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ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
SCHOOL OF INFORMATION SCIENCE

PROPOSING GENERIC KNOWLEDGE MANAGEMENT
STRATEGY FOR PRIVATE UNIVERSITIES IN ADDIS ABABA
ETHIOPIA.

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Science

PROPOSING GENERING KNOWLEDGE MANAGEMENT
STRATEGY FOR PRIVATE UNIVERSITY

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Declaration

I declare that: Proposing generic knowledge management strategy for private universities in Addis Ababa is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

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This thesis has been submitted for examination with my approval as university advisor.

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Abstract

This research was set out to propose a generic knowledge management strategy for private universities in Addis Ababa. Knowledge management (KM) strategy is an operating framework or plan that describes how an organization will effectively operate KM. Private Universities in Addis Ababa have not been able to implement KM due to a lack of good KM strategic planning. This study is aimed at proposing a generic KM strategy using four private universities as a case study. The research approach is case study and the research design of the study is guided by a combination of two research frameworks: (1) the KM framework (figure 2) which is composed of four stages to guide the entire research process of the research and (2) knowledge management strategic development process shown at figure 3 to guide the development of the KM strategy for the studied universities under stage 3 of the research process. Purposive random sampling technique is used to select respondents. A knowledge audit questionnaire was used to collect data from the full-time academic staff of private universities and analyzed using SPSS (static package for social science). The result indicates that KM was relatively new for most staff in private universities. Those universities lacked the ability to storage, organize, capture and codify knowledge. Collaboration culture is very weak in sharing knowledge among staff. Therefore private universities have many initial problems developing a KM program. KM processes that should be immediately implemented in order to enhance the effectiveness of KM at those universities are knowledge storage, organization, and capture processes. The research proposes a generic KM strategy for private universities should be a hybrid/Integrated strategy which focuses on both a personalization strategy and a codification strategy with defined KM mission and KM goal. In addition, the KM strategy should incorporate emerging strategic issues and decisions once the KM strategy is rolled out in each university. A personalization strategy should be in the leading role and codification should be in the supporting role. These strategies, however, still need

more factors to bring about a successful application; including commitment of the culture, information technology, staff, organization management, leadership, KM team, KM process, and useful measurements.

Keywords: - Knowledge, Knowledge management, knowledge auditing, Knowledge management strategy, knowledge management strategy in universities, Knowledge management strategy in higher education.

Chapter one

1.1. Background

Private universities play vital role in disseminating knowledge to students and academic staff because they serve as knowledge providers, Their main business domain falls in the knowledge category. Thus, information keeping and dissemination are important key activities in an education sector. Private universities offering programs by number of faculties could have difficulties in organizing data and information with regards to the existing students, facilities, systems or projects, libraries, electronic collections of learning materials, e-learning portals as well as student management systems. In order to maintain a constant check on the results and performance of students or even the financial performance of an institution, knowledge management steps in as one of the solution (Ling, Rosni , & Islam , 2014)

In achieving competitive advantage, knowledge management is important in assisting universities in developing their innovative product. It is recommended that knowledge management used as an essential business tool to gain competitive advantage and in turn encourage economic growth (Haloho, Tawila, Purba, & Rahim, 2018).

Knowledge management is a set of process and methods focused on capturing, documenting, distributing, identifying, sharing, structuring and valuing an organization's knowledge assets (Kane, 2014). The objective of knowledge management is to capture individual and institutional knowledge and to ensure that it is available and useful when authorized users implicitly or explicitly requires knowledge to operate, innovate and that help the organization achieve its goal.

According to Omotayo (2015) the driving factors for knowledge management need in organizations are organizational survival, competitive differentiation, globalization effects and aging workforce. These factors also can be the driving for universities as organization to have knowledge management practices”.

Knowledge economy forced organizations to rethink the nature of their resources and capability. Universities as organization have to adopt knowledge management practices for their success and sustainable development and competency. Organizations integrate Knowledge Management

practice in their organization process and structure in order to increase their success and sustainable organizational development competency (Ebuy, Bekele and Jimma, 2013).

Kane (2014) stated that the goal of knowledge management strategy is to translate an organization's knowledge management vision in to defined set of actions and measurable goals. Knowledge management strategy takes the ideas about what company's structure of knowledge assets should look like and turns those ideas in to reality. Generally speaking, creating a knowledge environment usually requires changing organizational values and culture, changing people's behaviors and work patterns, and providing people with easy access to each other and to relevant information resources.

Anduvare (2015) also stated that Knowledge management strategy is vital for institutions to look on managing their knowledge assets since it provides directions on how to do things to get desired results. The first striving of this study is to conduct knowledge management practices assessment on private universities.

According to HERQA (2018/19) there are four private universities in Ethiopia whose programs are accredited by Higher Education Relevance and Quality Agency (HERQA) /MOE (Ministry Of Education). These are Admas, Rift Valley, Unity, and St. Mary's Universities. The research focused on development of knowledge management strategy for those private universities located Addis Ababa Ethiopia. This study is important to manage knowledge of university to be able to identify the knowledge needs as well as knowledge assets of their university and how to manage them effectively and efficiently to give them a competitive edge over their rivals. The availability of organizational strategy determines the overall mission, priorities and goals of the university but knowledge management strategy is needed to manage individuals and groups knowledge that is essential for all activities of the adoption, which generally affects their performance, and subsequently, their overall ranking on the highly competitive global educational market (Gourova, Todorova, & Dragomirova, 2013).

1.2. Statement of the problem

The fact that private higher education institutions derive virtually all their operating income from tuition payments paid by students so these total reliance on student fees means that PHE institutions need to focus on programs that are in high demand from the customer (student) point of view (Makambe, 2017).

According to Sharma & Kaur (2016) in the era of privatization of higher education, the institutions have to raise their standards, quality and add value to the services to ensure the satisfaction of the different motives of various stakeholders of higher education institutions. The effective application of the knowledge management strategy and practices in higher education institutions can result in significant improvement in the functioning and operations of the institutions. If the higher education want to achieve competitive advantage, they should improve their knowledge management in order to compete with other universities and not necessarily those that the nation regards as critical. In such case KM initiatives will help these institutions minimize costs and enhance revenue inflows through effective customer service and offering customer value (Makambe, 2017).

Kabilwa(2018) stated that “there are many knowledge challenges in universities related to knowledge management practices. Failure to address these knowledge challenges can lead to failure in recognizing the knowledge capabilities of these institutions. This, in turn, may lead to failure to control the most relevant knowledge needed to gain a competitive advantage”. The study also points out that adapting this study in developed and developing countries will be important for higher education institutions. Ethiopia as one of the developing countries adapting this research will help private universities to rethink existing knowledge assets available in these institutions. What knowledge management practices are available currently in private university will be conducted in this study. Challenges and critical success factors of knowledge management practice in those universities are also issues of this research.

Anduware (2015) explained that Knowledge management strategy includes how to manage knowledge, knowledge codification and personalization, and knowledge process. Private universities in Ethiopia are also challenged with problems like duplication of work due to lack of central repository for knowledge, loss through expertise leaving the institution without knowledge

being captured and over-reliance of a few known subject experts. This research set out to address these problems and the aim of this study will be to conduct a knowledge management assessment at private universities in Ethiopia to see what changes are needed to bring in KM. in order to identify and propose a suitable strategy for these institutions.

As stated by Makambe (2017) Knowledge management solutions can help private universities to enhance the quality of teaching and learning. Such solutions include the provision of all the critical resources such as qualified, experienced and competent staff, efficient and effective processes, and suitable infrastructure. The student population, demands for high-quality graduates, etc., have forced universities worldwide to seek better strategies for competitive advantages. Knowledge Management as a key indicator in measuring a university's performance it states that the successful level of KM practice in a university is a primary factor in measuring the university's performance (Sarawanawong, Tuamsuk, Vongprasert, & Khiewyoo, 2009). Most of the Thai universities have not been able to successfully implemented KM due to a lack of good KM strategic planning (Thakur, 2017). But this study do not propose a strategy but recommended using KM strategy enable to implement KM in higher education. Studies have been conducted on knowledge management practice and knowledge management strategies in different corners of the world. But due to differences in organizational culture, technology, and other perspectives, it is very important to conduct this study in Ethiopia.

According to Bordeianu (2015) motivations leading organizations to focus on knowledge management: gaining a sustainable competitive advantage through people, faster learning, new knowledge creation, innovation and finding new solutions for organizational issues, increasing organizational performance, customer satisfaction and experiences, connections to knowledge across global organizations, and increasing the ability to manage change; and these are only few motivations. Moreover, in the current knowledge-driven economy, organizations must know how to develop and implement knowledge-based strategies to drive measurable business results.

In the knowledge age of today, KM strategy is one of the best approaches to drive business performance and support the competitive advantage of the company (Haloho, et al 2018). The increase of external pressures such as: competition in higher education, university internationalization, university rankings, decreasing student population, demands for high quality

graduates etc., have forced universities worldwide to seek better strategies for competitive advantages. (Makambe, 2017).

In private universities context in Addis Ababa to propose KM strategy identifying structures practices that help to practice knowledge management practices and challenges that impedes the flow of KM in private universities are considered and find the solution that guide to overcome those problems using KM strategy development frameworks and finally suggesting a generic knowledge management strategy for those private universities.

The problem of why and how KM can be used in an organization must first be identified and analyzed (Zack, 1999). Understanding private universities behavior and operations that are related to a KM process and practice are extremely important in order to propose a generic knowledge management strategy.

Generic knowledge strategies are those strategies that can be developed in any organization in concordance with the organization's vision and the organizational knowledge dynamics. A generic knowledge strategy represents a useful reference for a company. It can provide inspirations to executives for formulating or simply recognizing the specific knowledge strategy of their company, for denominating it in a standard way, and communicating its meaning and contents across the organization (Bolisani and Bratianu, 2017).

The main motive of the research is exploit past experience of academic staff in private universities like technical know how successful and failed experiences. Utilizing collective knowledge for strategic purposes for detection of new opportunities and reaction to change, improve learning, increase knowledge exchange and communication. In order to gain sustainable competitive advantage in building a winning organization, increasing private universities performance and increasing the ability to manage change. Enable private universities to use their KM resources to improve their standards, quality and adding more and more value to the services in order to attract students (customers). These all problems discussed above lead to the following research questions

1.3. Research questions

- ✓ What structures and practices prevail in the private universities in Ethiopia to support knowledge management?

- ✓ What knowledge management challenges are faced by private universities?
- ✓ What knowledge management strategy development framework would be appropriate for the studied universities?
- ✓ What generic KM strategy would help the studied universities to overcome their KM practice related shortcomings?

1.4. Objective of the study

1.4.1. General objective

The main objective of this study is to conduct a knowledge management audit at private universities in Addis Ababa Ethiopia in order to propose a generic knowledge management strategy for those private universities.

1.4.2. Specific objectives

To achieve the general objective of the study the following specific objectives are devised.

- To identify available knowledge assets and knowledge management practices at selected private universities.
- To formulate a suitable knowledge management strategy for those universities.
- To evaluate feasibility and acceptance of the proposed KM strategy by the studied universities.

1.5. Significance of the study

Even though, Knowledge becomes a valuable asset for organizations most of them have not put up proper outlines to identify and manage the key knowledge available for the success of the organization as stated by (Anduvare, 2015). Universities as an institution of higher learning are not free from these problems. In this research the researcher will identify key knowledge on related issues and therefore determine and suggest a strategy that will help to make knowledge management practicable in private universities. Specifically, this research will help academic staffs and non-academic staffs of the universities. The research provide inspiration to practitioners as new ways of planning their knowledge and KM strategies, and the managerial capabilities that can be required. The study will have greater contribution for all staffs of those universities that allows having proper guideline to practice knowledge management process throughout the universities.

This aimed at academic staff able to readily access all knowledge assets relevant to their work that can be internal and external to the university and shall use these capabilities in their work. Connecting people to people by setting up collaborative methods that allow members to learn together, which is enabled by community events, discussion forums, and team spaces. This shall be provided in a secure environment that encourages more effective use of data, information, and knowledge

Generally of this study help those private universities to develop their own KM strategy by extending proposed strategy specifically on each context of those universities. Proposed generic knowledge management strategy significantly help private universities to start identifying their knowledge assets and knowledge management related processes; control and manage these assets and processes; become aware of the importance of their knowledge assets and existing knowledge management related processes.

1.6. Scope and limitation of the study

- Because of time and resource constraint the study focuses on proposing knowledge management strategy for private universities located in Addis Ababa..
- The study also conducted on private universities at Head Quarter or main campus this is also due to time constraint but the study can be applicable for branch because branch universities also have the same mission and objective.
- The participants of the study are limited to full time plus permanent academic staff.
- The limitation of the study is evaluation of the proposed KM strategy this would completed after implementation by providing feedback mechanisms to measure the benefits of Proposed KM strategy and allow to evolve and change iteratively and as necessary.

Chapter Two

2. Literature review

2.1. Introduction

This chapter explains on concepts of KM and reviews some studies and published literature on knowledge management, starting with data information and knowledge continued with special focus on review of knowledge management concept, knowledge management assessment, knowledge management strategy, types of knowledge management strategies, knowledge management strategies in universities and related works.

2.2. Data, information and knowledge

Knowledge is an intangible asset and is the part of intellectual capital invested in the business. It is the most valuable asset for an organization and provides a sound base for driving innovation, promoting research and development. It helps an organization to experience growth driven by the excellence. Despite the great value associated with this asset, only few organizations are able to recognize it and fewer are able to capitalize on it (Sharma & Kaur, 2016). Knowledge is what is known. It is richer and more meaningful than information. Knowledge is gained through experience, reasoning, intuition, and learning. Because knowledge is intuitive, it is difficult to structure, can be hard to capture on machines, and is a challenge to transfer.

Knowledge is the appropriate collection of information. Information becomes knowledge when it is interpreted, put into context or when meaning is added to it. Knowledge is neither data nor information, though it is related to both (Mohanraj, 2010).

Knowledge is a high-value form of information as it can answer why and how that is ready to apply to decisions and actions and it is combined with experience, context, interpretation and reflection. Knowledge is the ability to use information in a way that it will enable you to achieve objectives. Knowledge is defined as justified personal belief that increases an individual's capability to take effective action (Whyte, 2008; HO, 2018). Knowledge is much more than the data and information. The various data & information pieces are transformed into knowledge. The process of transformation into knowledge involves the intellect, expertise, understanding,

experience and judgment of the organization and the individuals handling it along with its effective application and utilization(Sharma & Kaur, 2016)

When data are put into content and combined within structure, information emerges. Information is the data that has been given meaning by way of relational connection (Mohanraj, 2010). Knowledge is information in use and the interaction of information with human mind which gives it meaning and purpose is constructed through an accumulation of facts, procedural rules or heuristics through daily experience and study. It includes familiarity, awareness and understanding gained through experience or study, and results from making comparison, identifying consequences, and making connections.

Data is discrete, objective facts. Data is the raw material for creating information. By itself, data carries no judgment, interpretation or meaning.

Data refers to raw facts without any processing, organizing or analysis, so it has little meaning and few benefits to managers and decision-makers. Data is un-interpreted material on which a decision is to be based and depends on facts which may include anything known to be true or exist. In order to analyze and process data, meanings must be attached to those discrete values. Data is raw, unprocessed facts that are obtained through the use of measuring instrument(HO, 2018).

Information means data that have been processed and structured to make it more meaningful and useful to the person that will need it. It is about adding context to discrete data. Information tends to be more refined than data. In other words, what constitutes information to one person may not be information to another person. Information consists of data that have been processed and has become useful to a user. It is therefore, a matter of relevance and meaningfulness. "Information provide answers to questions that begin with such words as who, what, where, when, and how many" that means information is data in to context (HO, 2018; (Ramanigopal, 2012)). Information is data that is organized, patterned and/or categorized. It has been sorted, analyzed and displayed, and is communicated through various means. Information changes the way a person perceives something, thus, affecting judgment or behavior.

Most literatures agreed up on that there are two types of knowledge it has an explicit/formal and a tacit/informal form, and it can be categorized to the knowledge of the people, of the processes and of the technology (Whyte, 2008; Nonaka, 1994). Sharma & Kaur, 2016 also confirmed that

Knowledge may be explicit or tacit. Explicit knowledge is one stored in documents and other storage systems. It can be shared and expressed. Tacit knowledge on the other hand is one stored in the human minds and includes the intellect, experience, thoughts, intuitions, etc. It enhances with experience and efforts. It is hard to formalize, communicate, record and share such knowledge. Tacit knowledge is hard to formalize and to express using language. It is context related. It is the way apprentices learn their craft through observation and imitation from their masters. Explicit knowledge is defined as formal and systematic knowledge, which can be expressed in words or numbers and can be documented or stored in databases as electronic records(Nonaka, 1994).

2.3. Knowledge management

Various literatures agreed up on there is no universally accepted definition of knowledge management .but there are numerous definition offered by experts.

Knowledge management is defined, as targeted and systematic management of processes, methods and tools, making full use of the organization's knowledge potential for strategic goals, making effective decisions, implementing and creating its value (Raudeliūnienė, Davidavičienė, & Jakubavičius, 2018).

Knowledge management is the process that promotes the generation collaboration and use of knowledge for learning and innovation, generates new value and raises the level of competitiveness, in order to achieve organizational objectives with efficiency and effectiveness, as a result of the management of intangible assets based on key factors of the KM: people, processes and technology(Nogueira, Nogueira, Leon, & Nogueira, 2017).

Knowledge Management is the process of creating, sharing, using and managing the knowledge and information of an organization .It is the systematic process and strategy for finding, capturing, organizing, distilling and presenting data, information and knowledge for a specific purpose and to serve a specific organization or community. (Girard, 2015)

Knowledge management is a process that emphasizes generating, capturing and sharing information know how and integrating these into business practices and decision making for greater organizational benefit. Knowledge management is the process of transforming knowledge in the form of information and intellectual assets in to enduring value. It connects people,

technology and process with the knowledge that they need to take action, whenever they need it who ever wanted to use, provided with authenticity (Ramanigopal, 2012).

Knowledge management is the deliberate and systematic coordination of an organization's people, technology, processes, and organizational structure in order to add value through reuse and innovation. This is achieved through the promotion of creating, sharing, and applying knowledge as well as through the feeding of valuable lessons learned and best practices into corporate memory in order to foster continued organizational learning (Dalkir, 2005).

As cited by (Metaxiotis, Ergazakis, & Psarras, 2006) Knowledge management is concerned with the exploitation and development of the knowledge assets of an organization with a view to furthering the organization's objectives. The knowledge to be managed includes both explicit, documented knowledge, and tacit, subjective knowledge.

Ramanigopal (2012) stated that according to the experience, people differ in their perception, insights, technique they are using, skill they have tested and practiced, beliefs and value system they have long followed, ideas, and innovative thinking. Which may in different format such as Personal information, concept specific, information which are not expressible but enjoyable, and not easily communicable and transferable but can be applied? In higher education also, it requires the road map of both explicit and implicit knowledge as in other organizations Knowledge management resources.

2.4. Knowledge management strategy

Strategy is a method or plan chosen to bring about a desired future, such as achievement of a goal or solution to a problem. strategy is the framework which guides those choices that determine the nature and direction of an organization (Nickols , 2011).

According to Lesly Whyte (2008) and Rees et al. (2009), Knowledge management strategy means the careful planning and action to achieve the best results with the least possible effort and cost at the level of people, equipment, time and money. It is worth mentioning that there is not a unique model that it can be implemented to all Organizations without any exceptions, but it is a way of organizing ideas, plans and actions to manage Knowledge more effectively.

Effectively implementing a well-designed KM strategy and becoming a knowledge-based company is seen as a mandatory condition of success for corporations as they enter the era of the knowledge economy. The purpose of managing and leveraging a company's knowledge is to maximize the returns to the organization(Akhavan& Atashgah, 2008).

A knowledge management strategy determines which knowledge resources are valuable, unique, and indispensable, and how those resources support an organization's business strategy .In order to develop knowledge management strategy it's also vital to know where are the organizations now ,where do they went to be and how to ensure to get there successfully(Ivanov, 2017).

Knowledge management strategy refers to organization's means to achieve its knowledge strategy like human interaction based vs. IT based knowledge management strategy, or personalization vs. codification strategy, or Community networking model vs. Cognitive network model) that is how an organization aims to create new knowledge or reuse its existing knowledge (Mäki, 2017).

Dalkir(2005) Stated that the major steps involved in developing a KM strategy are first to understand the organization in terms of its current state "as is" and its desired business objectives "to be". The analysis of the difference between the two states is often referred to as a gap analysis, and the means of getting from the "as is" to the "to be" state is often represented in the form of a KM strategic road map.

According to (Thakur, 2017) Knowledge management strategy must be dependent on organizational strategy. The objective is to manage, share, and create knowledge assets that will help meet strategic requirements.

Knowledge Management strategy can be defined as s a high-level plan that defines and outlines the processes, the tools, and infrastructure (organizational and technological) required for managing Knowledge gaps (Dinku, 2016).

Knowledge management strategy needs three elements to function, the people involved, the processes and the technology. The people/academic staff must collaborate, have access, share and understand the needs of others. Also, they must be aware of the policies and procedures, be flexible and trained, manage and comply with the manipulation of the knowledge, using collaboration

tools, a single point of entry, storage of knowledge and a re-aligned infrastructure to achieve a successful outcome.

Knowledge Management strategy provides the basic building blocks used to achieve this organizational Learning and continuous improvement so as to not waste time repeating mistakes and so that everyone is aware of new and better ways of thinking and doing (Dalkir, 2005).

2.4.1. Knowledge audit

Knowledge Audit (KA) is a tool that identifies and describes organizational knowledge, its use, gaps and duplicities within the organization. It is fundamental for the implementation and development of a KM strategy (Nogueira et al., 2017). Knowledge audit output helps organizations to make recommendation of KM strategy which later can be used for better managing the knowledge.

A Knowledge Audit is a dynamic process to identify and assess knowledge, its availability, needs, sources, structure, flow, use, and importance to the organization. A Knowledge Management Audit (KM Audit) examines the KM culture and capabilities of the organization that impact the viability of KM. Carefully-designed Knowledge and KM audits lay a solid foundation for a KM Strategy that improves collaboration, productivity, knowledge accessibility, innovation, and knowledge retention. The Knowledge Audit process allows "to know what is known and to know what is not known". It identifies key users, uses and attributes of knowledge assets and its analysis center is aimed at identifying what knowledge is needed, what knowledge is available and what it means, who needs it and how it is applicable strategy must be intimately tailored to specific environment, technology ecosystem, and business goals. In order to develop a practical, realistic, and successful KM strategy, in depth grasping of the current situation is needed (Ivanov, 2017) .

In order to assess the current state of KM, an assessment model is needed. There are many models available, and every KM consultancy offers its own version. These models usually contain a list of key elements for the success of KM, and allow measuring the strength of these elements. The assessment and the framework be fully aligned and address a comprehensive set of KM flow components, and a full set of enablers (Barnes & Milton, 2015).

The four commonly recognized components of knowledge flow are those recognized by Nonaka and Takeuchi, often referred to as the SECI (socialization, externalization, combination, and

internalization) model: this is shown in the following figure which are described as the generic components of knowledge flow. The author also describes three commonly recognized KM enablers which are people, process and technology.

Knowledge creation: the socialization, externalization, combination, and internalization process of knowledge spiral. Source: Nonaka and Takeuchi (1995)

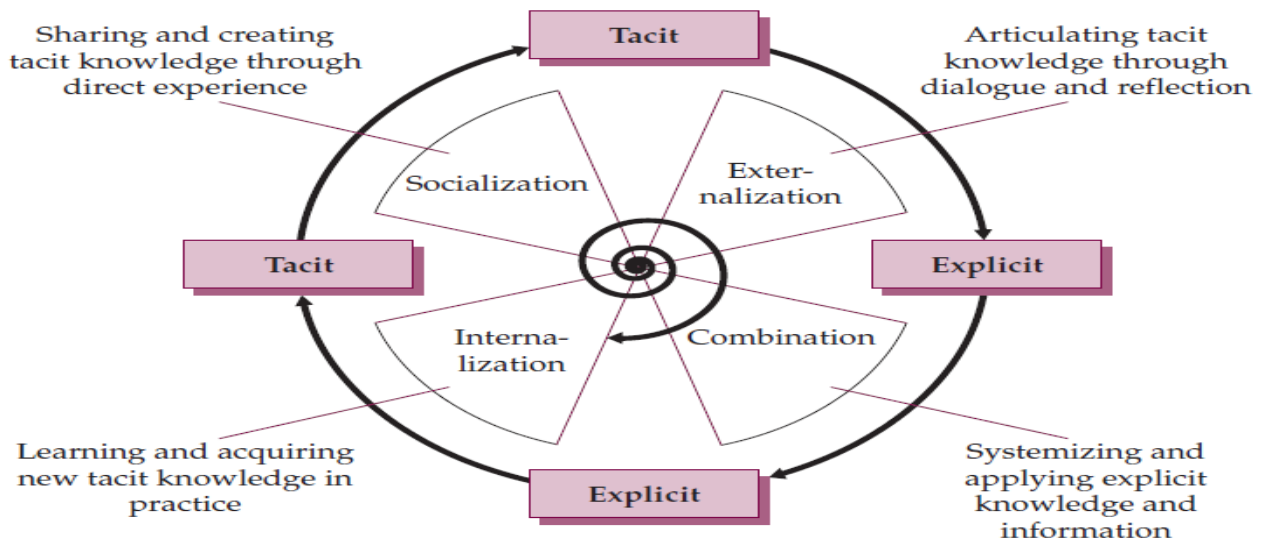


Figure 1. SECI model by Nonaka and Takeuchi

Nonaka and Takeuchi introduced the SECI model (Nonaka & Takeuchi 1995) which has become the cornerstone of knowledge creation and transfer theory. They proposed four ways that knowledge types can be combined and converted, showing how knowledge is shared and created in the organization as shown in figure 1 discussed below.

Socialization: Tacit to tacit. Knowledge is passed on through practice, guidance, imitation, and observation. That is sharing and creating knowledge through direct experience.

Externalization: Tacit to explicit. This is deemed as a particularly difficult and often particularly important conversion mechanism. Tacit knowledge is codified into documents, manuals, etc. so that it can spread more easily through the organization. Since tacit knowledge can be virtually impossible to codify, the extent of this knowledge conversion mechanism is debatable.

Combination: Explicit to explicit. This is the simplest form. Codified knowledge sources (e.g. documents) are combined to create new knowledge. That is systemizing and applying explicit knowledge and information.

Internalization: Explicit to tacit. As explicit sources are used and learned, the knowledge is internalized, modifying the user's existing tacit knowledge. Acquiring and learning new tacit knowledge in practice.

The effectiveness of any knowledge management practice will depend on the effective utilization of people, processes and systems (technologies). These are the three fundamental focuses, facets, elements or components of knowledge management which works in relation to one another to achieve any knowledge management objectives (Igbinoia & Ikenwe, 2017).

Ramanigopal (2012) also stated that Knowledge management connects people, technology and process with the knowledge that need to take action when ever needed it, who wanted to use with provided authenticity.

People: People also known as human resources are crucial in knowledge management and as such must be given consideration in any knowledge management practice. Understanding the actual need and preference of users curtail step in developing knowledge management strategy. That is who the audiences, what are their communication channels are and existing potential barriers to information flow will guide the development of KMS.

People influence knowledge management by promoting an open culture that values/inspires sharing of knowledge; promote a climate of commitment and trust; develop systems and policies for knowledge management among others (Igbinoia & Ikenwe, 2017).

Process: means the methods and steps by which knowledge management practices are achieved. Process is inter-organizational in distributed networks.

Technology: it is also important to understand all current systems their functionalities, users and restrictions as well as where they are technologically in their life cycle. The systems, tools, and technologies that fit the organization's requirements properly designed and implemented (Ivanov, 2017). What technology will support the transfer of knowledge through discussion and

conversation how new knowledge is documented how technology will support the finding and reuse of knowledge (Barnes & Milton, 2015).

Devices support the practice and implementation of knowledge management. Knowledge Management requires technologies to support people and processes involved in knowledge management (Igbinovia & Ikenwe, 2017).

Culture: along with process and procedures organizational culture shapes staff behavior and attitude towards capturing, sharing and managing information. The organizational culture influences the way people interact, the context within which knowledge is created, the resistance they will have towards certain changes, and ultimately the way they share or the way they do not share knowledge (Ivanov, 2017).

A culture that encourages change is an essential feature of organizational learning. The new organizational culture based on knowledge is an essential component of knowledge supportive environment to which contributes all the components of the organization management and which ultimately condition sustainability and performance decisively (Bordeianu, 2015).

Knowledge audits are important processes through which organizations can understand what Knowledge is needed, available and used for their current activities. They can also identify what Knowledge is missing and how this omission restricts organizational activities. Hence, knowledge audits can surface initiatives to improve the knowledge management (KM) processes of an organization and, in turn, improve efficiency and effectiveness (Gillian Ragsdell, Proberts, Ahmed, & Murray, 2013).

Knowledge audit process allows to know what is known and to know what is not known. It identifies key users, uses and attributes of knowledge assets and its analysis center is aimed at identifying what knowledge is needed, what knowledge is available and what it means, who needs it and how it is applicable as cited by (Nogueira et al., 2017). Knowledge audits help an organization identify its knowledge assets, including what knowledge is needed and available. They provide information on how knowledge assets are produced and shared, and where there is a need for internal transfer of knowledge.

Knowledge audit is a systematic method of determining the status of critical knowledge in organization or group, a way of knowing what you know. 'Knowledge audit is essential to the development of a knowledge management strategy.

Knowledge audit (KA) should establish a sound base for determining the main goals and tools of the KM strategy, and at the same time, identify KM awareness levels and attitudes. Exploring the available tacit and explicit knowledge in the organization, and how knowledge processes underpin business processes and create value for them, which is the organizational framework related to technology, culture and leadership, the study of all these issues should provide input for building the knowledge management strategy(Gourova, Antonova, & Todorova, 2009)

Knowledge audit identifies the core information and knowledge needs and uses in an organization, their gaps, duplications and flows, how they contribute to business goals, and which areas need improvement(Gourova et al., 2009)

According to Dalkir (2011) a knowledge management program or system should never be implemented without a knowledge audit having been conducted.

Knowledge audit differs from a knowledge assessment in that in the audit the goal is to conduct systematic inventories, examination, and evaluation of the organizational knowledge to determine the actual status of organizational knowledge assets (location, source, usability, utilization, transferability among others.), whereas a knowledge assessment is conducted to determine whether the organization can and is effectively using that knowledge (Anduvare, 2015).

2.4.2 Types of knowledge management strategy

Knowledge management strategy refers to the overall approach an organization intends to take to align its knowledge resources and capabilities for enhancing organizational performance there are two types of strategies the personalization strategy and codification strategy according to (Hansen et al. 1999; Zack 1999):-

Personalization strategy (or people-to-people) approach is centered on dialogue between individuals or interpersonal interaction knowledge sharing. Knowledge is closely tied to the people that develop it and manly shared through direct person to person contacts.

The focus of the personalization strategy is not to store knowledge, but to use Information Technology (IT) to help people communicate their knowledge. The objective of the personalization strategy is to transfer, communicate, and exchange knowledge via knowledge networks such as discussion forums. Its people to people approach centered on dialogue between individuals. In codification strategy knowledge is carefully codified and stored in databases where it can be accessed and used easily by anyone in the company.

Personalization strategy focuses on discussion between individuals not the knowledge base .It is based on a person to person approach and delivers customized services often practiced by organization that prove highly customized solution to unique problem .

The codification strategy (or people-to-document) approach is centered on the computer. To capture, store, disseminate, and allow for the reuse of knowledge. The codification strategy is assumed to be successful for those kinds of companies whose business strategy requires re-using existing or available knowledge (Naghizadeh, Ravasan, & Naghizadeh, 2013).

The codification strategy mainly concentrates on the content management system while the personalization strategy pays much attention on human interaction. The two strategies however shared a common goal; which is fostering creativity and innovation within organizations. If the organizations lean too much towards human factors, the new ideas may bubble up and evaporate due to lack of strategy and mechanism to harness them. Conversely, if the organizations emphasized too much on strategy and management system, the creativity might be restrained by the strategic directions or policies. The balancing act is mandatory on both human factors and management system to attain successful organizational innovation.

According to Mäki (2017) there are two types of strategies Exploration and exploitation strategies. Exploration involves creating new knowledge, emphasis on tacit knowledge, tolerate experimentation and failure more risks, better revenues, competitive advantage from entering first to the markets, unique solutions in different situations (e.g. in consulting industry), ensuring internal and external opportunities to exchange and combine knowledge. Exploitation utilizing and reusing existing knowledge, emphasis on explicit knowledge create routines and processes less risks, moderate revenues competitive advantage from economics of scale similar solutions in

different situations (e.g. in consulting industry), ensure the availability of codified knowledge within an organization right knowledge on the right place at the right time, Use of technology.

Another type of KM strategy is External oriented strategy attempts to bring knowledge from external sources via either acquisition or imitation and then transferring the knowledge throughout organization. Internal oriented strategy focuses on generating and sharing knowledge within the boundary of the firm as cited by (Ravasan, Naghizadeh, & Naghizadeh, 2013).

There are also three types of strategies knowledge management strategies of stock strategy, flow strategy and growth strategy. Stock strategy is focused on collecting and storing all knowledge in information bases in the organization. Flow strategy is focused on collecting and storing knowledge in information bases in the organization as long as the information is used in knowledge work processes. Growth strategy is focused on developing new knowledge as cited by (Naghizadeh et al., 2013)

The relation strategy is a kind of KM strategies aimed to expand the relationship between people and networks in organizations. The strategy is trying to publish the knowledge of experts to others by strengthening people communications in organizations and finally these increased knowledge level of staff will lead to more innovation in organizations. Also, it is impossible to attain suitable efficiency through utilizing and publishing organizational knowledge. It is noticeable that transmission of tacit knowledge has a higher priority compared to explicit one in organizations. It is highlighted that explicit and documented knowledge can also lead to innovation and it is not dedicated only to inexplicit knowledge. substitution strategy aimed to knowledge documentation, codification of current organizational knowledge and substituting expert systems instead of experts (Naghizadeh et al., 2013).

According to (Zack, 1999), there are two ways technology can provide support for knowledge management:

Codification and personalization: through the codification approach, structured knowledge (explicit) can be codified and stored in a knowledge base. Technology helps to create single point of access to knowledge, for easy retrieval and reuse of knowledge (Zack, 1999. Personalization approach: Technology creates a platform for sharing tacit knowledge. For instance using online forums and discussion groups people share knowledge (Tacit knowledge) whilst communicating.

Examples of such IT tools are knowledge expert directories and video-conferencing tools (Zack, 1999).

2.5. Knowledge management strategy in universities

The availability of organizational strategy determines the overall missions, priorities and Goals of the university, however rarely focuses explicitly on knowledge management processes. The knowledge of individuals and groups is essential for all activities of the university; however, normally difficult to access. Similar to private companies, universities differ in their knowledge management adoption which generally affects their performance and subsequently their overall ranking on the highly competitive global education market as described by (Gourova, et.al 2013).

Ramanigopal (2012) stated that institution should sketch a road map which should be first step to be completed the moment higher educational institutions decided to go with Knowledge Management strategies is essential factor before Knowledge Management implementation. As stated by Gourva et.al (2013) in its strategy a university set its mission and vision, and determined its strategic goals and related actions. University performance highly depends on the management of its knowledge assets. The awareness on the knowledge resources and the research results of its staff is essential for better ranking and higher assessment of each university. At the same time, the new knowledge created by researchers and university teams could be used for practical exploitation and gaining financial benefits from valuable intellectual assets. Making a comprehensive Knowledge Audit is a necessary step for evaluation of the knowledge state.

KM is a process that enables an organization to improve its performance by enabling learning and innovation whilst solving its problems, acknowledging and resolving gaps in its operations, and recognizing knowledge (comprising people and information) as an organizational asset which has to be managed through enabling policies and institutional tools (Thakur, 2017).

Sarawanawong et al. proposed a ‘hybrid KM framework development strategy’ in higher education. This personalization strategy/human oriented style (or people-to-people) plays a leading role while the codification (or people-to-document) plays the supporting roles. The former strategy includes knowledge identification, knowledge creation and knowledge acquisition involving appropriate use of ICT enabling tools; while the codification strategy includes knowledge storage, knowledge organization, knowledge distribution, and knowledge application.

2.6. Related work

The study conducted by Whyte(2008) on the title of Development of knowledge management strategy for Academic staffs explained that Dublin Institute of Technology (DIT) challenged by knowledge society brings and its role to society benefits in creating disseminating and transferring its knowledge for society benefit. Believed that academics are the key to fulfil this role and in order to manage knowledge in better and more productive way but there was no developed plan to perform this. Faculty of Tourism and Food is a typical faculty within DIT with the same need to manage its knowledge better. The study stands to solve these problems by developing a knowledge management strategy. To do this survey method were used to access whether knowledge management strategy (KMS) is needed or not and to find any existing gap to manage knowledge in order to establish KMS. Under the three themes of people, processes and technology a knowledge management assessment was done. Knowledge management strategy suggested focused on the people employed, processes adopted and technology adapted to manage knowledge and defined knowledge management within DIT.

As stated in the study strategic objectives of the processes as policy and procedures and technology will help to dictate future culture with regard to collaboration. This feeds into the development of a KMS. This process would then drive what governance processes were necessary and what future IT infrastructure/ data standards will be required to implement this strategy.

The Study conducted by Thakur (2017) by the title of private universities and knowledge management strategies looked into the prevailing knowledge management (KM) practices in some of the private universities of the NCR (National Capital Region) of India. The objective of the study was to look in to prevailing knowledge management practices, if there any knowledge management strategy and their relationship with institutional investigated the output. The status of knowledge management practices or strategies (if there was any) is investigated the perceived notions of its shareholders mainly including the faculty members of the selected institutions.

The study were adopted survey method to collect the data and it is descriptive type research. From five private universities in the area, three private universities were identified for the data collection and further analysis. The sample of the study consisted of faculty members of these identified universities. Based on the availability of faculty members and their willingness to participate in

the study, a total of 80 faculty members were shortlisted for the study. Questionnaires and self-developed semi-structured interview were used as primary data collection instrument and secondary data collection were from institutional records and internet searches.

The study points out that implementing knowledge management in education institution has several dimension like KM strategy with the objective of manage, share and create knowledge assets that will help meet tactical and strategic requirements must be dependent with organizational strategy. As second dimension the institutional culture also influences the way its stakeholders i.e. teachers ,students and other staff interact ,the context within which knowledge is created and shared, the resistance posed or faced towards certain changes and ultimately the way they make sense or not for created knowledge. The study also mentioned organizational process as another dimension for implementing KM in organization which enables the right processes, environments, and systems. Another dimension were management and leadership including a more experienced and competent leader who, by means of his/her subtle role, coordinates amongst the other stakeholders and encourages them to become active participants in the knowledge creation and sharing processes. The last dimension listed in the study is technology includes the systems, tools, and technologies that fit the institution's requirements in terms of properly designed and implemented instructional and other relevant systems.

Based on some respondent's response, the study concludes that academicians were not involved in taking up initiatives for the dissemination of the KM programs because of lack of recognition from management for the role of academic professionals in KM. According to the study the major roles being performed by the academicians in knowledge management programs include the formulation of KM strategies and setting up goals for self and colleagues. Team working, communication, networking and analytical skills were identified as the most important organizational skills required by information professionals to function in knowledge management programs. Making sense of the knowledge management process, ability to use information technologies, and document management skills were identified as the most important required competencies.

The study recommened the need of knowledge management strategies to be put in place as well as the experiences of such endeavors need to be shared among the parallel organizations working in the field of higher education and was done only in single faculty. This study stands to propose A

KM strategy for private universities in Addis Ababa because those institutions need KM strategy based on the context of their institution.

The research conducted by Anduvare (2015) on Marist International University College, Nairobi – Kenya. The study aim of the study was to conduct a knowledge management assessment at the Marist International University College (MIUC) in order to identify and recommend strategy for the institution. The study were standing to handle the problems like duplication of work due to lack of a central repository for knowledge, loss of knowledge through expertise leaving the institution without knowledge being captured and over reliance on a few known subject experts as others have not been identified. The study employed a concurrent triangulation mixed methodology approach which encompassed a questionnaire and an interview schedule to collect data from 33 academic staff and 9 members of the MIUC management respectively. These groups purposively selected as the target population in the study. Data transformation analysis was applied during which qualitative data from open-ended questions and interviews were quantified using content analysis. Quantitative data in the questionnaires was descriptively analyzed using SPSS. As explained by the researcher descriptive method of research was used in this study to gain factual information about Knowledge Management.

The study focused on 5 aspects to assess this study (KM process, KM leadership, KM culture, KM technology and KM measurement) of MIUC. Having analyzed the various strategies that were found in literature, the study concludes that a system- human orientation strategy would be appropriate considering the resources that were found available at MIUC and the flexibility of the strategy as it enabled accommodation of a variety of complex aspects found at MIUC such as having a gap between teaching and non-teaching staff.

As finding KM at MIUC requires formalizing to ensure there is consistency and coherence in the creation, identification, capturing, access, sharing, storage and usage of MIUC knowledge. This calls for policy creation, implementation and training. Top leadership need to realize the importance of managing knowledge and hence be in a position to provide support through provision of sufficient resources, structures, offering incentives to employees to encourage knowledge sharing, offer training to employees on KM and its benefits and identifying of intellectual capacity of all of employees. MIUC should inculcate a knowledge management culture by encouraging knowledge sharing, eliminating biasness while supporting employees, embracing

dialogue and sharing of ideas, fostering valuing opinions and encouraging team work. With regard to ICT, MIUC should invest in a comprehensive infrastructure that supports KM (improve bandwidth, accessibility, provide KM tools), create awareness of the institutional repository and develop policies on ICT usage to manage knowledge rapidly and more efficiently to gain benefits. Staff training is also needed to maximize the use and enable the depositing of items in.

The study revealed a variety of informal knowledge management structures and resources at MIUC and the challenges of managing knowledge at Marist. The study hence, formulated a KM strategy for MIUC that would help leverage its knowledge assets.

This study use knowledge auditing questionnaires rather than KM assessment in order to suggest a knowledge management strategy for private universities. Knowledge management auditing is often the first step in any KM initiative because it serves to inventory what knowledge-intensive resources exist within a company. This provides a snapshot of the “as is” or current state of the organization with respect to KM and helps in measuring progress toward organizational culture change and other KM goals. A knowledge audit service identifies the core information and knowledge needs and uses in an organization. It also identifies gaps, duplications, and flows and how they contribute to business goals Dalkir (2005).

Another related work were done by Gourova, Todorova, & Dragomirova(2013) by title Knowledge Management Strategy for academic organizations .Universities as learning organizations in the center of the knowledge triangle are faced with the need to better manage their knowledge resources and to facilitate their transfer to all interested stakeholders. Similar to companies, universities are developing at different speeds, and some are lagging behind in adopting KM strategic approach. The goal of their paper was to provide guidance to university staff in developing their KM strategy and integrating it in the overall strategy. The development of knowledge management strategy was done based on the result of Knowledge Audit carried out in the organization and which involves its staff in the assessment of knowledge state of the art at individual, group and organizational levels. The paper propose three different patterns to link to step in developing knowledge management strategy which are KM mission, KM goals and KM strategic choice. This ensures that the Knowledge Management strategy and the related roadmap will be better focused and will facilitate organizational performance and competitiveness. The patterns can be applied in knowledge-intensive organizations as they propose guidelines for

solving specific problems of linking knowledge and working processes, better usage and provision of knowledge when and where it is needed and taking advantage of existing knowledge flows. The examples provide a bases for academic institutions to develop their own KM strategy.

2.7. Conclusion

The study conducted by Makambe & Pellissier (2015) focused on KM related practices only and proposed model particularly for those operating in a highly structured environment, in order to enhance KM and business performance. Another study conducted by Whyte(2008) Knowledge management strategy suggested focused on the people employed, processes adopted and technology adapted to manage knowledge and defined knowledge management within DIT but it was conducted for single department.Anduvare(2015)Developing a Knowledge management strategy for the Marist international to conduct a knowledge management assessment at the Marist International University College (MIUC) .Formulated a KM strategy for MIUC that would help leverage its knowledge. Thakur (2017) by the title of private universities and knowledge management strategies in NCR (National Capital Region) of India. Survey method to collect the data and it is descriptive type research. knowledge management programs have include the formulation of KM strategies and setting up goals for self and colleagues shared among the parallel organizations working in the field of higher education

As discussed in related works different studies have been conducted in different corner of the world but for those operating in a highly structured environment.Those studies consider only KM activiteies.An other study focused on asingle setting but this research takes multi cases to propose KM strategy.This study is conducted by identifying avalabel knowledge assets and KM related process in relation to people process and technology of private univerties in Addis Ababa.As a methodology this study present two KM strategy development frameworks in order to propose ageneric KM strategy for those universties.so this all makes this study different from the other studies.

Chapter Three

3. Methodology

3.1. Introduction

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically.

3.2. Research approach

Research approaches are plans and procedures for research that span steps from broad assumptions to detailed methods of data collection, analysis and interpretations (Creswell, 2014). A research approach is also based on the nature of the research problem or issue being addressed and the audiences for the study it is also a systematic and orderly approach taken towards the collection and analysis of data so that information can be obtained from those data (Creswell, 2014; Kilani & Kobziev, 2016).

The general approach of this research is a case study using quantitative method to collect and analyze the data. Case studies are considered useful in research as they enable researchers to examine data at the micro level. Variations in terms of intrinsic, instrumental and collective approaches to case studies allow for both quantitative and qualitative analyses of the data there are also a number of case studies which seek evidence from both numerical and categorical responses of individual subjects (Zainal, 2007).

Case study research often examines the descriptive questions of who, what, where, how many, and how much but can ignore the how and why questions often considered in quantitative studies. Using both qualitative and quantitative methods allows opportunities for the meaningful questions to be posed, measured, analyzed, and interpreted. Because both inductive and deductive reasoning are applied in mixed method research, the results are far stronger, especially in case study research that involves rich empirical data gathered through varied data collection techniques (Aaltio & Heilmann, 2010).

3.3. Research design

The research design of the study is guided by a combination of two research frameworks: (1) the KM framework (figure 2) which is composed of four stages to guide the entire research process of the research and (2) knowledge management strategic development process shown at figure 3 to guide the development of the KM strategy for the studied universities under stage 3 of the research process.

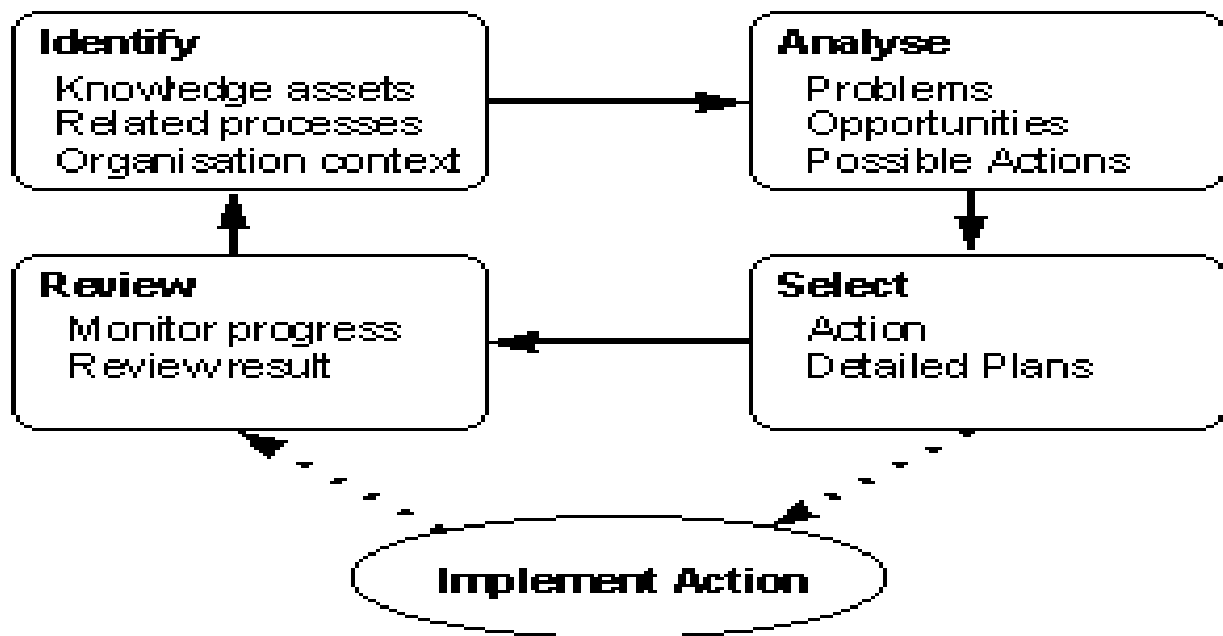


Figure 2. The Knowledge Management Framework (source: Macintosh, et.al, 1999)

This framework shows that KM is seen as a cyclic process of identifying knowledge assets and related process based on organizational context which are potentially valuable to the organization, analyzing the problems and knowledge assets to determine which ones need to be managed better find possible action to address the problems related to knowledge management in private universities. after analyzing the problems the next step is how to handle this problems this need action and detail plan the second framework guide to do plan for KM strategy. Review and monitoring progress is done after implementation of proposed KM strategy.

This KM framework is selected because It is based on the need to identify not just the assets but the knowledge management related processes and how these can be managed under the identify, analyse, action and review framework.

Selecting actions and detail plan is guided by knowledge management strategy process as shown in figure 3 it has five section KM mission, KM Goals, KM strategic choice ,KM road map and KM key performance indicators. disseminate, apply or otherwise manage these knowledge assets, and then reviewing progress to decide what to do next.

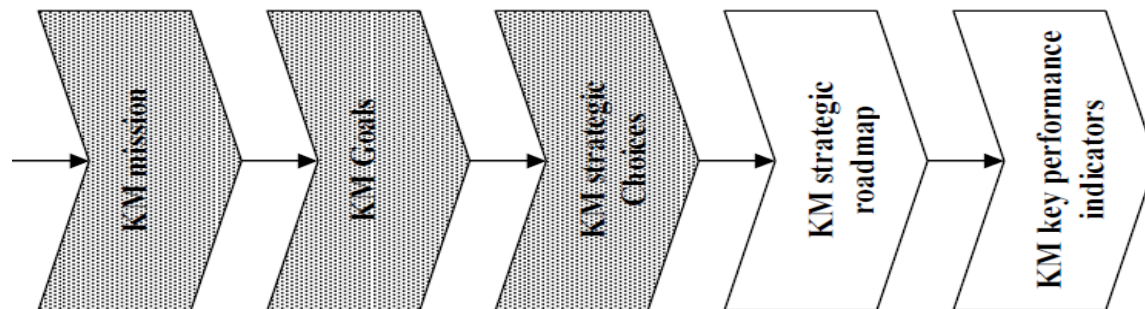


Figure 3. KM strategy processes adapted from (source: Gourova, et.al, 2013)

The research design guided by the above KM strategy development frameworks and each section of the framework presented below. Generally in the first framework assessing the current status, identifying KM activities and problems that impede the flow of knowledge in private universities is done up to stage 2 of the first framework and under stage 3 of the framework guided by the second framework.

3.3.1. Identify knowledge assets

The first step in the selected framework is to identifying knowledge assets which are potentially valuable to the organization. Identifying what knowledge assets those universities possess, where is the knowledge asset? What does it contain, in what form is it in and how assessable is it? It includes technology know how, codified knowledge, company procedures, operating guidelines and documented knowledge. These include also identifying knowledge available in the form in which the knowledge is held on paper, in an expert's head, in electronic media, or in a knowledge based system or knowledge storage. In order to understand the KM strategy requirements of the private universities under study, the study gather contextual information on each of the universities

3.3.2. Identifying Knowledge management related processes of those universities

Having identified a knowledge asset, it is important to consider what existing knowledge management related processes are acting on the knowledge asset. To do this, it is necessary to

consider if there are any KM processes which perform any of the following from figure 4.

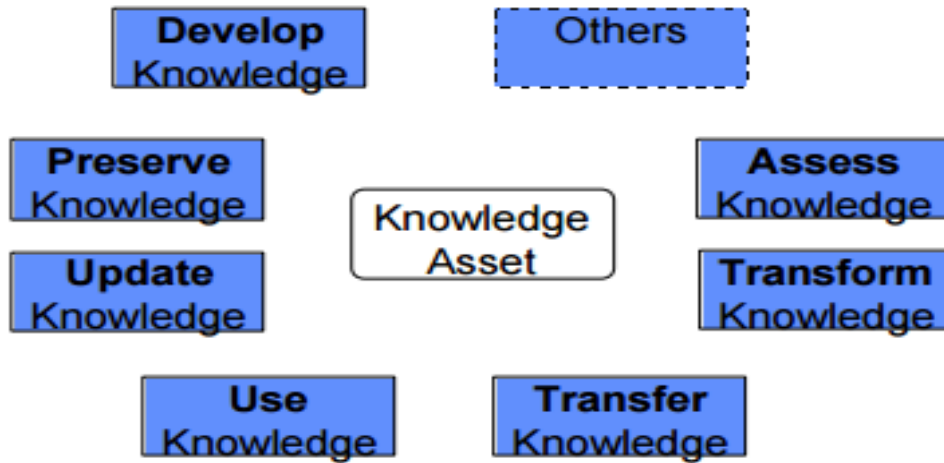


Figure 4 KM related process

If these functions are being carried out in private universities in Addis Ababa, then the next issue is whether they are being carried out efficiently and effectively. If these functions are not being carried out, or not being performed efficiently, then this highlights opportunities for better management of this knowledge asset.

To perform those actions the study population, need to be identified first. Then selecting sampling method and finally how the data can be collected from that population are determined at this stage.

3.3.2.1. Population of the study

As stated above in the background According to HERQA (2018/19) there are four private universities in Ethiopia whose programs are accredited by Higher education relevance and quality Agency (HERQA) /MOE (Ministry of Education). Those are Admas, Rift Valley, Unity, and St. Mary's Universities. Thus, this research focuses on private universities located in Addis Ababa Ethiopia. All the necessary data for this study will be collected from all private universities' main campus.

The target populations this study are permanent plus full time academic members of currently existing (2018/19) private universities in Addis Ababa Ethiopia those are Admas, Rift Valley, Unity, and St. Mary's Universities.

No	Name of university	Permanent plus full time academic members
1	Admas	35
2	Rift valley	29
3	Unity	34
4	St. Mary's	35

Table 1. The target populations this study

3.3.2.2. Sampling techniques

The selection of permanent plus full-time academic members of those private universities is using stratified random sampling techniques. Initially are Admas, Rift Valley, Unity, and St. Mary's Universities are first stratum. The next are Faculties/schools and the third is departments. Finally, to contact the individual respondent's random sampling technique is applicable.

3.3.2.3. Data collection methods

In order to transform those universities for this study in to competitive organization by using their existing knowledge and confirm an effective knowledge management strategy the assessment is done by knowledge auditing questioners which enables to examine those Universities knowledge needs, existing knowledge resources, knowledge flow, and future knowledge needs and knowledge gap analysis as well as behavior of people in sharing and creating knowledge. Knowledge auditing is an effort to understand where an organization stands in terms of knowledge management and its knowledge assets. Knowledge auditing also enables to understand where an organization stands in terms of knowledge management and its knowledge assets.

The researchers used questionnaire to collect primary data.As secondary data past literature studies, journal articles, annual reports of the selected organizations, blog entries and e-books were also used. Accordingly, the researchers utilized the primary and secondary data gathered from the case studies.

3.3.3 Analyzing problems and opportunities related to knowledge assets

Analyzing how the knowledge can add value. What are the opportunities for using the knowledge asset? What would be the effect of its use what are the current obstacles to its use and what would be its increased value to the organization will be answered at this stage.

Quantitative data that is collected using questionnaire and analyzed using tool statistical package for social sciences (SPSS) . This stage is very important in order to identify exact problems in relation to knowledge management practices that allow analyzing opportunities and possible actions. Analyzed report will help as reference guide of the organization knowledge management journey, supporting decision-making and allowing better planning and assessment of the knowledge management strategy.

SWOT(strength ,weakness,opportunities and threats) analyses provide most of the information needed to determine where knowledge management practices benefits private universties. This analysis also help reveal whether there is a knowledge bottleneck or knowledge gaps, while the opportunities and threats give some indicators of the potential value of this knowledge asset to the organization (Mackintosh et .al 1999). Having described the types of problems which can occur in an organisation, It is necessary to identify if any of these problems may be occurring in an private univerties using SWOT analysis.

3.3.4 Selecting actions and detail plans

Specifying what actions are necessary to achieve better usability and add value this can be done by answering how questions. How to plan the actions to use the knowledge assets, how to enact and monitor actions?

This stage allows selecting ways to leverage these organization critical knowledge assets. Knowledge management mission will be identified here which is first step of km strategy development process that deal with knowledge management purpose in order to ensure the organizational mission fulfillment. Defining KM goals in order to achieve the KM mission what KM should achieve. Knowledge management strategic choosing most suitable for the organization strategic alternative that is how to implement. This stage of the research will be guide by the second research framework (figure 3).

3.3.5 Review monitor progress and review result

Reviewing the use of proposed KM strategy is done at this stage after implementation of the strategy. This stage answee added value in knowledge manangement of private universties.The use of proposed KM strategy produce the desired value and create new opportunities to achive the competitive advantage of private universties.

3.4 Ethical consideration

The research will have potential benefit those universities which this study is going to be conducted. This research will be conducted after getting permission letter from the university. The target population will be requested to fill the questionnaire willingly and the purpose will be stated clearly before beginning of the questionnaire. Confidentiality of the respondents will be ensured by asking them to fill the questionnaire anonymously.

3.5 Validity and reliability

Validity is defined as the extent to which a concept is accurately measured in a quantitative study and reliability is the accuracy of an instrument. The extent to which a research instrument consistently has the same results if it is used in the same situation on repeated occasions (Heale & Twycross, 2015). The content validity also assured when the questionnaire was prepared based on extensive reading of literature review. So, the validity of each question to collect data that focused on the present research objective was discussed with 4 participants by selecting purposefully from private universities based on their level of awareness in conducting research. The feedback also led to minor modifications aimed at increasing the questionnaires validity and clarity.

Chapter four

4 Data presentation, Analysis and Discussion

4.1 Introduction

In this chapter, the data which is collected using the questionnaires are presented and analyzed. The questionnaires are personally distributed by the researcher to 133 full-time academic staff who are currently serving in four private universities in Addis Ababa Ethiopia in March 2019. From 133 questionnaires 117 of them are returned which means 87.9% response rate. The data collection instrument is knowledge auditing questionnaires focusing on people process and technology. Also covered by knowledge gaps, knowledge needs and bottlenecks for knowledge management to be practicable at those universities related to perception of people, organizational culture and technology perspectives. It further included incentive mechanisms to increase knowledge management practices at those private universities. The quantitative data from the questionnaires are coded and entered into SPSS which is a statistical package that is used to analyze data. The data is analyzed descriptively

4.2 Demographic profile of respondents

In conducting this study the demography of the respondents includes gender, age, educational status, academic rank, experience and name of serving University as shown in table 2. Differences in demographic characteristics especially in clearly visible traits such as age, gender, race, occupation,

Education, and language create fault lines that could function as barriers to interaction. This ineffective interaction decreases social attachment which in turn hinders knowledge sharing (Makeable, 2017).

Respondents asked to indicate their gender and 82.1% were Male, only 17.9 % of them were female as shown in table 4.1. Respondents also indicated their age group and from a result, the highest number of respondents is between 26-30 years old that is 66.7 % of the respondents. According to Makambe (2017), age plays a very important role in enhancing or inhibiting interaction since it is natural that those of the same generation find it easier to interact among themselves. So academic staff in selected private universities for this study have the same age group they can easily interact and adapt knowledge management practices.

Indicator	Category	Frequency	Percent	Cumulative percent
Gender	Male	96	82.1	82.1
	Female	21	17.9	100
	Total	117	100	
Age	Less than 25 years	13	11.1	11.1
	26-30 years	78	66.7	77.8
	31-40 years	21	17.9	95.7
	Above 40	5	4.3	100
	total	117	100	
Educational status	Bachelors	24	20.5	20.5
	masters	90	76.9	94.4
	Doctorate	3	2.6	100
	Total	117	100	
Academic Rank	Graduate Assistant	20	17.1	17.1
	Assistant Lecturer	13	11.1	28.2
	Lecturer	84	71.8	100
	total	117	100	
Experience	Less than 5 Years	44	37.6	37.6
	6-10 years	43	36.8	74.4
	11-15 years	29	24.8	99.1
	Greater than 15 years	1	0.9	100
	total	117	100	
University	Admas	30	25.6	25.6
	Rift Valley	28	23.9	49.6
	Unity	31	26.5	76.1
	St. Mary's	28	23.9	100
	total	117	100	

Table 2. Demography of the respondents

Another concern of knowledge management with regard to age is employee retirement and knowledge retention, but they could be involved in various key aspects of knowledge management initiative if there is a retention strategy. So Private universities can prevent the risk of losing important knowledge because of the retirement of key members of staff by developing and deploying retention strategy even if the respondents are far from retirement. Provision of basic and advanced operational knowledge to new and developing staff improves operational excellence (Barnes & Milton, 2015).

Respondents also indicate their educational status because education is a characteristic that can affect one's way of looking at and appreciating knowledge. The reason for grouping academic staff by their educational status is to make sure they have sufficient qualifications to respond to questions on knowledge management. From the result 76.9 % of respondents have a Master's degree, 20.5% hold Bachelor's degree and 2.6 percent of the respondents have doctorate so it can be concluded that they are well progressed in their education and can easily understand the idea of knowledge management.

According to Nonaka (1994), another critical demographic characteristic closely linked to education that facilitates KM practices is work experience. This study also includes full-time academic staffs' experience level in the demography and further, it includes whether their experience level has an effect on knowledge management practices especially on knowledge sharing. According to the respondents' response 37.6 that is 44 of them have less than 5-year work experience, 43 of them have from 6-10 years' work experience, 29 of them have 24.8% have 11-15 years' work experience and only 1 of the respondents have greater than 15 years' work experience. According to Makambe (2017), more experienced employees will be able to deal more effectively with both general and organization-specific problems than less experienced employees. So private universities have to work on preserving the knowledge of those few experienced staff. The implication is that when employees leave the organization, they leave with both general and organization-specific know-how hence depletion of tacit knowledge. Particularly important in enhancing KM practice is due to the division of knowledge into tacit and explicit. Nonaka (1994) refers to tacit knowledge as experience-based knowledge that cannot be expressed in words, sentences, numbers or formulas, often because it is context-specific/organization-specific. So limited accessibility of tacit knowledge accumulated by employees over the years or work experience makes critical to private universities as it forms invaluable organizational capital.

This study is conducted on currently existing private universities in Addis Ababa Ethiopia in the year of 2018/2019 which are Admas, Rift Valley, Unity, and St. Mary's Universities. Respondents are full-time Academic members of those private of the respondents 25.6% of the respondents are from Admas, 28(23.9%) respondents are from Rift Valley, 31(26.5%) respondents are from Unity and the remaining 23.9% which cover 28 respondents are from St. Mary's as shown in table 4.1.

From the result of the analysis in this section, the following are input to propose a knowledge management strategy for private universities in Addis Ababa Ethiopia which is the main concern of this study.

- ✓ Documenting or profiling academic staff information including education status, work experience, age, sex, and occupation is needed to plan KM programs in private universities
 - It can be used for:
 - Knowledge mapping to identifying easily where knowledge exists who knows that they need to have.
 - Connecting employees who are retired and existing staff for experience sharing.
 - Outlining necessary process and ensure capturing and reuse knowledge that is deliverable to decision making by recording the importance of the experience and expertise of staff as the most valuable Knowledge asset.

4.3 Collaboration culture in school context

The response scale are presented in scale ranging from 1 to 5 where 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree						
Statements	1	2	3	4	5	Total
1. What your school colleagues know (knowledge) is visible and accessible to you in some way.		109 (93.2%)	3 (2.6%)	3 (2.6%)	2 (1.7%)	117 (100%)
2. You are supportive of collaboration between colleagues.		10(8.6%)	4(3.4%)	94(80.3%)	9(7.7%)	117
3. You are willing to collaborate across organizational units/schools within a university?		7(6%)	14(12%)	79(67.5%)	17 (14.5%)	117 (100%)

Table 3. School context

This section aims to examine current turned of collaboration and willingness to collaborate among employees in order to share knowledge within a school or department context. Collaboration is the ability to share and catalog knowledge, ideas, standards, best practices, and lessons learned and to

be able to retrieve that knowledge from anywhere at any time. The response scale was presented on a scale ranging from 1 to 5.

As presented in the above table 3 response majority of the respondents 109(93.2%) disagreed with information or knowledge which is visible or accessible for their colleagues is also visible to them in some ways. Only 3(2.6%) of the respondents agree and 2(1.7%) of them strongly agree with this statement. On the other hand, 94(80.3%) of respondents are supportive of collaboration between colleagues and they are also willing to collaborate across organizational units/schools within university agreed by 79(67.5%) of the respondents. According to Makambe (2017) working together particularly facilitates the sharing of tacit knowledge which is more beneficial to organizations as it is complex and difficult to imitate. This form of knowledge benefits from employee collaboration because it requires more frequent interaction to develop a more effective common understanding among employees.

So from a result of this section, the following points are to be included in the knowledge management strategy to develop a more effective common understanding among employees and to make communication across school units that allow good ideas to be exchanged between groups who might otherwise be unaware of each other.

- ✓ Find a mechanism to provide easier and timely access for staff to information and knowledge they need to get their work done
- ✓ Connect people to people by setting up collaborative methods that allow members to learn together, which is enabled by community events, discussion forums, and team spaces.
- ✓ Build and expand social networks to create valuable links between individuals and groups. Emerging social software supports these networks by adding friends, identifying shared interests, and tagging resources.
- ✓ Facilitate conversation as conversations between people are the basis of building trust, gaining insights, and glowing new ideas. Storytelling kindles action, builds trust, inspires values, fosters collaboration, and transmits understanding.
- ✓ Provide policies which are clear and unambiguous in promoting the value of collaboration and support best practices in knowledge sharing

4.4 The overall environment of private universities context in knowledge management

The purpose of this section is to elicit how people view the overall environment of their university-related to knowledge management processes and technologies employed in facilitating finding what knowledge they need. The response scale is ranging from 1 to 5 as shown in table 4.

The response scale are presented in scale ranging from 1 to 5 where 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree						Total
Statements	1	2	3	4	5	
1. My university facilitates the discovery and capture of knowledge	5 (4.3%)	55 (47%)	17 (14.5%)	35 (29.9%)	5 (4.3%)	117 (100%)

2. My university facilitates storing of knowledge resources for the university wide access.	4 (3.4%)	80 (68.4%)	15 (12.8%)	15 (12.8%)	1 (0.9%)	115 (98.3%)
3. My university facilitates the transfer of knowledge across the university.	4 (3.4%)	88 (75.2%)	10 (8.5%)	14 (12.0%)	1 (0.9%)	117 (100%)
4. My university enables the organization to react more quickly to change by sharing these knowledge resources.	1 (0.9%)	87 (74.4%)	17 (14.5%)	8 (6.8%)	3 (2.6%)	117 (100%)
5. The overall environment of my university speeds decision making by facilitating retrieval across the university.	1 (0.9%)	76 (65%)	32 (27.4%)	6 (5.1%)	2 (1.7%)	117 (100%)
6. In my University, there is a motivational scheme to encourage staff to create and share their knowledge within and outside the University.	50 (42.7%)	45 (38.5%)	12 (10.3%)	7 (6.0%)	2 (1.7%)	116 (99.1%)
7. Failure seen as an opportunity for learning and recorded.	8 (6.0%)	77 (65.8%)	23 (19.7%)	9 (7.7%)		117 (100%)
8. Promotions & rewards are done based on individual's contribution to the development of university knowledge.	7 (6%)	53 (45.3%)	42 (35.9%)	12 (10.3%)	3 (2.6%)	117 (100%)
9. Holding knowledge and being secretive about the best way to do something is actively discouraged.	4 (3.4%)	36 (30.8%)	44 (37.6%)	31 (26.5%)	2 (1.7%)	117 (100%)

Table 4. Knowledge management context in private universities

The academic staffs were provided their response with statements on knowledge management processes in the first 4 questions of above table 4 questionnaire and were asked to select their extent of agreement or disagreement with a provision to give further comments

Respondents disagreed in their response 55(47%) for the question does their university facilitates the discovery and capture of knowledge and 35(29.9%) of them were agreed with the statement. Another question also asked about does their university facilitates storing of knowledge resources for the university-wide access and respondents disagree with 80(68.4%) only 15(15.6%) of the

respondents agreed with this statement. For the question there university facilitates the transfer of knowledge across the university respondents disagree by 88(75.2%) and 14(12%) of them agreed with this statement. The overall environment of my university speeds decision making by facilitating retrieval across the university 76(65%) were disagreed with this statement. Respondents strongly disagreed with 50(42.7%) and disagree 45(38.5%) in their University, there is a motivational scheme to encourage staff to create and share their knowledge within and outside the University. Failure is seen as an opportunity for learning and recorded, 77(65.8%) of the respondents have disagreed and 23(19.7%) of them were neutral. Respondents 53(45.3% disagreed in their response promotions & rewards are done based on an individual's contribution to the development of university knowledge and 42(35.9%) of them were neutral with this view. Holding knowledge and being secretive about the best way to do something is actively discouraged, 36(30.8%) of the respondents disagreed 44(37.6%) of them were neutral and 31(26.5%) of the respondents agreed with this statement in the above table 4.3. According to Agarwal & Marouf (2014) the key steps in knowledge management process include creating new knowledge, Capturing valuable knowledge from outside sources, using accessible knowledge in decision making, embedding knowledge in process, services, codifying knowledge in documents, databases, and software; facilitating knowledge growth through culture and incentives; transferring existing knowledge into other parts of the organization and measuring the value of knowledge assets and/or impact of KM. Overall of the above evidence, private universities in Ethiopia can get full advantage of the possibilities offered by KM by including the following points in their knowledge management strategy:-

- ✓ Private universities have to facilitate
 - acquiring, building, capturing, collecting, compiling, creating, discovering knowledge assets for or within the Universities
 - conservation and storage of the knowledge asset within the Universities
 - transferring or sharing the knowledge asset between members of the universities or exchanging between universities
- ✓ Private universities have to enable

- updating or maintaining or refreshing the knowledge assets of their universities
 - Classifying, exploring, locating, monitoring, organizing and retrieving knowledge assets in order to speed decision making.
- ✓ Private universities have to work on a careful arrangement of rewards that can enhance employees' interest and performance.

4.5 Perception of knowledge within the universities

This section deals with how knowledge is viewed in private universities, to ascertain where Knowledge does or does not reside within and how easily it can be applied.

The response scale are presented in scale ranging from 1 to 5 where 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree						Total
	1	2	3	4	5	

1. The specific knowledge that I need resides with the experts/colleagues rather than being stored in the university Intranet/ Internet sources because the knowledge is typically difficult to clearly articulate.	2 (1.7%)	10 (8.5%)	12 (10.3%)	71 (60.7%)	22 (18.8%)	117 (100%)
2. I always have to seek new knowledge that is not directly available in the university Intranet/Internet sources.	3 (2.6%)	3 (2.6%)	30 (25.6%)	69 (59.0%)	12 (10.3%)	117 (100%)
3. The knowledge that I find in university Intranet/Internet sources can be directly applied to current situations with little or no need to seek out or create new knowledge.	4 (3.4%)	54 (46.2%)	13 (11.1%)	37 (31.6%)	9 (7.7%)	117 (100%)
4. There is a problem in identifying where knowledge exists who knows that I need to have.	4 (3.4%)	5 (4.3%)	15 (12.8%)	88 (75.2%)	5 (4.3%)	117 (100%)
5. There is a problem where to find the knowledge I need to have from software systems or database in the university	3 (2.6%)	10 (8.5%)	6 (5.1%)	91 (77.8%)	7 (6.0%)	117 (100%)

Table 5. Perception of knowledge in private universities

From the result 71(60.7%) of the respondents agreed that specific knowledge that they need to resides with the experts/colleagues rather than being stored in the university Intranet/ Internet sources because the knowledge is typically difficult to clearly articulate (Table 5) only 2(1.7%) of the respondents strongly disagreed and 10(8.5%) of them disagreed with statement . Respondents also agreed with 69(59.0%) they have to seek new knowledge that is not directly available in the university Intranet/Internet sources only 3(2.6% disagreed) and 30(25.6%) of them were neutral. This indicates that private universities outdated information/ knowledge modification are not done regularly. Respondents also agreed with 91(77.8%) there is also a problem where to find the specific knowledge when they need to have from university software systems or in the database of university and 10(8.5%) respondents disagreed.

The conclusion that can be drawn from this is that the knowledge available through private universities information systems is not sufficient, specifically applicable to individual needs nor

up to date to deal with current situations. The fact that a lot of expertise resides with colleagues is not surprising given the academic environment. However, what this does highlight is the lack of this expertise and 'know-how' being recorded and documented for retention and future use, an overwhelming reason for a knowledge management strategy in itself. Therefore the following are input for KMS (knowledge management strategy):-

- Storing knowledge in the university Intranet/ Internet to understand easily in a way that can be articulate
- Include modification of information or knowledge in university Intranet/Internet sources for the university-wide use on time.
- Profiling employee's specialization and responsibility to identifying easily where knowledge exists who knows that they need to have.
- Advertising or communicating software systems or databases in the university about their content and how to use those systems.
- Programs to improve the workers' skills, capabilities, acquisition of knowledge for better performance.

4.6 Staff Skill set in information/knowledge activities

The purpose of this part is to elicit how staff viewed their abilities in activities such as creating, finding, maintaining and placing of knowledge and their understanding of policies and procedures in doing this.

From a result, as shown in table 6 only 1(1.0%) strongly disagreed and 3(2.6%) of respondents disagreed with regard to proficiency they possessed for finding the precise or sufficient amount of information or knowledge and 77(65.8%) agreed with this view. whilst Respondents also confirmed with 94(80.3%) agree and 17(14.5%) strongly agree with their view they consider sharing knowledge with other colleagues as an advantage and no one disagreed with this view. In addition, 70(59%) of respondents believed they have skills in creating information/knowledge. Furthermore, respondents also argued that they are proficient in maintaining information/knowledge. But only 24(20.5%) of those surveyed believed they were familiar with the institutes' policies and protocols for managing records.

The response scale are presented in scale ranging from 1 to 5.where 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree						
Statements	1	2	3	4	5	
1. I am proficient for finding precise information /knowledge that I require.	1 (0.9%)	3 (2.6%)	5 (4.3%)	77 (65.8%)	31 (26.5)	117 (100%)
2. I consider sharing my knowledge with other colleagues as an advantage.			5 (4.3%)	94 (80.3%)	17 (14.5%)	116 (99.1%)
3. I am proficient in maintaining information/knowledge.		13 (11.1%)	8 (6.8%)	81 (69.2%)	15 (12.8%)	117 (100%)
4. I am familiar with the institute's policies and protocols about managing records	69 (59%)	16 (13.7%)	8 (6.8%)	24 (20.5%)		117 (100%)
5. I am proficient in creating information/knowledge.	1 (0.9%)	4 (3.4%)	31 (26.5%)	70 (59%)	11 (9.4%)	117 (100%)

Table 6. Skill in knowledge management activities

It can be concluded that with regard to proficiency in information or knowledge activities respondents expressed an overwhelming view that they possessed the skills necessary in creating, finding the precise or sufficient amount of, and in maintaining information and knowledge. But academic staffs are not familiar with the institute's policies and procedures. So in their knowledge management strategy the following have to be included.

✓ Private universities have to :-

- Develop policies and protocols for managing information or knowledge and work on familiarization of it

- Facilitate the creation, location, and sharing of knowledge and expertise that is to be seen and perceived as a corporate asset.
- Develop a succession planning strategy to be put in place in order to maintain key skills and key knowledge within the organization.

4.7 Knowledge repository

The aim of this section was to assess the need for knowledge resource whether the staffs are willing to contribute to such resources and processes to be put in place to create reusable knowledge. The response scale is presented on a scale ranging from 1 to 5 as shown in table 7.

The response scale are presented in scale ranging from 1 to 5.where 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree						
Statements	1	2	3	4	5	Total
1. My university needs re-use existing information or knowledge in order to solve problems.	1 (0.9%)	1 (0.9%)	7 (6.0%)	47 (40.2%)	61 (52.1%)	117 (100%)
2. Your university needs to have a Knowledge Management Policy or Strategy for acquiring and sharing knowledge.	2 (1.7%)	22 (18.8%)	4 (3.4%)	56 (47.9%)	33 (28.2%)	117 (100%)
3. Do you think having cataloged and indexed knowledge sources or knowledge mapping is important for your university?	1 (0.9%)	1 (0.9%)	1 (0.9%)	102 (87.2%)	11 (9.4%)	116 (99.1%)
4. Do you have problems in identifying tools for capturing knowledge?	4 (3.4%)	28 (23.9)	6 (5.1%)	64 (54.7%)	14 (12.0%)	116 (99.1%)
5. Is there a need to transfer explicit knowledge between people, software applications and paper documents?		6 (5.1%)	4 (3.4%)	79 (67.5%)	27 (23.1%)	116 (99.1%)

Table 7. A need for the knowledge repository

Results as shown in the above (table 7) 47(40.2%) agree and 61(52.1%) of respondents strongly agree that their university needs reuse of existing information or knowledge in order to solve problems. Private universities' academic staff confirmed there is a need for knowledge mapping to

have who knows what, printed sources, experience database or repository of previous problems or best practices and actions with 69(59.0%) of agreed and 35(29.9%) strongly agreed with this statement. Knowledge management policy or strategy for acquiring and sharing knowledge is needed which is confirmed by 56(47.9%) agree and 33(28.2%) of respondents strongly agreed with this view. Respondents confirmed that there is also a problem in identifying tools for capturing knowledge in private universities 64 (54.7%) and 23.9 % of the respondents disagree with the view. This shows there is no problem in identifying tools for capturing in some cases and not the same in other cases. Respondents also believe that with 61(52.1%) level of the agreement their University has to give attention to the transfer of experience from the most experienced staff to new staffs via new methodologies but 27(23.1%) of respondents disagreed with this point. Respondents also argued with 94(80.3%) in their university needs to re-use existing information or knowledge in order to produce new knowledge only 2(1.7%) of the respondents disagreed with this view.

As indicated there is a need to re-align the IT infrastructure and development of collaboration tools. There is a clear mandate expressed by staff for the creation of a knowledge repository with a need for staff to create reusable knowledge whilst reusing existing knowledge. Also, knowledge mapping is needed for cataloging information/knowledge that is available in private universities which can be used find information/knowledge by identifying where it is located in the University. An Experts or Resource directory that lists people with expert knowledge who can be contacted by others in need of that knowledge. This overwhelming wish for such a system will dictate the need for a knowledge management strategy in its own right with all of these technical requirements.

From the result of respondents, this section also has input for knowledge management strategy which is going to be proposed. Private universities have to include the followings in their knowledge management strategy:

- ✓ Knowledge mapping mechanism
- ✓ Mechanisms for reusing existing information or knowledge in order to solve problems and to produce new knowledge.

- ✓ catalog and index on knowledge sources, printed sources, experience database or repository of previous problems or best practices and actions
- ✓ Mechanisms for creating a suitable environment that motivates to externalize knowledge
- ✓ A knowledge repository where the staff has access and visibility to the knowledge contained within their universities and other partner universities or subscribed databases of referred journals; Easy to use, simple to search and up to date.
- ✓ Re-alignment of the IT infrastructure and development of collaboration tools that provide a platform to share and learn, with the ability to seek out communities of practice or individuals, in finding the knowledge they need or understanding the knowledge they have.

4.8 Preferred method of communication

The purpose of this section is to identify the preferred methods of communication by the respondents when looking to gain knowledge or share knowledge within and out of their university. Sharing of knowledge from person to person through communication which is socialization and KM needed to be connecting people, so they can talk and discuss and share knowledge through conversation as cited by (Barnes & Milton, 2015).

The response scale are presented in scale ranging from 1 to 4. 1 = Never 2 = Rarely 3= sometimes 4 = Always					
Statement	1	2	3	4	total
1.One to one discussion with your colleagues.	2 (1.7%)	9 (7.7%)	59 (50.4%)	44 (37.6%)	117 100%

2. Verbally during meetings.	3 (2.6%)	4 (3.4%)	90 (76.9%)	20 (17.1%)	117 100%
3. By using documents or printed files.	1 (0.9%)	13 (11.1%)	50 (42.7%)	53 (45.3%)	117 100%
4. Trainings.	10 (8.5%)	72 (61.5%)	23 (19.7%)	11 (9.4%)	116 99.1
5. Experience sharing visits.	81 (69.2%)	15 (12.8%)	11 (9.4%)	10 (8.5%)	117 100%
6. Discussion forums.	74 (63.2%)	16 (13.7%)	11 (9.4%)	16 (13.7%)	117 100%
7. By using Email.	25 (21.4%)	11 (9.4%)	44 (37.6%)	37 (31.6%)	117 100%
8. Lesson learned programs.	76 (65.0%)	9 (7.7%)	20 (17.1%)	12 (10.3%)	117 100%
9. By using University website.	64 (54.7%)	35 (29.9%)	11 (9.4%)	1 (0.9%)	117 100%

Table 8. Communication methods

The result of this section shows that as indicated in (table 8) 44(37.6%) of respondents always communicate with their colleagues to gain knowledge or share knowledge and 59(50.4%) of the respondents sometimes asked their coworkers to gain information. Ninety out of one hundred-seventeen respondents sometimes communicate verbally during meetings to express their opinion and twenty of them always prefer the meeting to communicate their views. Sometimes respondents also use documents or printed files to inform their colleague's new information fifty-three of them always preferred this kind of communication. Seventy-two of the respondents believe that training is a rarely preferred method of communication and 23(19.7%) also sometimes need the training to gain knowledge. Majority of the respondents that 37(31.6%) of them always choose the email communication and them 44(37.6%) sometimes need email communication. Experience sharing visits never occurred as confirmed by 81(69.2%) respondents there is such a program rarely 16(13.7%) in some cases. Sixty-four of the respondents confirmed that they never use the university websites to get information

Therefore a deliberate strategy is needed to get the correct information and knowledge generated to the right people at the right time to help people share and put information into action in ways intended to improve organizational performance. Knowledge management focuses on creating a culture of knowledge sharing and the constant pursuit of learning to adapt new conditions and challenges and to change accordingly including programs, procedures, and organizational structure in order to improve those practices and doing the job better and increasing effectiveness. Private

universities need to offer opportunities for academic staff to work more dynamically as it will allow them to enhance information and communication flows.

From the result of respondents, this section also has input for knowledge management strategy which is going to be proposed. Private universities have to include the followings in their knowledge management strategy:

- ✓ Private Universities have to facilitate:
 - The use of university website and email for exchanging information.
 - The occurrence of lesson learned programs
 - Experience sharing visits with other universities.
 - Discussion forums

4.9 Inhibitors to effective and efficient knowledge storage

The response scale are presented in scale ranging from 1 to 5.where 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree						
Statements	1	2	3	4	5	Total
1. Lack of time/too busy	4(3.4%)	1(0.9%)	5(4.3%)	46(39.3%)	61(52.1%)	117100%
2.Poor tools/Technology	2(1.7%)	49(41.9%)	27(23.1%)	7(6.0%)	32(27.4%)	117100%
3.Organization policy/directives	2(1.7%)		44(37.6%)	58(49.6%)	13(11.1%)	117100%
4. Lack of training	2(1.7%)	1(0.9%)	3(2.6%)	72(61.5%)	39(33.3%)	117100%

Table 9. Barriers to store information or knowledge

The purpose of this section is to ascertain what the biggest barriers are presently for storing information and knowledge more efficiently and effectively. Employees are not able to access the knowledge they require even if it exists in the organization due to a number of barriers.

When reviewing what inhibits academic staff from storing their information and knowledge more effectively and efficiently, 61(52.1%) of respondents strongly agreed that they are too busy and 46(39.3%) of them also agreed with this statement. 72(61.5%) of respondents agree and 39 (33.3%) of them agree that lack of training as a cause to practice storage of knowledge effectively. This theme of neutral replies continues with regard to organizational policies at 44(37.6%), poor information systems/processes and to a lesser extent, poor tools/technology.

From the respondent's responses, it is obvious there is a lack of awareness about policies and processes held in private universities and possible tools and technologies that may overcome barriers to practice knowledge management. This is understandable when respondents cite a lack of time and lack of training as potential barriers. A structured, practical and understandable knowledge management strategy could assist in lecturers managing their time. Respondents also need knowledge management tools with a clear description of how to use the tools in order to make knowledge management activities an integral part of their knowledge and performance culture.

From this section, the following can be taken as input for knowledge management strategy:

- ✓ dedication of adequate time for planning, implementing, collaborating, learning together, evaluating what has been achieved, and added planning for a more effective program.
- ✓ Recognize that peoples' knowledge is the most valuable asset and managing it requires commitment and investment, in time and effort.
- ✓ Ensure a consistent high-quality user-friendly environment, providing the policies, procedures, and tools to do so, and governance over which tools to do so.
- ✓ Improvement of staff's ability to find, exchange and share knowledge under the culture of universities

4.10 Where knowledge is currently stored

The purpose of this section is to ascertain where information and knowledge needed for respondents to do their work is stored at present.

The response scale are presented in scale ranging from 1 to 5. Where 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
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Statement	1	2	3	4	5	Total
1. In paper-based documents		28 (23.9%)	2 (1.7%)	65 (55.6%)	22 (18.8%)	117 100%
2. In colleagues heads (internal collaboration)	5 (4.3%)	60 (51.3%)	3 (2.6%)	42 (35.9%)	7 (6.0%)	117 100%
3. University library online journals.	5 (4.3%)	61 (52.1%)	7 (6.0%)	38 (32.8%)	6 (5.1%)	117 100%
4. Information systems	8 (6.8%)	38 (32.5%)	11 (9.4%)	56 (47.9%)	4 (3.4%)	117 100%
5. On my personal pc or work station computer/ hard drive	4 (3.4%)	4 (3.4%)	16 (13.7%)	79 (67.5%)	14 (12.0%)	117 100%
6. On the internet	3 (2.6%)	13 (11.1%)	7 (6.0%)	44 (37.6%)	49 (41.9%)	116 99.1%
7. Email	26 (22.2%)	41 (35%)	11 (9.4%)	20 (17.1%)	18 (15.4%)	116 99.1%
8. E-books	27 (23.1%)	31 (26.5%)	13 (11.1%)	29 (24.8%)	17 (14.3%)	117 100%
9. E-libraries	25 (21.4%)	55 (47.0%)	5 (4.3%)	13 (11.1%)	19 (16.2%)	117 100%
10. University website	8 (6.8%)	60 (51.3%)	23 (19.7%)	18 (15.4%)	8 (6.8%)	117 (100%)
11. Instruction manuals	7 (6.0%)	32 (27.4%)	2 (1.7%)	71 (60.7%)	5 (4.3%)	117 100%
12. Research findings	13 (11.1%)	56 (47.9%)	23 (19.7%)	20 (17.1%)	5 (4.3%)	117 100%
13. Printed journals	12(10.3%)	32(27.4%)	24(20.5%)	43(36.8%)	6(5.1%)	117100%

Table 10. Where to find knowledge in the university

The majority of the respondents kept their knowledge on their personal computer or workstation pc or in a hard drive as shown in (table 10) 89% of respondents also use the internet and email to find and store knowledge. The mixture of resources beneficial to do their work included paper-based documents with confirmation of 65(55.6%) agree and 22(18.8%) strongly agree from respondents. There is a high level of uncertainty with high neutral responses in terms of knowledge located or stored on University information systems, university online library E-books, E-libraries, printed journals and research findings. The majority of the respondents use instruction manuals. Enabling the environment by establishing both electronic and physical meeting space is very important to make knowledge management more practicable in these universities In order to ensure

that knowledge spreads to many employees in the organization, top management needs to create an environment where trust exists and where an employee believes that his/her knowledge will not be misused (Makambe, 2017). It can be a fair conclusion to state that respondents may not readily be aware of potential knowledge available from these sources or there are no such knowledge storage mechanisms in the universities.

From the result of the analysis two types of knowledge can be identified that is individual knowledge and corporate knowledge. Individual knowledge is the knowledge held by individuals. Using localized knowledge for personal use to connect to others for sharing since knowledge is created through the interactions amongst individuals or between individuals and their environments, rather than by an individual operating alone. Corporate knowledge is the one that can be found in the corporate databases, web site, library and/or archives. The successful management of both individual and corporate knowledge may effectively contribute to the creation and application of University knowledge to support private universities in important processes, such as decision making, problem solving, and learning. So private universities need a strategy for managing knowledge in this case storage, sharing and easy way of finding knowledge have to be included. There is also a need for awareness of the potential professional bodies and other institutes and their potential as sources of knowledge. The university IT infrastructure has to facilitate the use of knowledge widely inside and outside of their university.

From the result of respondents, this section also has input for knowledge management strategy which is going to be proposed. Private universities have to include the followings in their knowledge management strategy:

- Knowledge storage that is connected to external storage or digital libraries
- An organized single point of entry to access the knowledge that staff need, easy to use and navigate.
- Internet access for academic staffs and digital libraries that allow access E-books , E-journals when they need to find knowledge from those sources
- Instruction manuals, Printed journals, research findings when academic staffs need to improve their knowledge from these sources.
- Information system rather than paper based document or use of personal computer, to make information and knowledge to all authorized users in the university

4.11 Tacit knowledge sharing programs

The aim of this section is to ascertain what programs or events are held in private universities to discuss the challenges, solutions, and progress of their university.

Table 11. Tacit knowledge sharing programs

The response scale are presented in scale ranging from 1 to 5. Where 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree						
Statements	1	2	3	4	5	total
1.Informal meetings		71 (60.7%)	9 (7.7%)	21 (17.9%)	16 (13.7%)	117 100%
2.Formal meetings	1 (0.9%)	2 (1.7%)	12 (10.3%)	91 (77.8%)	11 (9.4%)	117 100%
3.Story telling programs	64 (54.7%)	35 (29.9%)	7 (6.0%)	11 (9.4%)		117 100%
4.Conferences	15 (12.8%)	18 (15.4%)	12 (10.3%)	70 (59.8%)	2 (1.7%)	117 100%
5.Experience sharing programs.	27 (23.1%)	40 (34.2%)	12 (10.3%)	34 (29.1%)	4 (3.4%)	117 100%
6.Seminars.	28 (23.9%)	24 (20.5%)	9 (7.7%)	53 (45.3%)	3 (2.6%)	117 100%
7.Workshops.	60 (51.3%)	44 (37.6%)	8 (6.8%)	5 (4.3%)		117 100%
8.Team building events.	77 (65.8%)	25 (21.4%)	5 (5.1%)	6 (5.1%)		117 100%
9.Discussion databases.	78 (66.7%)	26 (22.2%)	5 (4.3%)	6 (5.1%)	2 (1.7%)	117 100%

According to Sajevea (2014), Knowledge sharing means a transfer, dissemination, and exchange of knowledge, experience, skills, and valuable information from one individual to another. It may be formal and informal. This section presents the effectiveness of the flow of knowledge in private universities, i.e., whether employees regularly participate in internal and external formal and informal meetings to discuss challenges, solutions, and progress such as departmental and interdepartmental meetings, tea and lunch break meetings, team- building events, seminars, and workshops. As shown in table 11, 91(77.8%) of the respondents agreed and 11(9.4%) strongly agreed that formal meetings are a common way to discuss the challenges, solutions, and progress of their university. Only 1(0.9%) of them disagreed with this view. The majority of the respondents disagree that there is an occurrence of informal meetings in their university while only 21(17.9%)

of the respondents agree with this point. Respondents also agree that storytelling programs are not held in their university previously and 7(6.0%) of the respondent are neutral with this statement. The respondents confirmed that conferences held in their university but 27% of the respondents do not agree with this. Only 53(45.3%) of the respondents agree seminar occurred in their university. With regard to workshops have been held in private universities 60 (51.3%) strongly disagreed, 44(37.6%) disagreed and 8% of the respondents were neutral. The majority of the respondents do not agree with the occurrence of team building events and discussion databases. But knowledge sharing may occur when a colleague individually shares his or her knowledge with other peers. It may also occur among team members or within and between different organizational units. Knowledge sharing may differ according to who shares his or her knowledge and with whom such as supervisors, colleagues, subordinates (Sajevaa, 2014).

A Widely used mechanism for knowledge sharing in those universities is a formal meeting which is not enough for sharing experience because it has a specific topic of discussion. So those private universities have to work on the occurrence of social informal meetings outside of the workspace, conferences, seminars, experiences share visits, discussion databases, training and team building events by integrating personalization strategy with their knowledge management strategy. Since Tacit knowledge is difficult to formalize and time-specific, it can be acquired only through shared experience that needs spending time together. It is also widely acknowledged that knowledge sharing has a positive effect on organizational success and competitiveness. By participating in the knowledge sharing process individuals learn from others, gain new ideas and knowledge, increase their competence. By deepening their own understanding and knowledge they feel self-confidence and self-efficacy.

From the result of respondents, this section also has input for knowledge management strategy which is going to be proposed. Accordingly, the private universities need to facilitate and adjust:

- Knowledge sharing via various internal and external events (seminars, workshops, conferences, etc.) and using technology support.
- Knowledge sharing in different forms and through different channels both online and offline.
- Planning training programs.

- Create awareness about importance of sharing information and knowledge throughout their university.
- Knowledge sharing programs like formal and informal meetings.

4.12 Bottlenecks for the effective flow of knowledge in private universities

This section is prepared to understand what impeded knowledge management practices in private universities related to individual perception of people, technological and organizational barriers.

4.12.1 Individual bottlenecks

The response scale are presented in scale ranging from 1 to 5 where 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree						
Individual perception of people	1	2	3	4	5	Total
1. Low awareness and realization of the value and benefit of possessed knowledge to others.	1 (0.9%)	4 (3.4%)	3 (2.6%)	35 (29.9%)	74 (63.3%)	117 100%
2. Use of strong hierarchy, position based status, and formal power.		2 (1.7%)	17 (14.5%)	88 (75.2%)	10 (8.5%)	117 100%
3. Insufficient capture, evaluation, feedback, communication, and tolerance of past mistakes that would	22 (18.8%)	6 (5.1%)	61 (52.1%)	21 (17.9%)	7 (6.0%)	117 100%

enhance individual and organizational learning effects.						
4.Differences in experience levels	1 (0.9%)	5 (4.3%)	30 (25.6%)	55 (47.0%)	26 (22.2%)	117 100%
5. Lack of contact time and interaction between knowledge sources and recipients.	4 (3.4%)	26 (22.2%)	7 (6.0%)	75 (64.1%)	5 (4.3%)	117 100%
6.Fear of not receiving just recognition and accreditation from managers and colleagues.	2 (1.7%)	28 (23.9%)	12 (10.3%)	74 (62.2%)	1 (0.9%)	117 100%
7. Lack of trust in people because they may misuse knowledge or take unjust credit for it	1 (0.9%)	10 (8.5%)	19 (16.2%)	82 (70.1%)	5 (4.3%)	117 100%
8.Lack of trust in the accuracy and credibility of knowledge due to the source	4 (3.4%)	8 (6.8%)	15 (12.8%)	87 (74.4%)	3 (2.6%)	117 100%
9.Differences in national culture or ethnic background and values and beliefs associated with it, for example, language differences.	5 (4.3%)	9 (7.7%)	36 (30.8%)	63 (53.8%)	4 (3.4%)	117 100%

Table 12. Individual perception that impend KM practice

KM is about applying the collective knowledge of the entire workforce to achieve specific organizational goals. It involves people, technology and processes. As shown in the above table 12 majority of the respondents agree that there is a lack of time to share knowledge and time to identify colleagues in need of specific knowledge.88(75.2%) of the respondents agree that they do not have awareness and realization of the value and benefit of possessed knowledge to others only 17% of the respondents uncertain this statement. 61(52.1%) of respondents uncertain the use of strong hierarchy, position-based status, and formal power but 21(17.9%) of the respondents agree and 22(18.8%) of the respondents disagree with this statement. This indicates that some of the case universities do not have such characteristics this creates bureaucracy and slows down knowledge flow. It also makes knowledge flow across departments difficult. Another effect that impedes the flow of knowledge was inadequate evaluation, feedback, communication, and tolerance of past mistakes that would enhance individual and organizational learning effects which are confirmed by 55(47.0%) of the respondent's agreement and the other 30(25.6%)were neutrals with this view.

The difference in experience level and fear of not receiving just recognition and accreditation from managers and colleagues are also a barrier for sharing knowledge with 75(64.1%) of respondent's

agreement. Seventy-four percent of the respondents lack trust in people because they may misuse knowledge or take unjust credit for it and lack of trust in the accuracy and credibility of knowledge due to the source. Differences in national culture or ethnic background and values and beliefs associated with it, for example, language differences affect in the flow of knowledge throughout their university and majority of the respondents that is 64(54.7%) them uncertain and 33(28.2%) of respondents agree with this view.

From above it can be concluded that individual perception has a great effect on the effective and efficient flow of knowledge throughout those private universities. So they have to work strategically to manage their university knowledge assets by including the following in their knowledge management strategy.

- ✓ Creating awareness by arranging a specific time and space for KM practices.
- ✓ Establishing mechanisms to adequately capture, evaluate, feedback, communicate, and tolerate past mistakes that would enhance individual and their university learning effects.
- ✓ Giving credit for individual contribution also have a great role in the effective flow of knowledge.
- ✓ Facilitating employees to freely express their views without fear which stimulates knowledge sharing.
- ✓ Changing employees feeling by giving value for their contributions and knowledge are appreciated which will encourage knowledge sharing.
- ✓ Developing the culture of tolerance related to cultural differences or ethnic background differences.
- ✓ Building trust among employees

4.12.2 Technological barriers

This section will present the result of the respondents on the technology point of view that inhibit knowledge management practices in private universities. Technological barriers examine some of the issues with the available ICT tools.

The response scale are presented in scale ranging from 1 to 5. Where 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree						
Technological barriers	1	2	3	4	5	TOTAL

1.Lack of integration of information Technology systems, organizational processes, and people	6 (5.1%)	5 (4.3%)	12 (10.3%)	47 (40.2%)	47 (40.2%)	117 100%
2.Lack of technical support and immediate maintenance of integrated IT systems that obstruct work routines and communication flows.	4 (3.4%)	5 (4.3%)	39 (33.3%)	58 (49.6%)	11 (9.4%)	117 100%
3.Unrealistic employee expectations as to what technology can do and cannot do.	5 (4.3%)	72 (61.5%)		19 (16.2%)	7(6.0%)	117 100%
4.No proper IT platform to share knowledge	2 (1.7%)	27 (23.1%)	5 (4.3%)	69 (59.0%)	14 (12.0%)	117 100%
5.Lack of training to enable employee familiarization with new IT systems and processes.	4 (3.4%)	2 (1.7%)	7 (6.0%)	95 (81.2%)	9 (7.7%)	117 100%
6.Lack of communication and demonstration of all advantages of new IT systems over existing.	4 (3.4%)	2 (1.7%)	7 (6.0%)	95 (81.2%)	9 (7.7%)	117 100%

Table 13. Technological barriers that impede KM activities

From the result of this section as shown in table 13 respondents believe that there is a lack of integration of information technology systems, organizational processes, and people 47(40.2%) of respondents strongly agreed and agreed with this view. Fifty-eight of the respondents confirmed that there is a lack of technical support and immediate maintenance of integrated IT systems which obstruct work routines and communication flows were neutral 39(33.3%) with this idea. Seventy-two of the respondents disagree with unrealistic employee expectations as to what technology can do and cannot do and 14(12.0%) were neutral with this idea. The majority of the respondents agree that there is no proper IT platform to share knowledge in their university but 27(23.1%) of the respondents disagreed with this statement. 95(81.2%) of the respondents agreed there is a lack of training to enable employee familiarization with new IT systems and processes and there is a lack of communication and demonstration of all advantages of new IT systems over existing 4(3.4%) of them disagreed with this statement.

There is no doubt technology can facilitate knowledge management practices more effectively and easily. Knowledge management-related technology and associated business process improvements promote performance improvements, providing people what they need, just when they need it, and where they need it. Enhancing technology in private higher education institutions will facilitate

KM practices since technology is believed to be the groundwork for implementation of KM practices as it is a vital KM infrastructural capability that leads to easier and faster adoption of KM practices (Makambe, 2017).

From the result of respondents, this section also has input for knowledge management strategy which is going to be proposed. Private universities have to include the followings in their knowledge management strategy:

- ✓ Private Universities need to provide:
 - Information Technology help support and training.
 - Tools for knowledge capturing and sharing.
 - A suitable platform accessible anytime from almost anywhere.

4.12.3 Organizational barriers

Organizational barriers are focused on the corporate-wide perceptions and managerial issues that can hinder KM practices in private universities. organizational culture, leadership and employee satisfaction are among the most crucial factors formulating the development of KM strategy, which in turn determine the overall service quality provided in Higher Education.

As shown in table 14 majority of the respondents 71(60.7%) agree, the Integration of KM strategy and KM initiatives into the company's goals and strategic approach is missing or unclear only 13% of the respondents were neutral with this view. Respondents also confirmed that there is a lack of leadership and managerial direction in terms of communicating the benefits and values of knowledge management practices only 2(1.7%) of the respondents disagreed. In private universities, there is a shortage of formal or informal space to share, reflect and generate (new) knowledge management practices confirmed by 99(84.6%) of respondents. A lack of staff refreshment facilities such as staff common room or staff cafeterias, and jammed staff rooms are overcrowded and noisy making it impossible to hold meetings there, 85(72.6%) of the respondents agreed with this view. Respondents agree that there is no transparent rewards and recognition mechanism that would motivate people to share more of their knowledge. Present corporate practice, which does not provide sufficient support for sharing the knowledge that inhibits them from sharing knowledge confirmed by 72(61.5%) respondents agreement. There is also a lack of open mind sharing the environment and physical work environment and layout of work areas

restrict effective knowledge management practices in private Universities and 90(76.9%) of respondents agreed with this view.

The response scale are presented in scale ranging from 1 to 5 where 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree						
Technological barriers	1	2	3	4	5	Total
1. Integration of KM strategy and KM initiatives into the company's goals and strategic approach is missing.	3 (2.6%)	3 (2.6%)	13 (11.1%)	71 (60.7%)	26 (22.2%)	116 99.1%
2. Lack of leadership and managerial direction in terms of clearly communicating the benefits and values of knowledge management practices	3 (2.6%)	2 (1.7%)	9 (7.7%)	98 (83.8%)	5 (4.3%)	117 100%
3. Shortage of formal or informal space to share, reflect and generate (new) practices.	2 (1.7%)	3 (2.6%)	9 (7.7%)	99 (84.6%)	4 (3.4%)	117 100%

4. Lack of transparent rewards and recognition systems that would motivate people to share more of their knowledge.		4 (3.4%)	7 (6.0%)	96 (82.1%)	10 (8.5%)	117 100%
5. Lack of open-minded sharing environment.		5 (4.3%)	13 (11.1%)	90 (76.9%)	9 (7.7%)	117 100%
6. Existing corporate practice, which does not provide sufficient support for sharing knowledge.		4 (3.4%)	34 (29.1%)	72 (61.5%)	7 (6.0%)	117 100%
7. A situation where knowledge retention of highly skilled and experienced staff is not a high priority.	1 (0.9%)	10 (8.5%)	34 (29.1%)	65 (55.6%)	7 (6.0%)	117 100%
8. Physical work environment and layout of work areas restrict effective knowledge management practices.	2 (1.7%)	4 (3.4%)	12 (10.3%)	88 (75.2%)	11 (9.4%)	117 100%
9. Lack of staff refreshment facilities such as staff common room or staff cafeterias.	1 (0.9%)	7 (6.0%)	16 (13.7%)	85 (72.6%)	8 (6.8%)	117 100%
10. Jammed staff rooms		6 (5.1%)	15 (12.8%)	85 (72.6%)	11 (9.4%)	117 100%
11. Heavy work load during working hours and making informal interaction is difficult		8 (6.8%)	14 (12.0%)	80 (68.4%)	15 (12.8%)	117 100%
12. Inadequate internet facilities due to bandwidth challenges	4 (3.4%)	28 23.9%	8 (6.8%)	66 (56.4%)	11 (9.4%)	117 100%

Table 14. Organizational Barriers

Heavy workload during working hours and making informal interaction is difficult is another problem that impeded knowledge sharing confirmed by 80(68.4%) of respondents. Inadequate internet facilities due to bandwidth challenges also inhibit knowledge management practices, 66(56.4%) agreed and 28(23.9%) of the respondents disagreed with this view. From the responses, it can be concluded that private universities have to work on integrating knowledge management initiatives and knowledge management strategies with the university's strategic approach.

The following are inputs from this section for knowledge management strategy:

✓ Private universities need to facilitate:

- Transparent knowledge flows, processes by creating flat and open organizational structures that can provide continuous learning in the organization.

- Communication of the university goals and strategy linking knowledge management practices and benefits to them including feedback processes.
- ✓ Private universities need to provide :
- Suitable physical work environment and avoiding layout of work areas that restrict effective knowledge management practices.
 - Staff refreshment facilities such as staff common room or staff cafeterias
 - Adequate internet facilities
 - Transparent rewards and recognition systems that would motivate people to share more of their knowledge.
 - The necessary condition for KM and motivation, training and support.

4.13 Incentives

The aim of this section is to ascertain what kind of incentives would increase the motivation of academic staff to participate in knowledge management activities. There is a finite amount of time that is available during a workday and spending that time on working vs. helping a colleague or codifying the knowledge in some KM tool is very hard to make in the absence of incentives.

The response scale are presented in scale ranging from 1 to 5 where 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree						
	1	2	3	4	5	Total
1. Financial incentive	1(0.9%)	1(0.9%)	2(1.7%)	74(63.2%)	39(33.3%)	117(100%)
2. Improving the work environment			2(1.7%)	68(58.1%)	47(40.2%)	117(100%)
3. Opportunity to attain certain experts or community of practice			3(2.6%)	71(60.7%)	43(36.8%)	117(100%)
4. Annual organization prizes (awards)			3(2.6%)	72(61.5%)	42(35.9%)	117(100%)

5. Learning opportunity		1(0.9%)		79(67.5)	37(31.6%)	117(100%)
6. Acknowledgment for your contribution			1(0.9%)	72(61.5%)	44(37.6%)	117(100%)
7. Tools			3(2.6%)	79(67.5%)	35(29.9%)	117(100%)
8. Time		1(0.9%)	4(3.4%)	76(65.0%)	36(30.8%)	117(100%)
9. Chance of promotion			4(3.4%)	72(61.5%)	41(35.0%)	117(100%)

Table 15. Incentives that encourage employees

Incentive systems have great effects for encouraging knowledge sharing that reward participants who share and transfer knowledge. Incentives can be differentiated from rewards in that they provide other, encouragement for sharing knowledge. From the response, as shown in table 15 majority of the respondents need financial incentives to participate in knowledge management activities 74(63.2%) agreed,39(33.3%) strongly and only 1(0.9%) disagreed with this view. That means academic staffs expect rewards especially money in exchange for acting in a particular way. In addition 68(58. %) respondents similarly agree and 47(40.2%) strongly agree that improving working environment or redesign physical workspace encourages them to knowledge sharing.

Knowledge management tools and specific time for knowledge management can also motivate them to practice knowledge management. Time refers to the pressures on an entity to accomplish specific tasks within a specified timeframe. The effect of time can constrain knowledge sharing activities and even affect the quality of results delivered. Academic staffs also confirmed that they need acknowledgement for their contribution 72(61.5%) agree and 44(37.6%) of them strongly agreed with this view. Annual organization prizes (awards) are needed by almost all of the respondents except 3(2.6%) of them were neutral. Learning opportunity, Chance of promotion, Salary increment Career development almost all of the respondents agree this kind of incentive motivates them well for knowledge management activities in their University.

According to Dalkir(2005), incentive is a reward or some form of positive feedback given when the desired behavior is revealed. Knowledge workers also need to get incentives because it encouraged and reason for knowledge sharing. Private universities need to offer incentives and necessary resources especially time and tool that will motivate academic staff to participate in

knowledge management activities as confirmed in their response. so private Universities have to include incentive mechanisms based on the contribution of employees in their knowledge management strategy.

From the analysis of this section academic staffs in private universities need the following kind of incentives to motivate in knowledge management activities:

- ✓ Private universities need to provide the following incentives for sharing and reusing proven practices:
 - Financial incentives
 - Annual organization prizes or awards
 - Improved working environment
 - Promotion and rewards for KM contributors.
 - More time and tool for KM practices

4.14 Strengths, weaknesses, opportunities, and threats (SWOT) analysis

<p>Strength</p> <ul style="list-style-type: none"> ▪ Currently, they have young and educationally well progressed academic staff that can adapt KM practices easily. ▪ Access to the internet is available and employees can relate to using technology. ▪ Already existing capacities can be improved on for example websites. ▪ Existing staffs are willing to participate in KM practices 	<p>Weakness</p> <ul style="list-style-type: none"> ▪ There is no communication strategy in place to help employees understand the strategic directions of the university. ▪ Key peoples are leaving the organization leaving critical gaps in expertise. ▪ Lack of integration of information technology systems, organizational processes, and people. ▪ Lack of Knowledge Management Office (KMO) or responsible body that facilitates knowledge management activities. ▪ There is a lack of formal/informal interaction due to the difficulty of holding meetings as a result of inadequate physical infrastructure.
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Opportunities	Threats
<ul style="list-style-type: none"> ▪ It is possible to map out knowledge within Private universities – who knows what and who needs to know and to link these people ▪ Appointing KM manager, team and/or workers ▪ Training employees when there is new technology brought into the university. ▪ Establish a platform, either electronic or physical meetings, for university. ▪ Provide a set of incentives and reward systems for employees based on performance and sharing knowledge and information amongst staff 	<ul style="list-style-type: none"> ▪ The physical work environment also impedes to preserve, share and retrieve knowledge in private universities like jammed staffroom, there is no staff cafeteria to have informal meetings with colleagues. ▪ Academic staffs in private universities can be laid off and get a new job somewhere else. ▪ Private universities unable to become competitive, improve their standards, quality and adding more and more value to the services in order to attract quality students.

Table 16. SWOT Analysis

To develop a basis for depicting a knowledge management strategy, the usual SWOT framework should reflect on today’s knowledge-intensive settings. And, to better understand firms’ points of advantage and weakness, they have to conduct a knowledge-based SWOT analysis and plan their knowledge resources and capabilities together with their strategic opportunities and threats. the existing Knowledge Management Practices (Shannak , Masa'deh, & Akour , 2012). As presented above in table 16 there is no KM strategy implemented to manage knowledge assets in private universities. so to avoid their weakness, to use their strength and fear of other similar institution by finding solution for opportunities and treats. Using the SWOT analysis this study present a generic KM strategy for private universities that can be used as a guide line to practice and use KM.

4.15 Conclusion

The purpose of this chapter was to analyze and verify the need for, and usefulness of a Knowledge management strategy for private universities. The analysis look at people, technology and organizational culture. In addition to these, it includes where knowledge exists in those universities, Knowledge gaps, knowledge needs and bottlenecks for practical knowledge management at those universities related to perception of people, organizational culture and technology perspectives. Furthermore, the incentive mechanisms that would help to motivate academic staffs to participate in knowledge management activities at those private universities are identified. Respondents also confirmed on their response there is a need to have a knowledge management strategy in those private universities.

People's requirements can be addressed within a knowledge management strategy. There appears a culture of mistrust amongst staff with regard to their respective schools not disclosing or facilitating access to all the schools knows, yet also express a view that the schools encourage collaboration. This contradictory theme is continued when nearly all personal knowledge is stored locally and not visible for other colleagues to view. Yet colleagues are willing to share their knowledge but in certain cases, they are unaware of these knowledge needs. From the result of analysis people no longer stay in one job for life. From the analysis of demography of respondents, most of the academic staff in private universities are young so they can leave and get a new job somewhere else. Since knowledge does not stay in one place creating a mechanism to capture employees' knowledge will keep private universities from loss of important knowledge. They have also to seek knowledge sharing mechanisms to get knowledge of the experienced staff.

Academic staffs feel that they are quite competent in finding, creating and maintaining their own knowledge, but unfamiliar with any policies or procedures about managing such knowledge. There is also a lack of awareness, understanding processes with regard to knowledge, its sources and its management. The overall environment of private universities needs to facilitate the KM process that will allow to discover, capture, store, and transfer of knowledge resources. A lack of visibility of what knowledge is available related to this vacuum of processes leads to mistrust. Private universities must learn fast enough to keep up with the speed of change. They must create, improve, and deploy new knowledge, and delete the old knowledge, in order to survive. Private university KM strategy must support that speed of learning, and enable every decision-maker in the university, no matter what their level; to have access to the knowledge they need, at the time that they need it, in a completely up to date form.

Knowledge management strategy is needed related to technology. In private universities, Staffs are willing to collaborate but also required proper IT platforms to share knowledge. These points dictate the need to re-align the IT infrastructure and the development of collaboration tools. There is a clear mandate expressed by staff for the creation of a knowledge repository with a need for staff to create reusable knowledge whilst reusing existing knowledge. This overwhelming wish for such a system will dictate the need for a knowledge management strategy in its own right with all of these technical requirements.

KM bottlenecks can be individual perception of people, technological and organizational barriers. Knowledge asset bottleneck occurs where there is a problem with knowledge availability. Knowledge management bottlenecks may also arise if the source of the knowledge is not properly cataloged. Lack of transparent rewards and recognition systems also fails to motivate people to share more of their knowledge.

CHAPTER FIVE

5 The KM strategy for the private universities in Addis Ababa

5.1 Introduction

Knowledge management strategy is proposed based on the analysis result. Questionnaires were used to identify private universities' collaboration culture, overall currently existing knowledge management processes, and rewarding systems. In addition Perception of knowledge within private universities, staff skill set in information/knowledge, knowledge repository, knowledge sharing programs, bottlenecks related to technology, organizational and people that impeded KM activities have been analyzed. Also, SWOT (strength, weakness, opportunities, and threats) analysis of chapter four leads to the main focus of this chapter or newly proposed knowledge management strategy. The generic knowledge management strategy for the private universities in Addis Ababa is structured under the following five components: knowledge management mission, knowledge management goals, knowledge management strategic choice, KM roadmap and KM key performance indicator.

Currently private universities need to recognize knowledge as the most valuable asset for private universities. Facilitate collaboration and knowledge sharing within department/school and across private universities. To accept knowledge as intangible assets and use the KM process to preserve their knowledge. To recognize the experts' knowledge as a corporate asset within the universities. Facilitating conservation and storage of the knowledge asset within the Universities. They have to facilitate transferring or sharing the knowledge asset between members of the universities or exchanging between universities. Updating or maintaining or refreshing the knowledge assets of their universities. Private universities have to enable classifying, exploring, locating, monitoring, organizing and retrieving knowledge assets to speed decision making. Private universities have to work on a careful arrangement of rewards that can enhance employees' interest and performance. Provide a knowledge repository where the staff has access and visibility to the knowledge contained within their universities and other partnered universities or subscribed databases referred to journal. Provide structure to bring the knowledge managed situation, which will give integrated and secure digital mechanisms of delivery, with support and administration services in place to ease this. Adequate physical space for the holding of formal and informal meetings to facilitate knowledge exchange is critical for the enhancement of KM practice in organizations. Motivation and familiarization of individual employees to purposely capture, disseminate, transfer and apply existing and newly created useful and relevant knowledge by avoiding inhibitors from individual behavior or people's perceptions and actions.

From all result of the analysis the following generic KM strategy is proposed for private universities. The KM strategy proposed here for the private universities in Addis Ababa is generic in the sense that it is the initial set of KM principles and action plans for the studied universities to adopt. Such a generic KM strategy leaves room for incorporating emerging strategic issues and decisions once the KM strategy is rolled out in each university. Many experts support this approach primarily because it allows merging both deliberate and emerging KM strategies (Bolisani and Bratianu, 2017).

5.2 Knowledge management Mission

In this generic knowledge management strategy development, the first step is to define a Knowledge management mission. The mission statements in an organizational sense define the organization's reason for being and intended in the market place. Knowledge management mission

defines the reasons or the purpose for strategy development and provides a sound base for determining the strategic goals and priorities. The KM mission, KM goal and strategic choice of the strategy stands from the result of the analysis discussed in chapter four that include collaboration culture of private universities, knowledge management processes and technologies employed in facilitating KM activities, knowledge storage available through private universities information systems is not sufficient and information or knowledge is not updated regularly. Knowledge mapping is needed to find and use knowledge in private universities. Also tacit knowledge sharing programs important for academic staff to learn from others experience, gain new ideas and knowledge, increase their competence. private universities also need to overcome problems related to personal perception, technological and organizational barriers. standing from those points which are discussed in detail in chapter four the following mission and goal statements are divided standing from those discussions.

The mission of this generic knowledge management strategy is outlining overall principles that the people, processes and technology needed to facilitate a cultural change whereby information and knowledge are habitually created, managed, shared and accessed by academic staff. This helps the staff to organize, share and find information and knowledge within their University. The following are specifically the mission of KM Strategy for private universities in Addis Ababa.

- ✓ To preserve the knowledge asset within the Private Universities.
- ✓ To provide easier and timely access for staff to information and the knowledge they need to get.
- ✓ To provide more effective flexible mechanisms for staff to access the knowledge and scholarly resources they need, in the desired formats, in the place they need inside or outside the university.
- ✓ To establish organizational culture and a structure that promotes KM practices.
- ✓ To improve staff ability to share knowledge, promote knowledge sharing culture and environment, embedding the sharing of knowledge within the daily work routine.

In addition, the mission of this knowledge management strategy is to support private universities' competitiveness and ensure overall growth by taking full advantage of their knowledge assets. University performance highly depends on the management of its knowledge assets (Gourova, et al, 2015). The overall mission of this KM strategy is to have a faster and more accurate decision-

making process in private universities. The same job can be assigned to different people while preserving the quality of service. This will increase staff efficiency, job satisfaction and competitiveness of private universities.

5.3 Knowledge management goal

Private universities are for-profit institutions funding is especially through student fees. Those private universities use education for economic gain in order that they got to provide quality service. But they suffer from poor quality, low academic standards, limited programs that specialize in the cheap field of study, poor infrastructure, and reliance on par time staff. To beat those problems, Private Universities must determine the elemental advantage of the knowledge and invest within the sort of knowledge that has value add knowledge and skill.

Managing knowledge can help private universities to achieve success in teaching and learning, student retention, and other financial sustainability goals of their university. Tacit knowledge of the academic staff is often scholarly knowledge that becomes explicit disseminated through teaching and students engaging within the learning process, publishing research, and disseminating knowledge through conferences, service activities, and collaboration with other universities. Operational knowledge is held in diverse areas like computer services, enrollment management, admissions, research support, student services, student organizations, etc. The operational knowledge made explicit in the multi-functional team is often assessed and wont to guide university operations. When academic staff leaves or retires, Private universities lose scholarly and operational knowledge that an individual brings to the university but are often handled by creating a mechanism for capturing knowledge. Experience of educational staff from other universities can help private universities to deliver quality service with an appropriate management structure, institutional documentation, and good service delivery.

The expected outcome of a technique is the establishment by the organization of a system to leverage its knowledge assets to maximize impact and reduce waste of resources, including time.

The main goal or aim of this generic knowledge management strategy is:

- To improve private universities' effectiveness by ensuring that plans are designed based on the latest knowledge, take advantage of past experience and expertise acquired by the academic staff.

- To increase private universities' efficiency and reduced costs through strengthening the ability to respond quickly, rapid mobilization of organizational expertise and experience, avoidance of previous mistakes and duplication of efforts.
- Facilitation of the adoption of an integrated approach to the program by :
 - Establishing and empowering communities of practice and
 - Networks that cut across sectors and geographic locations.

5.4 Knowledge management strategic choice

After setting the mission and goals of KM strategy in private universities the next step is deciding on how to achieve the goals and which are the necessary actions to follow and resources. The strategic choice mainly focuses on people, processes, and technology to facilitate the Knowledge Management strategy and the roadmap that will ease organizational performance and competitiveness. A strategy is essential to structuring and guiding the manner in which an organization channels its efforts to manage knowledge in order to achieve its goals. Organizational policy and a set of guidelines may further detail and transform such a strategy into concrete knowledge management processes and actions.

There are various choices to implement KM and meet the goals set incorporating the needs expressed by academic staff within the three streams in private universities. Knowledge management strategy is chosen to bring the desired future, such as the achievement of a goal or solution to a problem in private universities.

People, process and technology are acting as enablers or barriers to effective knowledge management. Knowledge management is basically about how people produce, share and use knowledge, and therefore no knowledge management tool will work if it is not applied in a manner the ways people think and behave which means investing only in a new system is valueless. On the other hand process and technology enable and facilitate knowledge management activities. Technology provides how the right knowledge is deployed at the right location, at the right time, and is effectively used to provide winning, value-added services, and solutions to the users. So, people, process and technology are interconnected with each other to implement knowledge management in private universities and the selection of knowledge management strategies.

The relationship between people process and technology is represented in the bellow picture fig 5.1. Ramanigopal(2012) stated People help to design and use technology whereas technology

provides support to people to perform KM. The process determines the role and needs of knowledge to people and people help to design and operate knowledge management activities. The process determines the need for technology and technology can make possible KM processes.

In order to provide a knowledge management strategy set of actions, resources, responsibilities, structures, etc. what structures, resources, and responsibilities are available have to be considered related to people, process and technology. The following section discusses people, process and technology and possible action to achieve the desired goal.

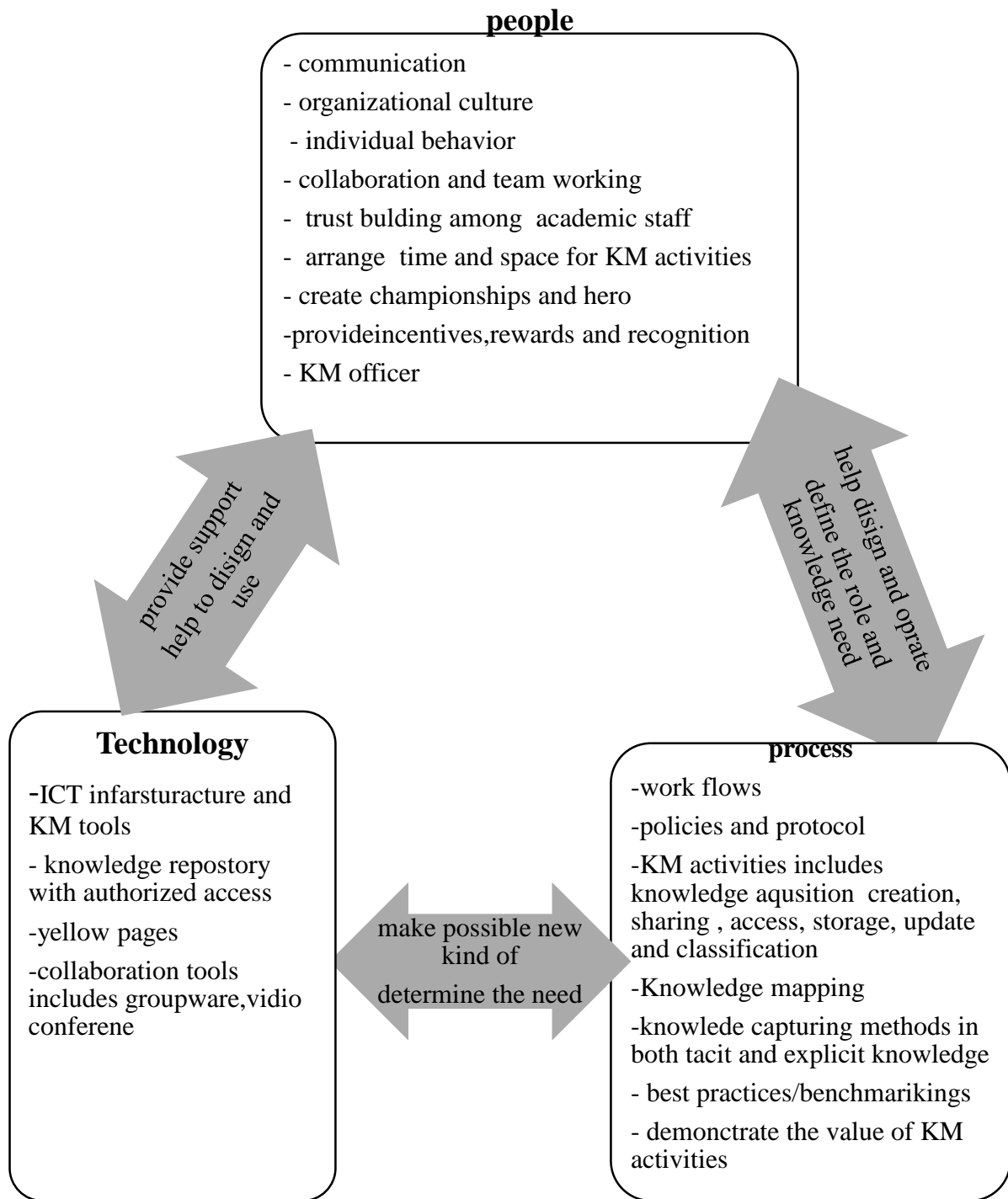


Figure 3. Knowledge management components

5.4.1 Actions in order to achieve the KM goal

Standing from people, process and technology perspectives, the following possible action has to be undertaken to achieve the knowledge management goal operational in private universities.

- ✓ To ensure information and knowledge are readily accessible and accurately managed within private universities, the universities should:
 - Enhance the provision of technology and give a lively intranet or database as a collaboration/information tool. Like groupware as a software product helping people communicate, share information, perform work efficiently and effectively, and ease group decision-making using IT. Email communication, instant messaging, discussion areas, file area or document repository, information management tools like calendar, contact lists, meeting agendas and minutes, and search facilities.
 - Increase the push of content to the users in a timely manner allowing increase awareness and efficiency on matters of professional or social concern to increase internal corporate cohesion. University library online journals, E-books, E-libraries and university websites, and discussion forums.
 - Mandate the use of personal profiles that will become authoritative sources for personnel information including skills information to support knowledge mapping of their university. Like yellow pages.
 - Retain the expertise when staff leave and reorganization occurs.
- ✓ To enable private universities academic staff to engage in knowledge sharing internally and external to other universities, the universities should:
 - Recognize the importance of sharing information and knowledge throughout private universities.
 - Encourage the sharing of tacit knowledge from person to person or collaboration culture while gradually investing in means to capture the tacit knowledge converting it into more tangible and explicit knowledge.
 - Ensure that explicit information and knowledge are shared legally and safely around the private universities.

- Ensure a range of processes and technologies are employed to realize efficient information and knowledge sharing within the private universities among academic staff
- Adopt a collaborative culture that allows learning together and helps to build trust among academic staff.
- Balance the technology enablers with facilities and communication process enablers to foster physical interaction and exchange of knowledge.
- Enable collaboration tool it can be used to connect people through video conferencing, e-mails, e-chatting and discussion groups, which provide the ability to record and save contents in the KM system.
- Enhance collaboration technologies, such as blogs, virtual worlds, wikis, social networking, and video teleconferencing, provide collaborative applications that facilitate creating groups. It allows users to upload pictures as well as personal and professional background information.
- Provide a good atmosphere that inspires learning and diffusion of knowledge. by providing space with adequate facilities for staff to interact and network regularly to exchange information and knowledge. Like meeting rooms, staff cafeteria for formal and informal meetings
- ✓ To guide to where knowledge exists in private universities and an inventory of the knowledge assets available, the universities should:
 - Provide a knowledge map that shows the location of knowledge resources within private universities, like document directory, databases, information systems
 - Provide a knowledge map that consists of a list of people, documents, and databases telling academic staff where to go when they need help. Like expertise directory
 - Provide information catalog with index.
- ✓ To perceive knowledge as the most important asset and manage it properly, the universities should:
 - Create awareness about knowledge management to engage staff in KM activities. Aware or explain the benefit of knowledge management in building the organization's competitive advantage in the education market.
 - Create a common understanding of knowledge management through education, discussion, publications, teaming, and job rotation

- Dedicate times and places for knowledge KM activities e.g. meeting rooms, and conference reports.
 - Build relationships and trust through face-to-face meetings. Like formal and informal meetings.
 - Educate staff for flexibility; provide time for learning; hire for openness to ideas.
 - Encourage flat organization approaches to knowledge; the quality of ideas is more important than the status of their source
 - Take failure as a learning opportunity; there is no loss of status from not knowing everything.
 - Provide training programs to improve skills in KM activities
 - Provide structure to bring the knowledge managed situation, which will give integrated and secure digital mechanisms of delivery, with support and administration services in place.
- ✓ To Motivate academic to participate in knowledge management practices, the universities should:
- Introduce incentives to motivate knowledge exchange and learning, rewarded for being an outstanding professional willing to share valuable experience
 - Provide formal time for staff dedicated to unstructured learning and sharing activities encourage staff to describe their expertise and experience for others.
 - Recognize academic staff to be motivated and participate when it is good for their career when they are recognized.
 - Take performance evaluation to encompass knowledge creation, exchange, and application capabilities to motivate employees to generate, share, and use knowledge for the benefit of the entire organization.
 - Evaluate performance and provide incentives based on sharing:
 - A financial incentive like salary increment, bonuses
 - Opportunity to attain certain experts or community of practice
 - Annual organization prizes (awards)
 - Acknowledgment for their contribution
 - Career development

5.5 Proposed generic KM strategy for private universities

The knowledge management strategy for private universities should be integrated or hybrid knowledge management strategy. Which focuses on both personalization and codification strategy one as a dominant strategy and one as a supporting strategy. This study suggests 80 percent personalization strategy with the emphasis of 20 percent codification strategy. The study reached with this argument based on the analysis done, available strategies in the literature discussed in chapter two and settled actions to achieve the KM mission and goal. In the studied universities, there is no defined KM plan/strategy charged with putting KM activities into practice in order to address KM mission and KM goals statements. In addition, there is a lack of people communication, non-standard information systems and inability where to find knowledge.

This generic KM strategy gives primary focus on people or academic staff interaction, communication, collaboration culture, access and visibility for information and knowledge. Information communication technology is taken as an enabler for KM activities. Current practices in those universities lack learning and sharing culture or collaboration culture, as well as a misunderstanding of the KM process by academic staff. In addition perception about knowledge and understanding of KM among academic staff have to be changed and involve in KM activities. Private universities should focus on encouraging staff to integrate KM into their daily work through their own will. Additionally, it might be argued that organization management should change to a flat structure, empowerment and personal management style supported by offering rewards and encouragement and more time for KM. Private Universities also need knowledge sharing through the utilization of IT tools with operational structure to capture, store, and organize knowledge. These can enable private universities to effectively retain internal knowledge in the organization. This occurs despite the fact that supporting staff of private universities have high skills and knowledge of their jobs. Thus, a codification strategy is needed at private universities to provide effective teamwork and the utilization of applicable software. This can be supported by information and communication technology, a knowledge management officers can have the potential of operating a KM system, as well as the ability to capture expert knowledge to be stored in a knowledge database. Private Universities must establish a clear vision and strategic plan for the use of a knowledge management approach. This KM strategy should address a KM structure that combines IT, process, measures, and roles and responsibilities. Private universities should

measure the impact of KM activities for performance, including benefits such as reduced staff work time and increase the quality of products and services. In an integrated view, private universities can continuously adapt and correct their KM strategy on the basis of a dialog between a rational contribution of reasoning and perception of reality influenced by practical views, intuitions, and emotions (Bolisani and Bratianu, 2017).

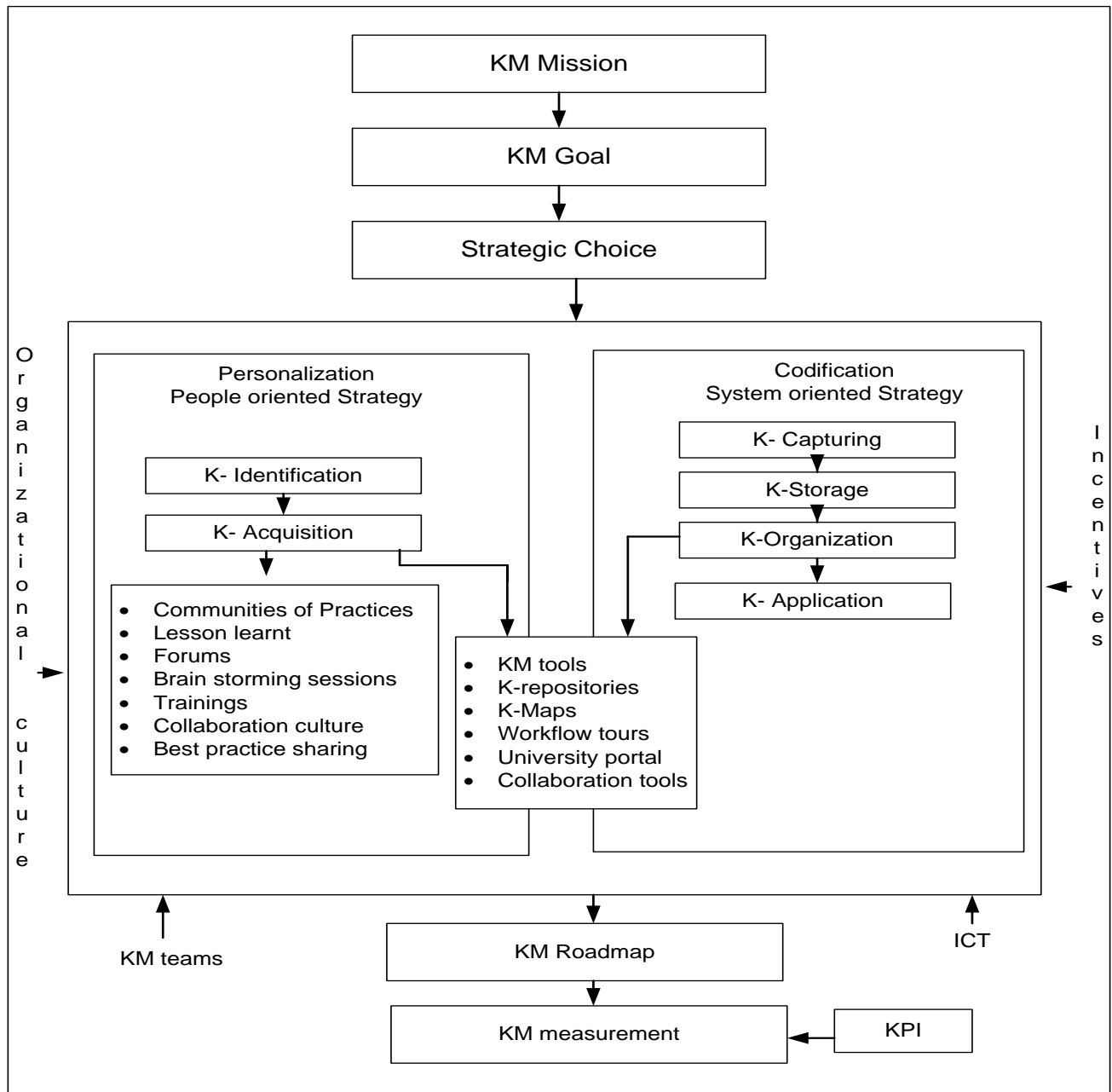


Figure 5. Proposed generic KM strategy for private universities

KM mission : Defining the scope of KM to ensure business mission that why private universities need KM. So private universities have to put their own KM mission based on their organizational context this study suggest KM mission standing from the analysis result. The KM mission clarifies the reasons for strategy development, and provides a sound base for determining the strategic goals and priorities.

KM goal: Defining KM goals to achieve the KM mission . Private universities have to put KM goal explain steps how to achieve the KM mission of their university. In this study necessary steps to achieve the KM mission are presented .

KM strategic choice : Choosing the most suitable for the organization strategic alternative. That is how to implement KM in private universities. As shown in the proposed generic KM strategy this study suggested those universities to implement hybrid or integrated knowledge management strategy. The strategic choice decided how to implement the goals and which actions would be more suitable that is finding the most suitable strategic alternative for private universities

Hansen et al. found that most companies which had used knowledge effectively pursue one predominant (80%) strategy and use the second strategy (20%) to support the first. Sarawanawong et al. proposed a 'hybrid KM framework development strategy' in higher education. The personalization strategy plays a leading role while the codification the supporting roles. This study also suggests 80 percent personalization strategy with the emphasis of 20 percent codification strategy.

In a generic KM strategy of an integrated view, private universities can continuously adapt and correct their KM strategy (Bolisani and Bratianu, 2017).

Personalization or people KM strategy: It is based on a person to person approach and delivers customized services often practiced by organization that provide highly customized solution to unique problem. As shown in proposed KM strategy it includes Knowledge identification , knowledge acquisition, enabled by communities of practices, best practices, lesson learned, trainings, best practices, collaboration culture or social interaction.

- ✓ Enable identification of knowledge find mechanisms to correct the knowledge gaps that are necessary to support staff daily work successful. This includes identifying knowledge to be transferred, knowledge sources, knowledge transfer targets, and selecting the transfer

method. Determining the source and the target of knowledge clearly will aid to identify whether it is people-to-people, people-to-system, etc. transfer.

- ✓ Encourage creation or acquisition of knowledge by allowing the exchange of ideas and knowledge among individuals and groups and reward staff for new ideas and knowledge. This can be enabled by collaboration culture and tools. This can be online discussion via web blog, teambuilding events, best practices sharing, brainstorming sessions, and discussion forums.
- ✓ Communities of practice are formed by people who engage in a process of collective learning in a shared domain of human endeavor: who deal with a common organizational process, who have interest in solving similar problems, who works in the same project, etc.
- ✓ Identifies and incorporates the practices considered most suitable to each task. It may result from benchmarking or incorporation of best practices among organizations.
- ✓ Represent the acquired and validated knowledge, as a result of the development of a particular project or activity
- ✓ Trainings : structured sessions with instructional material designed to support the processes of teaching and learning about a particular subject; it can include seminars, conferences, workshops
- ✓ Social interaction collaboration, social bookmarking, chat rooms, discussion forums.

Codification strategy or system oriented KM strategy

- ✓ Establish mechanisms to capture knowledge or codification that mean absorb and transfer the knowledge of staff, particularly retirees, to preserve meaningful ideas of staff and document them for further development. This can be enabled by arranging storytelling programs, experience sharing programs, discussion databases, and expert locator/directory of expertise.
- ✓ Gather and formalize existing internal enterprise and external knowledge in knowledge storage. This primarily refers to policies and procedures, best practices, lessons learned and expertise maps to be preserved for present and future use. Databases, repositories and information technology applications should be implemented to store knowledge for easy access by all staff.

- ✓ Provide a mechanism to knowledge organization this includes cross-listing and integrating different sources and types of knowledge. Those processes would allow for applying the knowledge learning from others' experiences and match sources of knowledge to problems and challenges. They can use document management or content management systems and lesson learned system.
- ✓ Establish effective and efficient methodologies for distributing knowledge to staff. Distribution of knowledge in the form that is readily accessible to staff who need it, by using email, blogs in the website, intranets, and internet. And send out timely reports with appropriate information to staff.
- ✓ Establish different methods for knowledge application for staff to further develop their knowledge and apply it to new situations. Additionally, such knowledge is critical to competitive needs and can quickly link sources of knowledge to problem-solving

KM tools : support the organizational processes and practices, enabling an environment that facilitates the knowledge sharing and creation, and also the communication and collaboration among the organization. More than technological systems, these tools could be viewed as virtual spaces that promote knowledge conversion between explicit and tacit dimensions of knowledge.

Knowledge repositories

Document management; edition collaboration; versions control; documents sharing; support for all content types (text, audio, video, graphs, xml, web, etc.); searching and retrieval advanced mechanisms.

Knowledge maps: categorizing and indexing knowledge in taxonomies; creating knowledge maps; pointing to organizational knowledge; inserting tags and labels in documents; alerting to relevant information.

Workflow tools: business processes automation; support automated flows of activities, tasks and information; support documental flows

University portal: filtering relevant information; search and retrieval advanced mechanisms; news, activities, tasks and calendar management; unified access environment to other tools: documents management, workflow, knowledge maps, groupware

collaboration tools: interaction, participation of people: blogs, wikis, social bookmarking, tagging, content sharing, virtual meetings like instant messenger, videoconference grouping calendar and scheduling, etc.

Organizational culture, organizational structure, incentive mechanisms, KM team, KM technology, KM road map and KM measurement (KPI) is needed to successfully implement in private universities.

5.6 KM strategic road map

A strategic roadmap to maturing an organization's KM capabilities is what sets apart organizations that leverage their collective knowledge from their competitors who don't have a handle on it at all. It is a living document regularly updated and serves as a framework for the monitoring of the knowledge management program. The document reflects the current state of the interrelationships between work in progress and proposed for the future and the overall milestones and aims of the program. Private universities can follow the following road map adapted from (Erkan, 2007).

Stage 1: Start-up or preliminary stage

Universities at this stage are the least advanced and characterized by:

- An understanding of the concept of KM, different perspectives and its practical Implications.
- Ensure KM awareness through different means by face to face training and using technology support
- Recognition of the potential of KM in building the value of knowledge assets for Service improvement
- Establishing the need for KM and the willingness to share knowledge
- Identify the knowledge that is strategically important to the university

Stage 2: Take-off

The take-off stage involves:

- Establishing the goals of KM
- Exploring strategic options. By considering real-time delivery. The focus could be on people's interactions that are personalization or codification which is storing knowledge in the system.

- Establishing leadership and identifying resources for consultancy and support.

Stage 3: Expansion

The expansion stage is characterized by:

- Refining the KM strategy and linking KM to specific business objectives.
- Increasing the visibility of KM leadership, and the allocation of resources (budget, Staff, IT infrastructure).
- Implementing a change management program to address barriers and risks identified.
- Implementing KM initiatives in a structured and coordinated way, and
- Identifying appropriate KM tools to support specific initiatives
- Increasing the scale of KM initiatives to other business units, projects, and offices
- Introducing performance measures to evaluate KM and communicate the benefits Of knowledge assets.

Stage 4: Progressive

- Integrating KM activities to strategic measurement frameworks such as the KPI to monitor and evaluate knowledge assets.
- Establishing evaluation criteria and targets for measuring the impact on Knowledge assets and justifying KM initiatives.
- Introducing reward and incentive schemes to strengthen KM activities
- Increased visibility and communication of the benefits from most KM activities.

Stage 5: Sustainability

At the sustainable stage, KM becomes institutionalized and is characterized by:

- KM practices diffused in the entire organization
- KM becoming embedded in organizational culture, employees' behavior, Business processes, and product development
- Widespread reporting on the performance of knowledge assets behind university sustainability.

5.7 KM Key Performance Indicators

KPI (key performance indicator) is a metric that indicates the current performance level of an individual, department or company to achieve goals. Knowledge management prevents waste of

money, time and human resources. Even in private universities where an increase in the number of new students or in the amount of profit or turnover can be attributed to a better knowledge of markets, the usefulness of knowledge management initiatives may be questioned as the business impact of such initiatives often can be hardly quantified or is only indirectly measurable. The strategy, plan, implementation, and procedure contribute to KM performance. They can be qualitatively or quantitatively measured to discover if the current situation meets expectations and if corrective actions are necessary. Quantifying the time spent looking for the right information, Or the cost of reproducing knowledge that already exists somewhere else or using obsolete instead of up-to-date information, or the money wasted in investing in technology without assessing its potential to improve the availability and accessibility of knowledge is difficult. Private universities with a knowledge management (KM) program need to monitor its KM strategy, processes, tools and approaches to determine how well KM aligns with business goals, how many employees are participating in KM, how often they are participating, and the impact knowledge sharing is having on the business. The following KM key performance indicator is suggested for private universities in Addis Ababa Ethiopia.

	Title	Description
People	Knowledge sharing attitude	To what extent academic staff feel comfortable for knowledge sharing in order to help others or willingness to share knowledge taking survey per year
	Awareness	To what extent the academic feel they have been provided with sufficient information or knowledge about the new routines and work procedures or the new knowledge repository
	Knowledge sharing activities	Number of participants in formal, informal meetings in workshops/seminars/networks or other activities, per month.
		Number of people using the knowledge management system
Number of contributions per person for knowledge management system		
Process	Number of document created for KM	The number of KM documents in the university over time; however, older KM documents will gradually become outdated and should be retired. Monitor the number of newly created documents to determine the optimal rate of growth over a period of time.
	Number of times a KM document is accessed	A useful document is accessed frequently. Use this indicator to figure out which documents are the most and least useful.
	Number of KM documents used to resolve Interactions	KM documents should ultimately lead to resolutions. Monitor the number of KM documents that lead to resolutions of Interactions to help determine how successfully your Service Desk is able to access and reuse knowledge

	Number of KM documents used to resolve Incidents	Monitor the number of KM documents that lead to resolutions of Incidents to help determine how successfully KM documents help resolve serious issues that have been escalated to Incidents.
	Number of KM documents with an expired review date	To ensure the efficiency of the document publication process, monitor the number of documents that have not been reviewed in a timely manner.
	Efficiency due to new routines	<ul style="list-style-type: none"> • To what extent the employee: <ul style="list-style-type: none"> • Experience saved time by using knowledge databases in their daily work and finding the correct information/competence due to using the databases • consider increased number of orders connected to solutions/success stories
Technol ogy	Active Involvement	<ul style="list-style-type: none"> • Number of users login in a knowledge repository • Number of: <ul style="list-style-type: none"> • accesses in the chosen area, per user • returning users in databases • solutions contributed, per user • success stories contributed, per user • lessons learned contributed, per user • best practices contributed, per user • other contributions, per user
	Knowledge Structure	<ul style="list-style-type: none"> • Number of communities in databases • Number of topics in communities in databases Know • Number of taxonomies in databases

Table 17. Key Performance Indicators for Knowledge Management

Chapter six

Conclusion and recommendation

6.1. Introduction

The final chapter of this thesis presents the conclusions and recommendations formed from performing this research. This research aimed to develop a knowledge management strategy for the academic staff of private universities in Addis Ababa. The knowledge management strategy was developed under the central themes of people, processes, and technology, reflecting the knowledge needs of academic staff based and how these needs are best managed. This chapter presents a summary of this thesis in the form of how the research aims and objectives were achieved within the research questions. The chapter will discuss what contributions to the body of knowledge this research has made and will also discuss what the potential areas are for future research.

6.2. Conclusions

The research was carried out in line with the aims of the research question. The research aims to conduct a knowledge audit and propose a generic knowledge management strategy for private universities in Addis Ababa Ethiopia. With the knowledge society and the global economy we live in, knowledge has become the key resource to sustained economic development and creating a competitive advantage with this economic growth. Knowledge management strategy, which is derived from the world of business can help private universities in Addis Ababa to operate more effectively and efficiently, enabling them to enter the world of competitiveness and to advance their quality. To come up with the proposed strategy, the prevailing structures and practices available to support knowledge management practices in private universities in Addis Ababa Ethiopia have been gathered from academic staff. Also, challenges that impeded knowledge management practices in private universities have been checked. After this using two knowledge management strategy development frameworks the study suggested generic knowledge management strategy for private universities in Addis Ababa Ethiopia.

6.3. Recommendations

6.3.1. Contributions for study

The application of knowledge management strategy has great relevance for private universities. Private universities have the potential to apply knowledge management practices to improve their operational effectiveness, competitiveness, and quality. In the era of privatization of higher education, private universities have to raise their standards, quality and add value to the services to ensure the satisfaction of the different motives of various stakeholders of the university.

The development of a knowledge management strategy within private universities enables them to enhance their quality services and to be able to stand up to the demands of the knowledge society and of the global world of the education market. Adopting the principles of this knowledge management strategy by making specific to their university and integrate with their organizational strategy enables private universities to harness the bulk knowledge. Also, to manage it in the best possible way, it is essential for the satisfaction of the academic staff about their performance, towards satisfaction of the students, and towards the satisfaction of the university, which private universities can use its resources both tacit and explicit knowledge properly. The study has

contributed to the body of knowledge by highlighting methodological approaches by combining two knowledge management strategy development frameworks.

6.3.2. Recommendations for future work

This section of the thesis highlights the potential types of future research suggestions that may help to build upon the findings of this research. It also helps address some of the unexpected results in the study as well as the unanswered aspects of the study. The following are the propositions for potential future research:

- ✓ The study focused on the full-time academic staff of private universities in Addis Ababa Ethiopia. Future research can sample non-teaching staff and their roles in KM in an academic institution.
- ✓ Future research research can be conducted based on a qualitative research design to consolidate the quantitative results. This can prove beneficial to both leaders in private universities and KM researchers as this can consolidate the findings of this research.
- ✓ Future research can investigate implementation that would complete the loop by providing feedback mechanisms to measure the benefits of such KM strategy allowing the strategy to evolve and change iteratively and as necessary.

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Appendix: Questionnaire

Dear Sir or Madam:

In partial fulfillment of the requirements for Masters of Science in Information Science, I am undertaking a research on “proposing knowledge management strategy for private universities in Addis Ababa Ethiopia” at Addis Ababa University. I have accordingly prepared this questionnaire.

The research aims to identify knowledge Management activities and processes and bottlenecks at private universities, auditing currently existing knowledge management resources and identifying knowledge needs and gaps .Based on the information you respond the final output is generic knowledge management strategy for those private universities.

Your honest responses to each question and statement are extremely valuable to the outcome of this research. The results of the survey will be used for the purpose of academic research only. Hence, all responses will be kept in strict confidentiality and hence would not affect any one in any case.

The researcher will collect the completed questionnaire in one week after you got this questionnaire in your hand .Your dedication is most valued and appreciated. I would like to take this opportunity to thank you in advance for your kind participation, genuine and on time response to the questionnaire. For any question you can contact the researcher in the below address.

Name: Almaz Belhu

Phone: 0911621734

Email: almazbelhu20@gmail.com

Part 1: Demographic Profile			
Please circle write in the space provided your response to each of the questions.			
1. Your gender?			
1. Male	2. Female		
2. Your Age group?			
1. Less than 25 years	2. 26-30 years	3. 31-40 years	4. above 40
3. Educational status?			
1. Bachelors	2. Masters	3. Doctorate	
4. Academic Rank?			
1. Graduate Assistant	2. Assistant Lecturer	3. Lecturer	4. Assistant Professor
5. Associate Professor	6. Professor		
5. Your experience in an academic institution (the current or prior)?			
1. Less than 5 Years	2. 6 -10 Years	3. 11-15 Years	Greater than 15 Years
6. Name of your University?			
1. Admas	2. Riftvally	3. Unity	4. St. Mary

Part 2: The following statements are related to **the context of your school/department** in knowledge management practices. Indicate the extent to which you agree or disagree by putting [√] in the appropriate number against each using the response scale. The response scale are presented in scale ranging from 1 to 5. 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

Statements	1	2	3	4	5
1. What your school colleagues knows (knowledge) is visible and accessible to you in some way.					
2. You are supportive of collaboration between colleagues.					
3. You are willing to collaborate across organizational units/schools within university?					

Part 3: The following statements are related the **overall environment of your university** in knowledge management practices and process. Please indicate the extent to which you agree or disagree by putting [√]in the appropriate number against each using the response scale given below: The response scale are presented in scale ranging from 1 to 5. 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

Statements	1	2	3	4	5
1.My university facilitates the discovery and capture of knowledge					
2.My university facilitates storing of knowledge resources for the university wide access.					
3.My university facilitates the transfer of knowledge across the university.					
4.My university enables the organization to react more quickly to change by sharing of these knowledge resources.					
5.The overall environment of my university speeds decision making by facilitating retrieval across the university.					
6.In my University, there is a motivational scheme to encourage staff to create and share their knowledge within and outside the University.					
7.Failure seen as an opportunity for learning and recorded.					
8.Promotions & rewards are done based on individual's contribution to the development of university knowledge.					
9.Holding knowledge and being secretive about the best way to do something is actively discouraged.					

Part 4: The following statements are related to **Perception about knowledge within university**. Indicate the extent to which you agree or disagree by putting [√] in the appropriate number against each using the response scale. The response scale are presented in scale ranging from 1 to 5. 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

Statements	1	2	3	4	5
1. The specific knowledge that I need resides with the experts/colleagues rather than being stored in the university Intranet/ Internet sources because the knowledge is typically difficult to clearly articulate.					
2. I always have to seek new knowledge that is not directly available in the university Intranet/Internet sources.					
3.The knowledge that I find in university Intranet/Internet sources can be directly applied to current situations with little or no need to seek out or create new knowledge.					
4. There is a problem in identifying where knowledge exists who knows that I need to have.					
5. There is a problem where to find the knowledge I need to have from software systems or database in the university					

Part 5: To what extent do the following statements **characterize you personally?** Indicate the extent to which you agree or disagree by putting [√] in the appropriate number against each using the response scale given below: The response scale are presented in scale ranging from 1 to 5. 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

Statements	1	2	3	4	5
1. I am proficient for finding precise information /knowledge that I require.					
2.I consider sharing my knowledge with other colleagues as an advantage.					
3. I am proficient for maintaining information/knowledge.					
4. I am familiar with the institute's policies and protocols about managing records					
5. I am proficient in creating information/knowledge.					

Part 6: Do you agree **there is a need to have the following within your university**. Indicate the extent to which you agree or disagree by putting [√] in the appropriate number against each using the response scale given below:

The response scale are presented in scale ranging from 1 to 5.where 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree						
Statements	1	2	3	4	5	Total
6. My university needs re-use existing information or knowledge in order to solve problems.						
7. Your university needs to have a Knowledge Management Policy or Strategy for acquiring and sharing knowledge.						
8. Do you think having cataloged and indexed knowledge sources or knowledge mapping is important for your university?						
9. Do you have problems in identifying tools for capturing knowledge?						
10. Is there a need to transfer explicit knowledge between people, software applications and paper documents?						

Part 7. What is your **preferred method of communication when looking to gain knowledge** or share knowledge within and out of your university? Please indicate the extent to which you use by putting [√] in the appropriate number against each using the response scale given below: The response scale are presented in scale ranging from 1 to 4. 1 = Never 2 = Rarely 3= sometimes 4 = Always

Statements	1	2	3	4
1.One to one discussion with your colleagues.				
2.Verbally during meetings.				
3.By using documents or printed files.				
4.Trainings.				
5.Expriance sharing visits.				
6.Discussion forums.				
7.By using Email.				
8.Lesson learned programs.				
9.By using University website.				
10.Other (please specify)				

Part 8: Do you think the biggest barrier to storing knowledge more efficiently and effectively is related to the following: Please indicate the extent to which you use by putting [√] in the appropriate number against each using the response scale given below: The response scale are presented in scale ranging from 1 to 5. 1

= Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

Statements	1	2	3	4	5
1.Lack of time/too busy					
2.Poor tools/Technology					
3.Organization policy/directives					
4.Lack of training					

Part 9: where information or knowledge you need to do your work is located: Please indicate the extent to which you use by putting [√] in the appropriate number against each using the response scale given below:

The response scale are presented in scale ranging from 1 to 5. 1. Strongly Disagree 2.Disagree 3. Neutral 4.Agree 5.Strongly Agree					
	1	2	3	4	5
1. In paper based documents.					
2. In university library online Journals.					
3. In university information systems.					
4. On my personal or workstation computer /hard drive.					
5. On the internet.					
6. Email					
7. In colleagues heads (internal collaboration).					
8. From professional bodies					
9. E-books					
10. E-libraries					
11. Printed Journals					
12. University website					
13. Instruction manuals					
14. Research findings					
15. Other(please specify)					

Part 10: Do the following events or programs held in your university to discuss challenges, solutions and progress of the university? Indicate the extent to which you agree or disagree by putting [√] in the appropriate number against each using the response scale given: The response scale are presented in scale ranging from 1 to 5. 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

Statements	1	2	3	4	5
1.Informal meetings					
2.Formal meetings					
3.Story telling programs					
4.Conferences					
5.Experience sharing programs.					
6.Seminars.					
7.Workshops.					
8.Team building events.					
9.Discussion databases.					
10.Trainings (know-how and experience that requires hands on learning ,observation ,dialogue and interactive problem solving programs)					
11.Experience sharing programs.					
12.Other (please specify)					

Part 11. To what extent does your **university individual perception of people; organizational and technological bottlenecks** for the effective flow of knowledge? Indicate the extent to which you agree or disagree by putting [√] in the appropriate number against each using the response

The response scale are presented in scale ranging from 1 to 5.					
1. Strongly Disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly Agree					
	1	2	3	4	5
1. Lack of time to share knowledge and time to identify colleagues in need of specific knowledge.					
2. Low awareness and realization of the value and benefit of possessed knowledge to others.					
3. Use of strong hierarchy, position based status, and formal power.					
4. Insufficient capture, evaluation, feedback, communication, and tolerance of past mistakes that would enhance individual and organizational learning effects.					
5. Differences in experience levels					
6. Lack of contact time and interaction between knowledge sources and recipients.					
7. Fear of not receiving just recognition and accreditation from managers and colleagues.					
8. Lack of trust in people because they may misuse knowledge or take unjust credit for it					
9. Lack of trust in the accuracy and credibility of knowledge due to the source					
10. Differences in national culture or ethnic background and values and beliefs associated with it, for example, language differences.					
Technological barriers	1	2	3	4	5
1. Lack of integration of information Technology systems, organizational processes, and people					
2. Lack of technical support and immediate maintenance of integrated IT systems which obstruct work routines and communication flows.					
3. Unrealistic employee expectations as to what technology can do and cannot do.					
4. No proper IT platform to share knowledge					
5. Lack of training to enable employee familiarization with new IT systems and processes.					

scale given below:

6.Lack of communication and demonstration of all advantages of new IT systems over existing.					
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Organizational barriers	1	2	3	4	5
1.Integration of KM strategy and KM initiatives into the company's goals and strategic approach is missing or unclear.					
2.Lack of leadership and managerial direction in terms of clearly communicating the benefits and values of knowledge management practices.					
3.Shortage of formal or informal space to share, reflect and generate (new) practices.					
4.Lack of transparent rewards and recognition systems that would motivate people to share more of their knowledge.					
5.Lack of open-minded sharing environment.					
6.Existing corporate practice, which does not provide sufficient support for sharing knowledge.					
7.A situation where knowledge retention of highly skilled and experienced staff is not a high priority.					
8.Physical work environment and layout of work areas restrict effective knowledge management practices.					
9.Communication and knowledge flows are restricted into certain directions (for example, top - down).					
10.Lack of staff refreshment facilities such as staff common room or staff cafeterias.					
11.Jammed staff rooms					
12.Heavy work load during working hours and making informal interaction is difficult					
13.Inadequate internet facilities due to bandwidth challenges.					
14.Other (please specify)					

Part 12: What kind of **incentives** would be suitable for your university in order to make knowledge management activities practicable? Indicate the extent to which you agree or disagree

The response scale are presented in scale ranging from 1 to 5.					
1. Strongly Disagree 2.Disagree 3. Neutral 4.Agree 5.Strongly Agree					
	1	2	3	4	5
1. Financial incentive					
2. Improving work environment					
3. Opportunity to attain certain experts or communities of practice					
4. Annual organization Prizes(awards)					
5. Learning opportunity					
6. Acknowledgement for your contribution.					
7. Tools					
8. Chance of promotion					
9. Time					
10. Career development					
11. Salary increment					
12. Other (please specify)					

Part 13: Please write down here if you have additional suggestion.
by putting [√] in the appropriate number against each using the response scale given below:

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Thank you so much