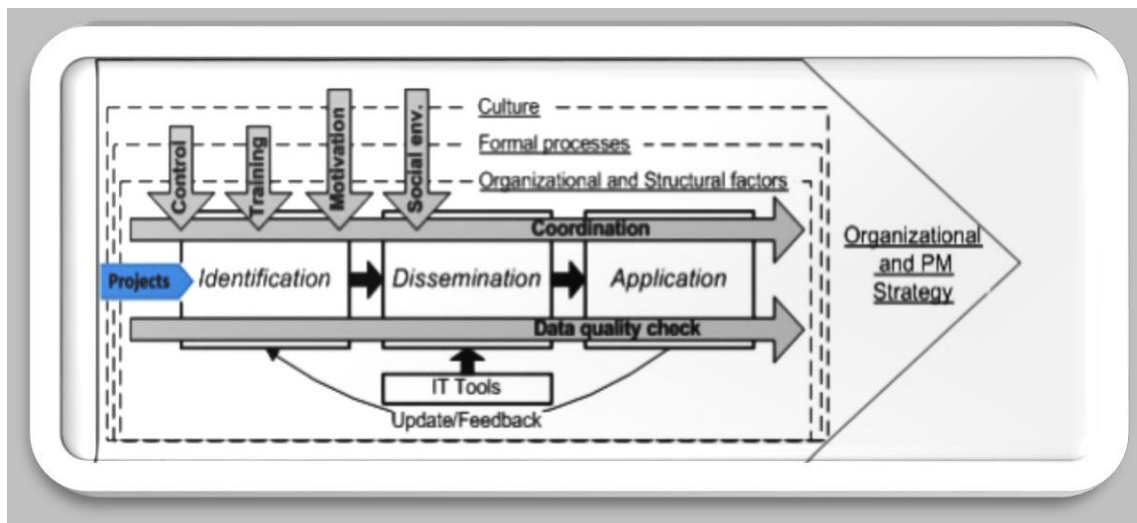


Fig3: Suggested Conceptual Framework. *Adopted from: (Oleksii. & Ekaterina,2016)*

The framework above presents the major stages of the KM process: identification, dissemination, and application. These stages are sequential and imply the loop connection, meaning that the results of knowledge circulation and following changes must be used for the process improvement and update.

Also, the stages described are institutionalized and guided by the natural organizational boundaries, such as culture, formal process, organizational and structural factors. All of them are aligned and directed by general organizational strategy. The KM stages are coordinated, and the data control checks are applied on all levels. Throughout the organizational layers, the overall control of the process is being performed. The KM process is encouraged by the motivation policy on different levels together with the creation of a social environment, which facilitates the initial informal exchange of information. On the diagram, the arrows of Culture, Training, Motivation, and Social environment start from the relevant organizational boundaries, which supposedly influence them the most. From the side of tools application, IT systems are critically required on the stage of data dissemination (including its accumulation in a centralized database).

The four enterprise engineering pillars are leadership, organization, technology, and learning in support of enterprise-wide knowledge management initiatives. In application, the pillars represent critical success factors for KM implementation. To achieve a basic entry-level KM program, it has been determined that all four pillars must be addressed.

Leadership develops business and operational strategies to survive and position for success in today's dynamic environment. Successful implementation of a knowledge management system requires a champion or leader at or near the top of an organization who can provide the strong and dedicated leadership needed for cultural change.

The value of knowledge creation and collaboration should be intertwined throughout an enterprise. Operational processes must align with the KM framework and strategy, including all performance metrics and objectives. While operational needs dictate organizational alignment, a KM system must be designed to facilitate KM throughout the organization.

Technology enables and provides all the infrastructure and tools to support KM within an enterprise. While cultural and organizational changes are vital to achieving a KM strategy, a lack of the proper tools and technology infrastructure can lead to failure. Properly assessing and defining IT capabilities is essential, as is identifying and deploying best-of-breed KM software and IT tools to match and align with the organization's requirements

Organizational learning must be addressed with approaches such as increasing internal communications, promoting cross-functional teams, and creating a learning community. Learning is an integral part of knowledge management. . Enterprises must recognize that people operate and communicate through learning that includes the social processes of collaborating, sharing knowledge, and building on each other's ideas. Managers must recognize that knowledge resides in people, and knowledge creation occurs in the process of social interaction and learning

CHAPTER THREE

3. METHODOLOGY

3.1 Study Design

Research design is the outline, plan, or strategy used to arrive at findings for a research question (Johnson & Christensen, 2004). This study conducted a descriptive research design to establish an efficient knowledge management practice for the selected directorate at African Union. A descriptive analysis is concerned with specific predictions, with the narration of facts and characteristics concerning individual, group, or situation. The main sources of data are managers and staff of the directorate. According to the recommendations of Creswell (2003), the literature review was used to provide direction for the research questions, and the tools in the assessment were adopted from South African, Nigerian, and Sweden studies which have revealed adequate data on the topic. Thus, the researcher used both questionnaires and interview schedules.

The author of this paper is a member of the AU who proposed this research idea for the directorate's benefit. Background to the directorate evaluation process and evaluators are briefly described to verify the accuracy of the data and at the same time, the reliability of the research outcomes. This study was designed to support the development of organizational excellence, recognizing the need for implementation and integration of knowledge concepts in the operations of the organization.

3.2. Study Area

The African Union (AU) is a continental union consisting of 55 member states located on the continent of Africa. The AU was announced in the Sirte Declaration in Sirte, Libya, on 9 September 1999, calling for the establishment of the African Union and launched on 9 July 2002 in Durban, South Africa (Thabo, 2002). The intention of the AU was to replace the Organization of African Unity (OAU), established on 25 May 1963 in Addis

Ababa by 32 signatory governments and to promote unity and solidarity of African states, to spur economic development, and to promote international cooperation.

Administration and human resource directorate is one of the main directorates of AU, consisting five divisions, namely human resource, management information system, administration and facility, safety and security and procurement with 5 heads and 55 staffs totally 60 employees.

3.3. StudyPopulation

All five division heads and staff of administration and human resource directorate were considered as a study population. According to the human resource department of the organization 2020 report, the total number of registered staff is 60 and of which 5 of them are leaders and 55 are employees.

As a mechanism of addressing the validity of a research undertaking, this study has two sample frames. The first sample frame contains 5 interviewees (managers) and the second sample frame has contained 55 staff for close-ended questions. Thus, the total size of the study or participants was 60.

3.4. Data Collection

The main tools of data collection for this study were closed-ended questionnaires and interview schedules and the questionnaire design was based on the objectives of the study. The questionnaire had two broad parts: the introduction part was in which the researcher introduced himself and objectives, and the second part was covered instructions for answering the questions.

The content of closed-ended questions was from the literature review and used a five-point Likert scale in which respondents tick the appropriate choice, so they are easy to complete and analyze.

The interview approach was done to investigate the role of knowledge management and the implementation of KM in the directorate. The interview questions were made by way of probing and prompting.

3.5. Data Analysis and Presentation

Data analysis refers to the process of generating value from the raw data (Johnson & Christensen, 2004). Since this study employed a mixed approach to data collection data was analyzed using the preferred data analysis techniques.

3.5.1. Interview Data Analysis and Presentation

Data collected through interviews was analyzed using content analysis based on analysis of meanings and implications emanating from respondents' information. Microsoft word processing program was used to group similar themes together by copying and pasting related themes after which the researcher summarized answers.

3.5.2. Close ended Questionnaire Data Analysis and Presentation

After data collection was completed, data analysis strategies were applied to analyze the collected data. The forms were firstly checked for the accuracy of data entry and for missing values. Descriptive statistics analyses using SPSS software version 26 were next conducted to provide an overview of the sample and summarizing the demographic details of the respondents.

CHAPTER FOUR

4. Results and Discussion

4.1. Results

4.1.1. Interview session

Of the five division heads planned for interview four of them (80%) gave their response see Table 3 below.

Table 3. Interview Questions and Answers

No.	Interview Questions	Answers by Division Heads			
No.	Interview Questions	Abdoulaye Doucoure (Head of Management Information System Division)	Carine Toure Yemitia (Head of Procurement, Travel & Store Division)	Rico Bien Aime (Head of Administration & Facilities Management Division)	Hamza Sahel (Head of Human Resource Management Division)
1	Does the organization have a knowledge management practice system that employees can upgrade themselves for a better performance of organization? If any please explain.	The organization has Microsoft Teams, Bitrix and the knowledge database developed by MIS. Unfortunately, only few people are using these tools.	Yes under by populating in the official web page through Learn and Development Unit.	It does not have a knowledge management practice system that employees can upgrade themselves. However, it has a Library and internal communication system as well social media groups to share knowledge.	Not yet. The organization in the past has attempted to implement and practice a knowledge management system but it is distributed and insufficient.
2	Do you believe that the current knowledge management program of your organization contributes for the achievement of the overall organization strategic goals?	I don't think so. Thus, the AU should more invest in training to enforce the usage of the available tools for knowledge management.	It can be improved by making it smart, robust and tailored to the environment.	I would say a well-managed knowledge management system would definitely contribute to the achievement of the overall organization strategic goals. But the Organization does not have such system.	No. There is no tangible platform of knowledge management, and also it lacks alignment and direct relation to the organization's strategic goals.
3	What types of practices are used in your organization for process improvement and	The performance evaluation related to SAP is the main tool. Unfortunately, the correlation between this	Online, interactive, synchronous and asynchronous . Developed	The Division of HRM had benefited from JICA to improve its processes using the KAIZEN method. And	Ad-hoc practices are driven by initiatives of individuals hence lack a systematic approach

	employees' training?	performance evaluation is not properly ensured.	smart feedback collection system.	continued through brainstorming sessions with the team.	resulting in unrelated and harmonized outcomes.
4	What is your future opinion about developing knowledge management systems/application s/cultures for your organization?	A KM system is very useful for any organization especially when the turnover is very high (like AU). A whole department should not be stacked because a resource left.	I know it's in the good path to improvement by adopting existing benchmarks from other organizations of same level.	It is my strong belief that a well-managed knowledge management system could bring an added value to the Organization.	Knowledge is key to achieve organizational goals. Organizational top down approach of knowledge flow and knowledge management system must be put in place to improve all aspects of Knowledge management its desired outcome.
5	Does your organization have content organization system? If yes, please explain the strategies it uses?	No. I am not aware.	Yes, but it is my knowledge, still at a very low level.	The Organization has digital systems to organize its Archives and the internal communication Memos.	No. I have not come across content organization system as well as strategies.
6	Do you have a motivation system? If yes, please explain the some of them?	There was a ceremony of appreciation for the best performers in each department. But since 2018 the system has been abandoned	No	NO	There is none.
7	What are the problems your organization is facing in practicing knowledge management?	The biggest problem of my organization is strategic planning. There is no relationship between the planned activities and the available budget. Therefore, the knowledge management fully implementation may be affected also.	Needs the commitment at the political level. Enhance lateral and vertical team work	The staff believes that being indispensable is the key to keep one's job. Therefore, knowledge is considered powerful and used mostly when needed to hurt other colleagues seen as threats. Therefore, not many staff members are keen on sharing their knowledge unless it benefits them personally.	Lack of Executive sponsorship and organizational culture. African Union is supposed to be a knowledge organization, but it currently does not have any of the traits of the so-called knowledge organization.

Table 4. Summary of the Interview Answers

No.	Central Points or Revealed Points	Suggested by
1	The organization has a weak knowledge management practice that employees cannot upgrade themselves for a better performance of organization. However, the knowledge database developed by MIS, Library, internal communication system and social media groups, and articles are available to share a knowledge	Rico Bien Aime & Abdoulaye Doucoure, (2020)
2	There is no tangible platform of knowledge management and it lacks alignment and direct relation to the organization's strategic goals	Hamza Sahel, (2020)
3	The Directorate has benefited from the JICA to improve and automate some of its processes using the KAIZEN method. There is also Ad-hoc practices driven by individuals, which lacks systematic approach resulting in unrelated outcomes.	Rico Bien Aime & Hamza Sahel, (2020)
4	It is a strong belief that a well-managed knowledge management system and organizational top down approach of knowledge flow and knowledge management system must be put in place.	Rico Bien Aime & Hamza Sahel, (2020)
5	The organization has digital systems to organize its archives and the internal communication memos. But we have not come across content organization system as well as strategies	Rico Bien Aime & Hamza Sahel, (2020)
6	A couple of years ago, we used to have a ceremony of appreciation for the best performers in each department. This shows at present there is no motivation platform to encourage employees to share knowledge.	Abdoulaye Doucoure, (2020)
7	The implementation of knowledge management is fully affected by poor planning and it needs the commitment at the political level. Knowledge is considered as power and used mostly when needed to hurt other colleagues seen as threats and many staff are not keen in sharing their knowledge unless it benefits them personally	Abdoulaye Doucoure & Rico Bein Aime, (2020)

4.1.2. Close Ended Questionnaires Session

Of the total 55 calculated study participants 50 were approached and participated in the study. This shows that the response rate of 91% and Kothari (2006) asserted that, a response rate of 50% is adequate, while a response rate greater than 70% is very good.

4.1.2.1. Demographic Information

Table 5 Demographic Information

Variables	Frequency(n = 50)	Percentage (%)
Age group in years		
18 - 30	5	10
31 - 40	33	66
41 - 50	7	14
51 - 60	5	10
Sex		
Male	23	46
Female	27	54
Employment type		
Fixed term	24	48
Regular	9	18
Short term	9	18
Special service	8	16
Educational qualification		
Diploma	-	-
First degree	10	20
Masters	40	80
Doctorate degree	-	-
Service years		
1 - 5	9	18
6 - 10	23	46
11 - 20	14	28
Above 20 years	4	8

As shown in Table 4 above, 33 (66%) of participants were in the age range of 31 – 40 years and it indicates the majority of staffs are middle-aged adults. Twenty-seven (54%) male and 23 (46%) were female and it shows that proportional gender

employment. Concerning the level of education, 40 (80%) of participants have a master's degree and if the directorate manages fair these employees it could be benefitted more.

4.1.2.2. The State of Leadership in the Directorate

For the questions below (Table 5), the general response of the participants (41%) shows that the management has no attention and motivation platform for the enhancement of knowledge sharing system and an effective environment of divisions.

Table 6. The State of Leadership in Directorate/ Organization

No	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagreed
1	Knowledge gained from community of practice in my workplace is used for enhance service delivery	0%	48%	12%	32%	8%
2	We have an effective environment for collaboration within and between departments	0%	24%	18%	52%	6%
3	Information flows easily throughout the organization regardless of employee roles or other boundaries	0%	18%	12%	48%	22%
4	The management is aware of the importance of knowledge sharing	2%	32%	32%	24%	10%
5	Knowledge sharing among colleagues is considered normal in my company	0%	26%	20%	48%	6%
6	There is a brain storming sessions	0%	42%	12%	32%	14%
7	There is a motivation system that encourages employees to exchange their knowledge.	0%	2%	22%	52%	24%
*	Overall statement	0%	27%	18%	41%	13%

4.1.2.3. The State of Learning in the directorate

As the state of learning described by most of the respondents (38%), there is no continued organizational learning encouragement in the directorate (Table 6 below). Thus, the problems of increasing internal communications, promoting cross-functional teams, and creating a learning community must be addressed.

Table.7. The State of Learning in the Organization

No	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagreed
1	Knowledge capture/creation practices are satisfactory	0%	22%	32%	42%	4%
2	Continued organizational learning is encouraged	4%	22%	44%	26%	4%
3	There is an expectation to develop new skills and knowledge towards supporting innovation in the organization.	0%	28%	12%	50%	10%
4	There is Knowledge acquisition and application practices	0%	16%	42%	38%	4%
5	Experiences and know-how are transferred during workshops, seminars and meetings	0%	18%	38%	34%	10%
*	Overall statement	1%	21%	34%	38%	6%

4.1.2.4. The Level of Using Technologies in the Directorate

Table 8: The Level of Technologies Use in the Directorate

No	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagreed
1	Use of social medias are available	0%	74%	6%	20%	0%
2	There is a formal networks exist to facilitate dissemination of knowledge in my organization	8%	28%	38%	24%	2%
3	My company provides IT support for collaborative works	10%	80%	6%	4%	0%
4	The technological tools available at the organization for sharing knowledge are effective	14%	60%	18%	6%	2%
5	Innovation is a core value in this organization	0%	32%	34%	30%	4%
6	There is innovative solutions in our organization	10%	24%	30%	28%	8%
7	New system of knowledge acquisition and sharing is needed for the organization	24%	58%	10%	8%	0%
*	Overall statement	9%	51%	20%	17%	2%

The above survey (Table 7) wanted to check the availability of technologies used in support of knowledge sharing and the respondents indicated that there is a problem of technology use in the directorate. Thus, as nowadays the use of technology is mandatory the directorate must install the system for efficient use.

4.1.2.5. The Extent of Willingness of Knowledge Sharing in the Organization

The participants were asked to give their opinion on the extent of the willingness of knowledge sharing in the directorate and from the response it is observed that the majority of the respondents believe the extent of the willingness of knowledge sharing in the directorate is good (Table 8 below). Thus, it is advisable to continue in a better way.

Table9. The extent of willingness of knowledge sharing in the directorate

	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagreed
1	There is a culture of communicating and educating each other's.	6%	18%	12%	50%	14%
2	There is knowledge and experience dissemination practices between departments.	0%	18%	22%	48%	12%
3	I apply knowledge acquired through discussion to improve my work processes	0%	70%	18%	12%	0%
4	There is a coherent set of innovation goals and objectives that have been articulated	0%	26%	24%	46%	4%
5	I have a positive tendency of improving a project delivery process	32%	52%	16%	0%	0%
6	The management is aware of the importance of knowledge sharing	2%	38%	8%	48%	4%
*	Overall statement	7%	37%	17%	34%	6%

4.1.2.6. The State of Content Management and Use in the Directorate.

Today the knowledge is in the form of content generated and used within an organization. Thus organizations should be collecting, tagging, identifying, storing, retrieval, reuse of this content. However, in the case of the selected directorate, the majority (37%) of the respondents dissatisfied with the current management of contents in the directorate

(Table 9 below). Therefore, it is advantageous to arrange the necessary contents to facilitate knowledge sharing within the directorate.

Table 10: The State of Content Management and Use in the Organization.

No	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagreed
1	There are sufficient and updated contents in the organization	6%	16%	16%	58%	4%
2	There is an organized content management system in the organization.	12%	18%	14%	44%	12%
3	Content utilization is accessible and comfortable	6%	6%	50%	32%	6%
4	The organization has an interest to store enough contents.	8%	12%	48%	26%	6%
5	I am joyful in upgrading my knowledge from the contents of the organization	10%	38%	28%	24%	0%
*	Overall statement	8%	18%	31%	37%	6%

4.1.2.7. Barriers Hinder Inter-Professional Collaboration & Application of Information Technology in Your Organization.

The below questions were prepared to check if there is a barrier in the process of knowledge management at the directorate. And 53 % of the respondents agree (Table 10) that there is a barrier in the directorate. This concludes that knowledge acquisition, creation, sharing, and retention are inhibited by several factors. Thus, the directorate needs identification of these factors and should try to solve them in order to develop a suitable knowledge management practice in the directorate.

Table 11. Barriers Hinder Inter-Professional Collaboration & Information Technology Application in the Directorate

No	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagreed
1	Problem of knowledge ambiguity	14%	56%	22%	8%	0%
2	Unwilling to devote time and resources to sharing knowledge	16%	58%	22%	4%	0%
3	Lack of coordination between units and staffs	24%	64%	4%	8%	0%
4	Lack of competitiveness among staff	20%	44%	18%	14%	4%
5	Lack of integration of IT systems	18%	42%	6%	32%	2%
*	Overall statement	18%	53%	14%	13%	1%

4.2. DISCUSSION

As is presented in the previous chapter the investigator has used both interview questions and close-ended questions to assess the existing situation of the directorate knowledge management practice

According to Fathian et al (2008) to consider knowledge management assessment models, some points must be noted: the assessment models must be complete and be able to evolve the whole dimensions of organizational KM indicators. By considering such points, the study utilized mainly the four KM pillars: learning, technology, organization, and leadership; using the five-point Likert's scales as indicating point. And under each category different questions were set to gain broad ideas and the perceptions of staff in the current level of the problem were evaluated

The result of the study revealed that except for technology use the average score of the leadership, learning, and organization pillars in relation to the current level of KM practice in the directorate is below the average score or normal activity. This indicates that both respondents believed the level of KM in the directorate in relation to these criteria is below the normal performance or weak. Even though the perception between the two groups is different, it needs a more in-depth study for investigating the underlying causes.

The analysis of both interviews (heads) and close-ended questions (staffs) results showed that the majority of the participants were aware of the need of sharing knowledge in order to accomplish and succeed in their work and to extend and sustained organizational development and competency. However, the top management is not keen to organize and facilitate the necessary environment for the development of the knowledge management practice for the directorate. Also, there is no instigation for the development of knowledge management practice between divisions of the directorate. There is also no motivation and no sufficient and updated content in the organization that encourages employees to gain knowledge. This is similar to the study done by Haftamu et al (not

rated) in Jimma university, hence leadership is the most problematic of the four pillars with respect to the KM practices in the university.

Whereas, the participants believe considering priority for leadership will bring better improvement in the current KM practices. Also, awareness, and approach to the knowledge resource, organizational culture, reliance on technology and lack of trust, and insufficient management support were among the major factors mentioned by participants that negatively influence the success of KM practices in the directorate. According to Yeh et al (2006), KM enablers should be clear in an organization, because they not only create knowledge but also prompt people to share their knowledge and experiences with others.

And, both groups similarly indicate that the KM system is very useful for any organization and the importance of the organizational top-down approach of knowledge flow and knowledge management system to put in a suitable place to improve all aspects of KM. However, the implementation of knowledge management of the directorate lacks proper planning, and knowledge is used mostly to threaten and hurt other colleagues, and many staff members are not keen on sharing their knowledge unless it benefits them personally.

Knowledge sharing is central to the success of all knowledge management strategies. Effective knowledge sharing practices enable the reuse and regeneration of knowledge at the individual, group, and organizational levels. Also, an organized technology enables and provides the entire infrastructure that supports knowledge management practice within an organization. In contrast, a lack of proper tools and technology infrastructure can lead an organization to failure.

Alexander (2010) in his research findings indicates organizations of outsourced training and common activities between project teams, organizations appear to be able to bring in new knowledge from outside or to create it inside the organization. Another finding is related to the theory of organizational change. It was proved in practice that an open problem-solving atmosphere, which could be created by the application of brainstorm sessions and openness of upper management, is a positive influence in the acceptance of change among employees. According to the results, this can be achieved,

particularly through revision of knowledge base with previous projects, using of knowledge-based decision-making system, organizing of training programs and collaborative activities among project teams.

The result of another done by Pearl (2004) reveals that engaging in KM activities, that is, creating, capturing, sharing, and utilizing knowledge to achieve the library goals. KM is a viable means by which academic libraries could improve their services and become more responsive to the needs of users in the university. People gain knowledge from their experiences and their peers' expertise. Academic libraries need to recognize the knowledge of their staff and create an environment in which their knowledge can be valued and shared. Thus, it is important to receive feedback and suggestions for better relationships in the organization and for the development of knowledge management practice in all groups of the directorate.

CHAPTER FIVE

5. Conclusion and Recommendation

5.1. Findings of the Study

This study has investigated the level of knowledge management practice at the administration and human resource directorate of the African Union. Thus, this section presents the summary of findings in relation to the study objectives to be achieved by the study.

- a) **Leadership Related Issues:** In the leadership context, the analysis indicates that there is a lack of leadership support at all levels and weak initiatives. Normally intelligent leaders are those who have a store of skills and knowledge gained from experience that allows them to manage effectively and efficiently the tasks of daily life. But in this directorate, there is a lack of leadership commitment to consistent and ongoing communication and lack of empowerment and encouragement are some problems.
- b) **Learning Related Issues:** According to participant response and analysis, there is no knowledge acquisition and application practice, and continued organizational learning to encourage. And there is also no expectation to develop new skills and knowledge towards supporting innovation and experience to transfer knowledge gained during workshops, seminars, and meetings.
- c) **Organization Related Issues:** on organizational related issues that analysis gives a fact that in directorate there is no at all an organizational response on the knowledge management issue, no department existing and no assigned responsible person to run this activity. As perceived by the respondents, there is no motivational program in the directorate. Another

issue is about barriers to managing knowledge in the organization; for this question, respondents gave their opinion in a frank way there are different barriers to manage knowledge in the directorate. Among the listed barriers; organizational culture, lack of experts to manage knowledge, staff member's resistance to share their knowledge. In addition, there is no support by the top management are the main negative factors affecting Knowledge Sharing within the organization

- d) **Technology-Related Issues:** There are formal networks that exist to facilitate the dissemination of knowledge and IT support for collaborative works. The technological tools available at the organization for sharing knowledge are effective and innovative solutions are available. Generally, there is an updated system of technology and the use of social media for knowledge acquisition and sharing in the directorate. So the level of technology is better than other KM practices in the directorate.

5.2. Conclusion

This study has implications for KM practice in the context of the directorate. Although a few different perceptions between managers and staff, from the result obtained it is possible to conclude that among the four decisive KM practice pillars technology is satisfactory and the rest three are below standard level. Particularly leadership is the most problematic. Generally, the level of KM practice is weak, and it is not easier to implement the directorate knowledge management without managing the knowledge assets of the organization. Thus, to remain sustainable and competitive in the dynamic environment of today, the directorate required to acquire strong dynamic capabilities by implementing a variety of KM activities based on the findings.

5.3. Recommendations

Based on the findings the following themes are recommended in relation to the leadership, learning, organization and technology problems to solve the existing problems and to enhance the directorate's knowledge management practice.

- a) **Leadership:** Top managements have to give attention to the development of knowledge management and have to motivate individuals to share their knowledge and create new innovations. They should also reward people who do an active effort to share and use knowledge in the workplace. In addition, leaderships have to create a mechanism to identified solutions by mapping existing tasks and procedures & processes and should appoint a responsible body (Chief knowledge manager, knowledge editor, knowledge analyst, etc.) for proper managing KM practice in the directorate.
- b) **Learning:** To promote the culture of learning in the directorate, creating a mechanism to connect people with people, through socialization like training, workshop, facilitating across department research, making accessible of expert profile and creating a mechanism for connecting people with knowledge source should be considered.
- c) **Organization:** Regarding the process of KM organization of the directorate, the value of knowledge creation and collaboration should be intertwined throughout the directorate. Also, the Directorate needs to establish clear guidance, procedure, and strategy to manage KM practices are advisable
- d) **Technology:** according to the findings of the study the current level of technology use of the directorate is in a better condition. However, All the technologies of the directorate have to be upgraded periodically also it is

important that the technologies/contents of the organization should link easily with each other.

5.4. Further Research

To build a more detailed understanding and identify the other problems, additional research should be done that has not been covered in this study. And this could cover the whole problem of knowledge management practices within the directorate and made a full knowledge management practice system of the organization.

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Annex 1. Introduction and Support Requisition Letter

Date _____

Dear Respected Respondent

I am a Master's degree student/researcher on the title assessment of knowledge management practice among project: the case of administration and human resource directorate in African Union at Addis Ababa University Collage of Commerce.

I invite you to be one of the participants with providing response using your experience about work environment and culture of your organization. I appreciate your voluntary to completing these questionnaires and all of the information you give will be kept confidential.

Thank you kindly for your consideration and cooperation.

Yours sincerely,

Samrawit Kinfemichael

If you have any enquiries, please contact phone No. 0912 64 16 41

Annex 2. Interview Questions(For Division Heads)

Please explain briefly the following questions using your experience about work environment and culture of your organization.

1. Does the organization have a knowledge management practice system that employees can upgrade themselves for a better performance of organization? If any, please explain.
2. Do you believe that the current knowledge management program of your organization contributes for the achievement of the overall organization strategic goals?
3. What types of practices are used in your organization for process improvement and employees' training?
4. What is your future opinion about developing knowledge management systems/applications/cultures for your organization?
5. Does your organization have content organization system? If yes, please explain the strategies it uses?
6. Do you have a motivation system? If yes, please explain the some of them?
7. What are the problems your organization is facing in practicing knowledge management?

Annex 3. Close Ended Questions (For Staffs)

General Instructions

1. Please tick the choice that appropriately represents your response in each of the following questions.
2. All of your responses will be treated as confidential and not attributed to you.
3. Do not write your name

I. Demographic Information

1. Gender

Male Female

2. Age _____ in _____ years

18 - 30 years 31 - 40 years

41 - 50 years 51 - 60 years

Above 60 years

3. Employment type

Fixed term Regular Short term

Special service

4. Educational qualification

Diploma First degree

Masters Doctorate degree

5. How many years do you have worked in the organization?

1-5 years 6-10 years

11-20 years More than 20 years

II. The State of *Leadership* in Your Directorate

S.no.	Survey items	Indications or suggestions				
S.no.	Survey items	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Knowledge gained from community of practice in my workplace is used for enhance service delivery					
2	We have an effective environment for collaboration within and between departments					
3	Information flows easily throughout the organization regardless of employee roles or other boundaries					
4	The management is aware of the importance of knowledge sharing					
5	Knowledge sharing among colleagues is considered normal in my company					
6	There is a brain storming sessions					
7	There is a motivation system that encourages employees to exchange					

	their knowledge.					
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III. The State of *Learning* in Your Directorate

S.no	Survey items	Indications or suggestions				
S.no	Survey items	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Knowledge capture/creation practices are satisfactory					
2	Continued organizational learning is encouraged					
3	There is an expectation to develop new skills and knowledge towards supporting innovation in the organization.					
4	There is Knowledge acquisition and application practices					
5	Experiences and know-how are transferred during workshops, seminars and meetings					

IV. The Level of Using *Technologies* in Your Organization

S.no.	Survey item	Indications				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Use of social medias are available					
2	There is a formal networks exist to facilitate dissemination of knowledge in my organization					
3	My company provides IT support for collaborative works					
4	The technological tools available at the organization for sharing knowledge are effective					
5	Innovation is a core value in this organization					
6	There is innovative solutions in our organization					
7	New system of knowledge acquisition and sharing is needed for the organization					

V. The Extent of Willingness of *Knowledge Sharing* in Your directorate.

S.no	Survey item	Indications or suggestions				
S.no	Survey item	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	There is a culture of communicating and educating each other's.					
2	There is knowledge and experience dissemination practices between departments.					
3	I apply knowledge acquired through discussion to improve my work processes					
4	There is a coherent set of innovation goals and objectives that have been articulated					
5	I have a positive tendency of improving a project delivery process					
6	The management is aware of the importance of knowledge sharing					

VI. The State of *Content* Management and Use in Your Organization.

S.no.	Survey item	Indications or suggestions				
S.no.	Survey item	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1	There are sufficient and updated contents in the organization					
2	There is an organized content management system in the organization.					
3	Content utilization is accessible and comfortable					
4	The organization has an interest to store enough contents.					
5	I am joyful in upgrading my knowledge from the contents of the organization					

VIII. Barriers/Problems that hindering inter-professional Collaboration & Information technology application in your organization.

S.no.	Survey item	Indications or suggestions				
S.no.	Survey item	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
1	Problem of knowledge ambiguity					
2	Unwilling to devote time and resources to sharing knowledge					
3	Lack of coordination between units and staffs					

4	Lack of competitiveness among staff					
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5	Lack of integration of IT systems					
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