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COLLEGE OF NATURAL AND COMPUTATIONAL SCIENCES
SCHOOL OF INFORMATION SCIENCE (SIS)



ASSESSMENT OF ORGANIZATIONAL MEMORY PRACTICES:
THE CASE OF ETHIOPIAN PARLIAMENT

*A thesis submitted to the School of Information Science of Addis Ababa
University in partial fulfillment of the requirements for the degree of Master of
Science in Information Science*

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This is to certify that the thesis prepared by Daniel Demissew, entitled: “*Assessment of Organizational Memory Practices: the case of Ethiopian Parliament*” and submitted in partial fulfillment of the requirements for the degree of Master of Sciences in Information Science complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

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Dedication

I dedicate this research report affectionately to my beloved family. Thank you all for your unconditional love, support and encouragement you have been giving to me. You made me a man!

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There are many individuals that deserve space on this page given that without their involvement and influence, this dissertation might not have been completed. First and foremost, I would like to take the pleasure to be grateful to almighty God for giving me the strength and courage from the beginning to the end of my entire course and research work. Next to that, I would like to forward my gratitude to my thesis advisor, Mr. Getachew Jemaneh, for his advice and support during my research work. To my dear friends, colleagues, and relatives who consistently offered words of support and encouragement that I needed to write one more page and read one more chapter. I would also like to be grateful to the staffs of HoPR (Secretariat of the House of Peoples' Representatives of the Federal Democratic Republic of Ethiopia) for their support and participation in filling the questionnaire. Of whom, special thank goes to Mr. Yakob Tilahun for his professional support during questionnaire preparation, data collection and analysis.

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Abstract

Despite its strategic importance, organizational memory remains under developed in public sector organizations. Research has shown that the private sector organizations have a better grasp on knowledge management concepts and practices than the public sector organizations. This study reported the findings of a quantitative investigation of organizational memory practices within the office (secretariat) of the Ethiopian Parliament. Under a quantitative research approach, a single case study design was used to encourage participants to share their view about knowledge acquisition, retention, storage and sharing practices within their organization. The study was based on a survey data from 156 respondents of multi-unit organization that were mainly from the research and development, Human Resource, procurement and finance, general service, legislative, public relations and IT departments. The result suggested that HoPR do not have a systematic way of managing both individual and organizational knowledge. Overall, this indicates that HoPR do not have a planned organizational memory practices and the organizational memory management enablers such as organizational infrastructure, organizational culture and organizational support are not in such a way to foster organizational memory practices. This study is one of the first to empirically test proposals with regard to the concept of organizational memory.

Key words: Memory, Knowledge, Organizational Memory, OM, Knowledge Management, KM, Ethiopian Parliament.

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List of Abbreviations

AAU:	Addis Ababa University
CKO:	Chief Knowledge Officer
CoP:	Community of Practice
ERP:	Enterprise Resource Planning
FDRE:	Federal Democratic Republic of Ethiopia
HoPR:	The House of Peoples' Representatives
IBM:	International Business Machines
ICT:	Information Communication Technology
IS:	Infrastructural Support
IT:	Information Technology
KA:	Knowledge Acquisition
KC:	Knowledge Creation
KM:	Knowledge Management
KR:	Knowledge Retention
KS:	Knowledge Sharing

NASA:	National Aeronautics and Space Administration
OC:	Organizational Culture
OL:	Organizational Learning
OM:	Organizational Memory
OMI:	Organizational Memory Initiative
OMM:	Organizational Memory Management
OMS:	Organizational Memory Systems
OS:	Organizational Support
RD:	Research and Development
SPSS:	Statistical Package for Social Sciences

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Chapter One

Introduction

1.1 Background of the Study

Organizational memory (here after referred to as OM) has existed as long as organizations have. The notion of OM has been discussed for over a quarter of a century and it has received a great deal of attention from researchers across a wide range of disciplines, such as Organization Theory, Psychology, Sociology, Communication Theory, and Information Systems (Argote, 2013; Casey and Olivera, 2011; Hodgkinson and Healey, 2008). The concept of OM emerged out of the notion that organizations need to use past and present knowledge in collective and individual decisions and actions in order to do projections to the future. To do this, organizations need to preserve present knowledge and identify gaps that must be addressed through learning (Kransdorff, 1998).

Through OM, managers are able to derive the historical perspective that help shape their visions of the organizational future, and aid them in understanding the context of decision in the present. According to Stein (1995), any established organization today is very different from the same organization before a couple of decades or so, yet many essential characteristics remain so that the organization is still itself, for better or worse. The persistence of organizational features suggests that organizations have the means to retain and transmit information or knowledge from past to future members of the social system. In line with his account, there are three major reasons to explore OM in more detail: (i) memory is a rich figure of speech that provides insight into organizational life; (ii) OM is embedded in other management theories; and (iii) OM is relevant to management practices.

Another reason to extend our understanding of OM is that it has long since worked its way into management theory (Stein, 1995). As a management concept, OM relates the dialectics of learning versus unlearning, human resources versus information technologies, and is essential to planning, communicating, decision-making and information processing in organizations. Finally, we need to intensify our understanding of OM because the topic is relevant to management practices for a reason that memory management is a daily activity at most organizations (Stein, 1995).

According to literature, building OM involves three steps (Stein, 1995). First, executives need to determine which experiences are worth remembering and learning from. They should target activities of the greatest strategic importance. Second, they need to provide structures and environments that encourage individuals and groups to reflect on and share what they have learned from their experiences. Successful approaches used by organizations include after action reviews, peer reviews, collaboration, and communities of practice. Finally, management needs to embed the lessons learned and experiences into information repositories, work processes and support systems. Methods include databases, data warehouse, intranet sites, and online communities. Through these actions, executives ensure that knowledge is not only abstracted from experience but also effectively put into operations.

In order for OM to be useful and effective for an organization, it is necessary that the organization need to tailor its strategy to the creation of a favorable environment that fosters and encourages collaboration and the sharing of knowledge, ideas, experiences and relevant information among its members (Schein, 1996). OM works best in an organizational culture that encourages knowledge sharing and reuse. Organizations whose culture does not support knowledge sharing need to manage expectations of the benefits of OM and OMS while they

undertake actions to change the culture to one that supports sharing. This takes time and effort and tends to require a top down approach. It is also important to ensure that the Information System (IS) supporting its processes facilitates both acquisition and retention and the dissemination of this knowledge in the organization (Perez and Ramos, 2013).

In general, the processes of OM can have a significant effect on the functioning of the organization. According to Carley, (1992) and Stein, (1995), every time an organization re-structures itself, the contents of its OM are affected. Similarly, turnover of personnel results in loss of the human component of an OM, which can have a significant effect on the performance of the organization. When people depart, they leave spaces in existing networks of social interaction and take with them important knowledge and experience accumulated over many years (Carley, 1992; Stein, 1995). Similarly, when experts leave, the cost to the organization is even greater because it takes years of education, training, and experience to make one. Loss of such kind of knowledge could challenge the achievements and the overall performances of the organization, and have an impact on cultural norms and values.

In summary, a better understanding of OM can assist officials and managers in framing and solving problems associated with the retention and utilization of organizational knowledge within their organizations beyond the limited support provided by contemporary information technologies (Stein, 1995).

1.2 Public Organizations and their Characteristics

According to Finger and Brand, (1999), public organizations are defined as legal entities that provide services to the general public on behalf of the government whose operation is subject to various forms of control and regulations imposed by the government and sanctioned by the general public. In effect, all institutions established by law or by constitutions, which are

involved in the process of government, can be termed as public organizations. But, they do differ in a number of ways from private organizations. For private organizations, profit-making and efficiency improvement are their main concerns, whereas public organizations encounter distinctive normative pressures during the course of their operations. This is because the government is a politicized organization with the satisfaction of the interests of different stakeholders as its top priority (Finger and Brand, 1999). Public organizations, compared with private enterprises, have the following characteristics which may hinder individual desire for OM and OL, as presented by LaPalombara, (2000).

Purposes and goals: Public organizations are vastly different from private enterprises in terms of their goals and purposes. Their goals are sometimes vague, diffused or even paradoxical with each other, because the functions performed by a government are so diverse and wide-ranging covering different social aspects and satisfying different interest groups (LaPalombara, 2000).

Accountability: As mentioned above, public sector officials are accountable to a variety of individuals and constituencies, and their actions are always subject to the governance by a number of laws, constitutions, administrative regulations, judicial decisions and executive orders. Moreover, pretty all of them are under continuous scrutiny from outsiders, including the mass media all the time. This means the actions of all public officials are constrained by external and internal rules and limitations (Rainey and Milward, 1981). Their agendas are essentially normative and rarely based on the consideration of increasing efficiency.

Autonomy: In addition, the issue of multiple accountabilities implies that the public organizations are less autonomous than private businesses (Levin and Sanger, 1994). This is attributed to the following points. One being the formal chain of command is more complex and

the other being the informal influences from political parties and other parties often affects the environment in these organizations.

Orientation to action: Compared to private enterprises, the actions of public organizations tend to be reactive rather than proactive. Conservatism, rather than taking risk, and this is their modal orientation for action. Such kind of conservatism grows out of the fact that these public organizations are more traditional and institutionalized than private ones. There are many examples showing the efforts to reform these organizations often fail (Destler, 1981).

Environment: Since the atmosphere of public organizations is very normative, the enactment of a single policy relies on careful manipulation of both internal and external environmental forces. People inside public organizations should learn how they can overcome the various kinds of constraints described above (LaPalombara, 2000).

1.3 Organizational Memory in Context

An organization's ability to remember and learn from its past or its ability to use its OM has been around for centuries as a means of learning, exchanging and accumulating knowledge to help them realize their objectives. Moreover, well organized, accurate and timely available information becomes a necessity for every organization to achieve its goals. On top of this, getting this well organized, long-lasting and accurate information and operationally relevant knowledge at the required time and place is sometimes difficult, if at all possible. In such a situation, it is deemed necessary to put in a place up-to-the-minute OM that lets preservation of organizational heritage and make it accessible to the members of the organization in particular and to the general public in general. With regard to this notion, the organization under investigation, owns infrastructures that provide general ICT services to its staff members and customers through its datacenter that hosts many physical servers dedicated and optimized to

different services. The list of services include internet, intranet, web portal, live audio recording, ERP, etc. However, the infrastructure is not in such a way to support reuse of organization's experience. Besides, there is lack of training and development programs that help acquire new knowledge and information that can then be reinforced through OM. Employees are far less likely to leave if there is training and development program or other educational opportunities within the organization (Chen and Edgington, 2005). In addition to this, OM practices pertaining to motivating and encouraging employees towards sharing, acquiring and reusing knowledge are at their minimal. The author, therefore, believes that a lot need to done surrounding this area.

Owing to the above discussion, investigating the office (secretariat) of Ethiopian Parliament from this perspective is worth mentioning and there are a couple of issues that need to be addressed for the effective adoption of OM as identified as follows: For one thing, currently, there is a high rate of employee turnover that accounts for about a considerable amount (5.7% in 2010 E.C., 15.0% in 2009 E.C., and 11.9% in 2008 E.C.) of the total workforce which makes it difficult to embed and leverage intellectual capital. Secondly, there is a general lack of OM best practices.

Starting from its inception to date, the Parliament of the country has been going through different forms and producing different information contents as output of its activities and processes. These information contents have never been given due attention and the researcher no longer assumes that nobody will be able to gain access to such information contents unless some urgent measures are taken. To ensure that these information contents survive, these organizational assets must be supported with best OM practices. Based on the above account, it is pretty easy to imagine the difficulty facing the office (secretariat) of the Parliament concerning the loss of operationally relevant knowledge through employee turnover and retirements added to

lack of OM best practices. In order to deal with the loss of this operationally relevant knowledge, OM is said to play a vital role. These core issues are, therefore, placing real and pressing demands on the office (secretariat) of the Parliament to think critically and act towards building robust OM. In this context, this research, therefore, aims to identify and address the core tone of these problems specifically through the identification of critical OM initiative (OMI) areas of the organization into a well-structured and coherent OM implementation framework. The reasons for choosing this organization as the subject of study were that 1) it is a public organization; 2) there is a new OM initiative; and 3) the ease of access to resources and facilities.

1.4 Statement of the Problem

Organizations of the present and future will live in an environment where the business landscape is continuously changing. In the currently emerging knowledge society, information or knowledge is seen as the most important success factor. Similar to the significance of technologies and mechanical machineries during the industrial period, the continuous creation and renewal of innovative ideas, as well as the management of existing bodies of tacit and explicit knowledge will play a pivotal role in the future organization's performance. The creation, acquisition and retention of knowledge as well as its efficient utilization is becoming the most important aspect of maintaining and archiving organizations heritage.

In an organization where there is lack of proper KM, two main problems are more likely to be encountered: one being OM loss and the other being brain drain (Stein, 1995). OM loss occurs when the same department or division fails to remember the knowledge it gained from previous activities or experiences like the case of NASA which has lost the knowledge of its first mission to moon and admitted that all its work had to be redone (Hall and Raffaele, 2013). Other cases, as explained by Davenport, (1998) include the case of Ford and its efforts to rebuild its

successful Taurus design, which no body remembered and there were no records available and the case of Russian venture to build a new tractor factory in Russia and approached international harvester who has done the same, some 20 years back, and found that nobody had any clue regarding the old project. Thus, organizations tend to reinvent the wheel every time a new, yet in many ways, similar project or activity is undertaken. This also means that the organization will repeat the same mistake, given that it has not learned from previous experiences (Coffey and Hoffman 2003; Pollitt, 2000; Tuomi, 1995; Walsh and Ungson, 1991). Hence, the statement of George Santayana which goes like *“Those who cannot remember the past are condemned to repeat it.”* On the other hand, brain drain, occurs whenever valuable knowledge resources are lost with employees leaving the organization due to a number of reasons (Al-Ali, 2003).

Up on consulting literatures, the researcher managed to see that there are different outlooks of OM that gave rise to different schools of thoughts. Literatures on OM hold many varying, and occasionally competing, definitions. Little, however, rests on pragmatic examinations of OM within a context of use, even though there have been repeated calls for such types of studies. Walsh and Ungson (1991), for example, assert that “Despite the general use of the term OM, it is not clear that we have understood the concept or its implications for the management of organizations.” Though, Walsh and Ungson do distinguish a number of general components of OM, their paper is more of theoretical. Similarly, other papers concerned about OM also theorize it at a very grand scale, not relying on experiential data. Huber (1990), for example, argues that OM support would be useful, but the papers do not distinguish clearly what constitutes OM.

What is more, most studies of OM have largely focused on the technology systems designed to replace human and paper-based memory systems. Some of these studies (Ackerman, 1994 and Morrison, 1993) have examined memory systems in use, but the studies have been often based

on the assumptions of organizations or organizational tasks. More importantly, the studies have been limited to particular systems, and these systems are often prototypes. The lack of empirical examinations of OM is unfortunate in that the literatures so far have not yet empirically examined how OM is related to its enablers. The need for systematic work to examine OM is even more pressing than for many other organizational concepts. However, as it is argued above, OM as a theoretical concept must result initially from studies within an organizational setting; that is, within a context of everyday use.

Despite its strategic importance, organizational memory remains under developed in public sector organizations. Research has shown that the private sector establishments have better understanding on knowledge management concepts and practices than public sector organizations (Marsh, 2016). Hence, most of the initiatives that have been undertaken both locally and globally in the area of OM are on private and financial sectors. As it is stated above, OM has been a long-running area of concern in the study of private sector organizations, and it is here that the defining concepts of the literature came from. It is a much more recent theme in the study of public sector organizations.

Given the internal and external challenges facing public sector organizations, the processes and systems associated with knowledge management could serve as a resource for performance improvement and greater level of effectiveness and efficiency. Public sector organizations are no exception as they have been facing increasing pressures to change from both external and internal factors (Finger and Brand, 1999). However, as it is noted in the background, the environment of public sector organizations is very normative where investigations are under careful manipulation of both internal and external environmental forces (Levin and Sanger, 1994). Hence, literature on the aspect of OM in public organizations is still under-developed

(Ferdinand, 2004), and a pragmatic study needs to be done (Vince, 2000). In conclusion, OM gained less attention in the public sector organizations and there is a dearth in existing researches on this topic.

Therefore, this study derives its impetus and motivation through an established void in the literature that lacks implementation practicality as far as OM is concerned. Moreover, there are a couple of issues that need to be treated from such perspectives concerning the organization under investigation. For one thing, currently, there is a high rate of employee turnover that accounts for about a considerable amount of the total workforce which makes it difficult to embed and leverage intellectual capital which in turn requires capturing tacit knowledge from employees leaving the organization. According to Stein (1995), a major threat to OM is personnel turnover, for much of the information generated within an organization is stored within the people in the organization. Carley (1992) also finds, within the context of her simulation model, where there is no repository knowledge other than personnel, that turnover leads to a reduction in OM. Secondly, there is a general lack of OM best practices. According to Atwood (2002), the challenges facing any organization that intends to implement an OM are difficult to transcend. There are a few examples of organizations that have implemented successful OM and there are no prescriptive approaches that define how to develop an efficient and effective OM. In the words of Atwood (2002), this should not be surprising since each organization is unique, so must each organizational memory system (OMS) be unique. The challenges may be common, but the solutions must be unique. Hence, the role of OM in public sector organizations has not received much attention in the literature.

This study is one such empirical examination that is based on a single case study within the organizational setting which aimed at investigating the extent to which the office (secretariat) of

Ethiopian Parliament has adopted OM in order to retain the knowledge of its employees and share it with others.

1.5 Research Questions

In this study, the researcher, in the course of his investigation, intends to answer the following research questions:

RQ1: What are the personal barriers towards organizational memory within the office (secretariat) of Ethiopian Parliament?

RQ2: What are the infrastructural barriers in building organizational memory within the office (secretariat) of Ethiopian Parliament?

RQ3: What are the cultural barriers in building organizational memory within the office (secretariat) of Ethiopian Parliament?

RQ4: What are the challenge(s) in building organizational memory within the office (secretariat) of Ethiopian Parliament?

1.6 Research Objectives

1.6.1 General Objective

The purpose of this research work is to assess organizational memory practices within the office (secretariat) of Ethiopian Parliament.

1.6.2 Specific Objectives

With the aim of achieving the general objective of this study, the following specific objectives are identified:

- identify the challenges with respect to organizational memory within the office (secretariat) of Ethiopian Parliament.

- identify the cultural barriers towards organizational memory within the office (secretariat) of Ethiopian Parliament.
- identify the infrastructural barriers towards organizational memory within the office (secretariat) of Ethiopian Parliament.
- identify the personal barriers towards organizational memory within the office (secretariat) Ethiopian Parliament.
- forward recommendations towards organizational memory to the organization under investigation

1.7 Scope and Limitation

This study aimed at investigating OM practices within the office (secretariat) of Ethiopian Parliament. Due to time and financial constraints, like most studies, this study is also confined to the office (secretariat) of Ethiopian Parliament.

1.8 Variables used and their definition

Knowledge: knowledge is the capacity with which one thinks creatively, interprets the available information and act up on it. It is a human act and the result of thinking (Beijerse, 2000).

Knowledge Management (KM) is a systematic, organized, explicit and deliberate ongoing process of creating, disseminating, applying, renewing and updating the knowledge for achieving organizational objectives (Pillannia, 2007).

Memory is “the faculty of retaining and recalling things past and it is associated primarily with individuals” (*American Heritage Dictionary, 1969*).

Organizational Memory (OM): is concerned about storage of all knowledge pertaining to an organization and in its most basic sense, it refers to stored information from an organization's history that can be brought to bear on present decisions (Walsh and Ungson, 1991).

Organizational Culture (OC): Culture is defined as “a learned way of perceiving, thinking, and feeling about problems that is transmitted in the members of organization” (Schein, 1984, as cited in Ungson and Walsh, 1991). Organizational culture is a set of norms and values which collectively guide and influence the behavior of employees in an organization (Smith et al. 2003).

Infrastructural Support (IS): The extent of use of information and communication technology tools (ICT) such as internet, intranet, ERP, Web portals, inventory management systems, information systems, data base management systems etc. (Gold et al, 2001; Lee and Choi, 2003).

Knowledge Acquisition (KA): Knowledge acquisition is a process of seeking and acquiring relevant knowledge from external sources and creating new knowledge by combining it with internal know-how for better product and service (Chen, 2007).

Knowledge Creation (KC): It is the process of creating new knowledge from knowledge obtained from outside and within the organization by applying internal know-how (Holsapple, 2001). It is also a technique of transforming knowledge into a form that is suitable for assimilation or internalization in the organization’s context and it is considered to be an immediate process after KC in KM.

Knowledge Storage (KST): It is a process of accumulating and documenting the available organizational knowledge and acquired knowledge for future use and reference (Lawson, 2003)

Knowledge Sharing (KS): is a process of bidirectional flow of knowledge between individuals, groups, individual and group, between the external environments and the organizations at large (Friesl, 2011; Al-Gharibeh, 2011; Argote and Ingram, 2000).

Knowledge Dissemination (KD): refers to the human processes and technical infrastructures that make embodied knowledge available to the people and identify who to use a particular body of knowledge within an organization (Armbrecht et al., 2001).

Organizational Support (OS): refers to supports such as involvement of the management in providing the necessary infrastructure, facilities, funds, formulating a suitable OM strategies and creating a conducive environment towards OM processes and practices (Davenport et al, 1998; Liebowitz and Beckman, 1998).

1.9 Significance of the Study

This study aimed at assessing OM practices of the office (secretariat) of Ethiopian Parliament and it is supposed to have the following contributions. First of all, the result of this research work will help the organization under investigation in promoting OM practices into a well-structured and coherent one. Secondly, it can be applied to other similar public sector organizations with or without modifications. Thirdly, future researchers or students may find it helpful in carrying out further research in this area and it will also serve as reference material for students, managers or organizations. Finally, it will have an educational significance to the scientific community in general and to the field of Information Science in particular.

1.10 Thesis Structure

This is a section that outlines the structure of this thesis. This study is organized into five chapters. The first chapter describes background of the study, statement of the problem, research questions, general and specific objectives, scope and limitation, significance of the study, study variables and outline for the composition of the thesis. The second chapter is devoted to literature review about OM, KM and related concepts followed by a detail review of OM. The third chapter describes the actions to be taken to investigate the research problem and the rationale for

the application of procedures or techniques used to identify, select, process, and analyze data applied to understand the problem, thereby, allowing the reader to critically evaluate the study's overall validity and reliability. The fourth chapter deals with data analysis, interpretation and presentation of the results. Last but not least, the fifth chapter discusses the conclusion about the current study, recommendation for future studies and managerial implications.

Chapter Two

Literature Review

2.1 Theoretical Framework

Nowadays, information has become the power of every organization and means for its day to day activities and development process. The progresses made by human civilization could not be achieved without transfer of Knowledge from generation to generation. Even though oral knowledge transfer cannot be neglected, man kind used primarily written documents to preserve knowledge for its descendants. Thanks to that, the new generation is able to build on the knowledge of their antecedents rather than starting from scratch, which enabled mankind to reach great depth in science, culture, etc.

Knowledge has been recognized as one of the most important assets of organizations, which decisively influences its performance. This has led to a growing interest in KM and has raised questions about what information technology should be provided for its support. To improve business performance, organizations are transitioning from the simple accumulation of individually acquired knowledge to ensuring that their employees capture knowledge for collective benefit. Some of these organizations rely on databases to store the lessons learned through experience. However, some authors argue that technology alone does not improve performance (Olivera, 2000). Employees learn the most by interacting with other employees; when seeking information, they are more likely to turn to trusted colleagues than to databases. Although technology plays a useful role, executives must understand the many channels through which knowledge migrates into organizations and address the peculiar ways in which people actually seek out information and solve problems. Key experiences, such as new service development or core work processes, generate knowledge that becomes part of an organization's

memory. This knowledge is held within individuals, networks and relationships, information repositories, work processes, procedures and support systems. As such, business performance improves as executives use the growing stores of knowledge to guide organizational activities, structures, and processes.

Organizations may exist independent of particular individuals, but it should be recognized that individuals acquire information in problem-solving and decision-making activities (Weick and Gilfillan, 1971). This focuses on individual cognitive activities as the central element in the organization's acquisition of information that reflects an active construction of memory. However, interpretations of problems and solutions vary with individuals. The thread of coherence that characterizes organizational interpretations is made possible by the sharing of interpretations. Thus, through this process of sharing, the organizational interpretation system in part transcends the individual level. This is why organizations may preserve knowledge of the past even when key organizational members leave (Weick and Gilfillan, 1971). According to Walsh and Ungson (1991), interpretations of the past can be embedded in systems and artifacts (e.g., cultures, structures, transformations, ecology), as well as within individuals. In this way, OM is considered to be both an individual and organizational level construct.

Although the need to preserve knowledge in organizations is now recognized, organizational theorists still disagree on a number of issues relating to OM. Existing literature exhibits contradictory arguments regarding OM which can make the relevance and application of OM concepts difficult to understand. This section describes some of the disagreements surrounding OM in order to provide a clear understanding of how OM might help to manage knowledge.

It is perhaps surprising that there are arguments not only for, but also against, the desirability of making the knowledge of the past available in knowledge storage repositories (Paper and Johnson, 1996). Some do indeed argue that OM is functional (Argote et al., 1990; Stein, 1995; Walsh and Ungson, 1991). Walsh and Ungson (1991), for instance, identify three important organizational roles occupied by OM: (1) an informational role; (2) a control function; and (3) a political role. Other benefits that have been identified include increased organizational learning (Te'eni and Weinberger, 2003), improved coordination (Yates, 1989), and the facilitation of knowledge sharing (Te'eni and Weinberger, 2003).

Stein (1995) contends that OM can benefit organizations in several ways, including strengthening its identity and providing new personnel with access to the expertise of their predecessors. Argote et al. (1990) and Stein (1995), on their part, assert that an appreciation of OM can facilitate the solution of problems associated with the retention and utilization of knowledge within organizations. They further suggest that the effective use of OM can protect an organization from some of the negative effects of staff loss.

On other hand, these same authorities plus some others (Walsh and Ungson, 1991; Stein and Zwass, 1995) fall to the other extreme and have pointed to non-functionalities of OM. In their view, organizations should discard old practices and develop new ones. Stein (1995), on his part, argues that organizational memory is not necessarily a good thing for individuals or organizations, and that, at the other extreme, it can become a constraint that threatens organizational viability.

Overall, some scholars like Walsh and Ungson, (1991) and Stein and Zwass, (1995) are found to be in between the influence of the two extreme school of thoughts and they are telling us that OM is there for better or worse depending on the way organizations handle it. If

organizations depend too much on OM, they are more likely to suffer from resistance to change. To the contrary, if organizations ignore OM all together, they are more likely to suffer from organizational amnesia. Hence, organizations should consider handling OM in such a way that they take the most but the best out of it.

An organization's ability to remember and learn from its past or its ability to use its OM has been around for centuries as a means of learning, exchanging and accumulating knowledge to help the organization realize its objectives. In its most general sense, OM is concerned with the ability to reuse an organization's experience (Ackerman and Halverson, 2000). Due to its multidisciplinary nature, definitions of OM range from those that consider OM to be a static repository (Huber, 1991; Huber, Davenport and King, 1998; Walsh and Ungson, 1991) to those that consider OM as a more dynamic, socially constructed phenomenon, or as a process (Anderson and Sun, 2010; Casey, 1997; Morgeson and Hofmann, 1999; Olivera, 2000; Spender, 1996). One of the first widely accepted OM conceptualizations is described in Walsh and Ungson's (1991) model. Their model synthesizes many of the previous scientific insights developed about how organizations store and retrieve knowledge. According to them, OM is viewed as an aggregate of information useful for decision-making and is stored in organizational bins. This is, therefore, a static conception of shared memory that focuses on locations and contents. Information for decision-making is then stored as: experience in individuals; shared experience in culture; integrated sets of practices guiding transformation of inputs into outputs; structural configurations connecting formal roles played by individuals; and physical arrangements of the workplace.

Similarly, Stein (1995) defines OM as the means by which knowledge from the past is brought to support present activities, thus resulting in higher or lower levels of organizational

performance. This explanation corresponds closely with the definition given by Walsh and Ungson (1991), who conceptualize OM as “stored information of an organization's history that can be brought to bear on present decisions”. According to their definition, OM is considered to provide information that reduces transaction costs; contributes to effective and efficient decision making, and is a basis for performance within organizations. In the words of Walsh and Ungson, OM refers to the accumulated body of data, information, and knowledge created in the course of an individual organization's existence. They also view it as accumulated heritage representing the beliefs and behaviors of organizational members both past and present cumulated over the life of the organization. This implies that OM is the sum of all knowledge assets owned or held by an organization.

On the other hand, recent works have emphasized the dynamic view of OM and the concept has progressed to include dynamic features. Morgeson and Hofmann (1999) proposed that the structure of OM is defined by continued interactions between members of an organization, supported by memory artifacts. According to them, the OM structure is usually linked with interactions, roles, tools, units of memory (individuals and groups), forming a web of resources, processes and connections able to hold past experience and bring it to present organizational activities. The organizational interactions are embedded in processes of probing and sense making that result in the recall of past experience. OM must display certain functions including: adaptation, goal attainment, integration, and pattern up keeping supporting them. This view of OM as having structures and functions, brings in the notion that OM should be seen as a process that enacts memory contents distributed inside and even outside organizational environment. The focus is no longer on storing and retrieving large amounts of information but also on supporting interactions, making them easier as well as informing and supporting by automatic feedback.

In summary, a dynamic view of the structure of OM takes into account the social nature of memory (Corbett, 2000). Rather than viewing memory as knowledge stored in a collection of retention bins, the emphasis is on memory as continually constructed and reconstructed by humans interacting with each other and their organizational environment (Corbett, 2000; Johnson and Paper, 1998). From this perspective, memory and forgetting are inextricably linked: The processes through which organizational knowledge is enacted are also processes of creation, retention, and decay.

2.2 Related Terms (OK, KM, OM and OL)

2.2.1 Organizational Knowledge (OK)

Davenport and Prusak (1998) consider knowledge as an evolving mix of framed experience, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experiences and information. According to them, in organizations, knowledge often becomes embedded in documents or repositories and in organizational routines, processes, practices, and norms. Nonaka (1994), on himself, expands this view by stating that knowledge is about meaning in the sense that it is context-specific. This implies that users of knowledge must understand the context in which it is generated and used for it to have meaning to them. This further implies that for an OM to be useful, it must also store the context in which that knowledge was generated. According to Nonaka (1994), the notion that knowledge is context specific argues against the idea that knowledge can be applied universally, however it does not argue against the concept of organizational knowledge. This section considers organizational knowledge to be a subset of OM. This further implies that the processes of OM are also a subset of KM practices.

2.2.1.1 Knowledge Dimensions

Knowledge can be broadly classified into individual knowledge and organizational knowledge. The former resides in an individual mind, whilst the latter is formed through interactions between technologies, techniques and people the pattern and form of which depend on an organization's history and culture. This view is consistent with that of Nonaka and Takeuchi (1995) who assert that individual knowledge moves to group level and finally be assimilated at the organizational level through an upward spiral of knowledge creation (KC).

Researchers have distinguished two types of knowledge, explicit and tacit. Nonaka (1994), Nonaka and Takeuchi (1995), for example, have used Polanyi's (1967) concept of explicit knowledge and tacit knowledge to define knowledge dimensions. According to them, explicit knowledge is that part of knowledge which is characterized by ease of articulating, capturing, and distributing of knowledge in different formats, whereas tacit knowledge is difficult to capture, codify, adopt, and distribute. This is because individuals cannot easily articulate this type of knowledge, for it is deeply rooted in their work routines (Kogut and Zander, 1992; Nelson and Winter, 1982). Experience, personal interactions and the craftsmanship of experts, for example, cannot be articulated through procedures and recipes (Bhatt, 2000).

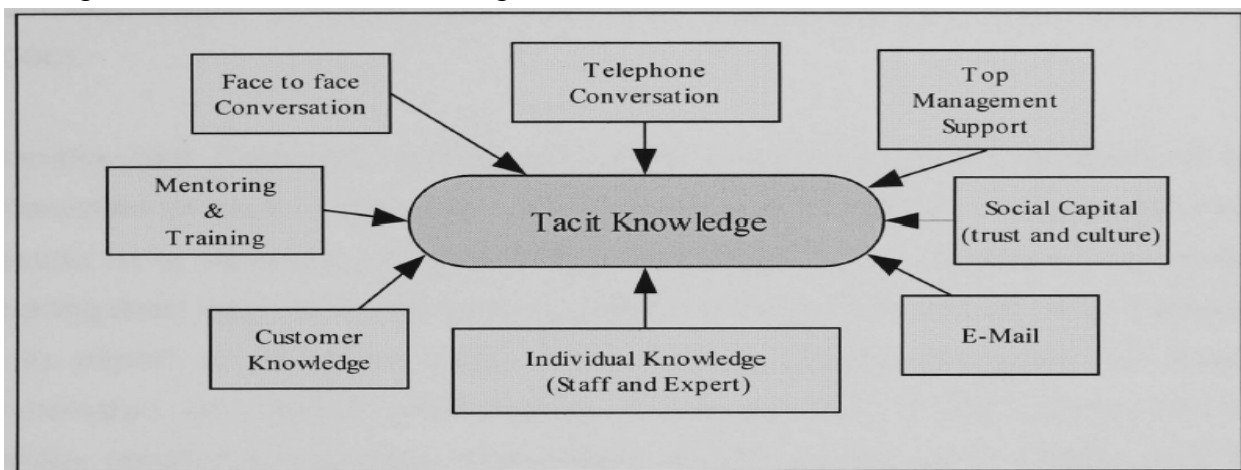
Explicit knowledge and tacit knowledge could also be classified as organizational knowledge (Nonaka, 1991). Therefore, as this research study is concerned with organizational knowledge, it is worth explaining about explicit and tacit knowledge and it is presented in the following sub-sections.

2.2.1.1.1 Implicit Knowledge

According to Beijerse, (2000), implicit knowledge is people bound knowledge that resides in the human mind, behavior, and perception and it evolves from people's interactions and requires

skill and practice. Nonaka and Takeuchi (1995) suggest that tacit knowledge is hidden and thus, cannot be easily represented via electronics. Furthermore, it refers to hunches, intuitions and insights (Gore and Gore, 1999; Guth, 1996). It is personal, undocumented, context-sensitive, dynamically created and derived, internalized and experience-based (Duffy, 2000). As part of tacit knowledge suppliers, Kanti and Koenig (2000) presented some sources for tacit knowledge as illustrated in Figure 2.1 below.

Fig 2.1: Sources of Tacit Knowledge



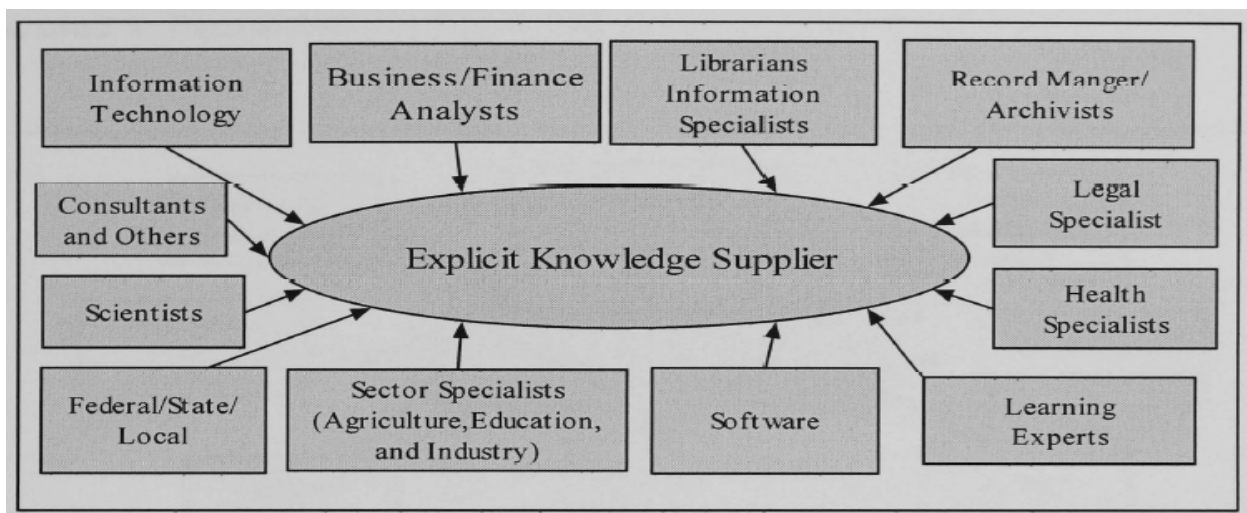
Source: (Kanti and Koenig, 2000)

Implicit or tacit knowledge is the knowledge that people have in their minds; it is much less concrete than explicit knowledge (Kanti and Koenig, 2000). It is more of an unspoken understanding about something, knowledge that is more difficult to be codified. It is difficult to access tacit knowledge as it is often not known both to the owner and to others. In fact, people are not that far conscious about the knowledge they possess or its value to them and to others. Dr. Michael Polanyi, the founder of the modern theories about understanding tacit knowledge, said “*we can know more than we can tell*”.

2.2.1.1.2 Explicit Knowledge

Explicit knowledge is the exact opposite to implicit knowledge and it is that part of knowledge which is recorded and codified for people to find and use it easily. Explicit knowledge can be articulated as the most common types of knowledge. It is readily available in a form and in a way that makes it easily transmissible through formal languages. In other words, it is formal and systematic and thus easy to communicate and share (Nonaka and Takeuchi, 1995). Similarly, in 1995, Nonaka and Takeuchi explain it in a more precise way. According to them, explicit knowledge is typically documented and publicly available; has a structure, fixed-content, can be externalized and it is consciously known (Duffy, 2000). It is what can be captured and shared through IT, for example. Explicit knowledge can be found in various sources, such as HR data, minutes of meetings, databases, libraries and the Internet (Patel et al., 1999). Kanti and Koenig, (2000) reveal some sources of explicit knowledge as shown in Figure 2.2. According to them, it can be gained from different sources including libraries, scientists, domain experts, databases etc.

Fig 2.2: Sources of Explicit Knowledge



Source: (Kanti and Koenig, 2000)

OM systems developed with IT tools, so far, are proved to be useful to capture explicit knowledge but not yet the tacit one. OM systems should also consider capturing tacit knowledge which is extremely difficult. This difficulty is attributed to a couple of situations: the development of OM system is challenging because of inadequate information (inadequacy due to uncertainty) regarding the nature of knowledge sought for whom, when, where and why and the other being the level of acceptance of OM systems by the employees.

2.2.2 Knowledge Management (KM)

The need for research in managing knowledge in organizations stems from the importance of knowledge for the development and survival of organizations (Antonie et al., 2008; Watson, 2003). Knowledge management (KM) is the process that deals with the development, storage, retrieval, and dissemination of information and expertise within an organization to support and improve its business performance. Good managers in organizations have been using the know-how of individuals they hired with skills and experience, and processes for effective management on an ad hoc, casual basis. However, only recently have organizations begun to focus their interest on this aspect in more systematic and a formal manner. Knowledge Management (KM) addresses the process of acquiring, creating, distributing and using knowledge in organizations.

Knowledge is a fundamental factor, whose successful application helps organizations deliver creative products and services. There is a wide variety of literature about what knowledge and knowing means in epistemology, social sciences, and psychology. However, the business perspective of knowledge is much more pragmatic (Antonie et al., 2008; Watson, 2003).

Most organizations already have a vast reservoir of knowledge in a wide variety of organizational processes, best-practices, know-how, customer trust, MIS, culture and norms (Davenport and Prusak, 1998; Nonaka & Takeuchi, 1995). However, this knowledge is diffused,

and mostly unrecognized. Often, organizational culture itself prevents people from sharing and disseminating their know-how in an effort to hold onto their individual power base and viability (Stein, 1995). Determining who knows what in an organization itself could be a time consuming and daunting task. This, in itself, justifies the need for a KM system for organizations to allow them to identify and access workers skills and expertise.

2.2.3 Organizational Memory (OM)

Organizations must embrace change. To begin with, they need to re-evaluate the types of knowledge and skills needed by their workforce to effectively compete in the future business landscape (Fellers 1993). In addition, they need to learn from both successes and failures. Since change is extremely hard to accomplish, organizations must be willing to accept failure and learn from it (Caron, Jarvenpaa and Stoddard, 1994). Though it is easier to learn from successes, organizations must have a mechanism to retain what was done correctly as well as what was not (Levitt and March, 1988). Such a mechanism is typically referred to as OM.

Organizational memory, sometimes called institutional or corporate memory, is the accumulated body of data, information, and knowledge created in the course of an individual organization's existence (Ackerman and Halverson, 2000). Ackerman (1994), on his part, defines OM as organizational knowledge with persistence. According to Ackerman and Halverson (2000), OM is seen to have two principal goals: one being integration of information across organizational boundaries and the other being controlling current activities and thus avoid past mistakes. A concept of OM, like KM, has no single, universally accepted definition. As noted by Ackerman and Halverson (2000), early efforts assumed that OM could be considered as though it were a single, monolithic repository of some sort for the entire organization. Later, they noted that “In organizations, it often becomes embedded not only in documents or repositories

but also in organizational routines, processes, practices and norms.” On the one hand, Schein (1996) defines organizational culture as the organization’s “embedded memory.” As these definitions highlight, OM is more than just simple information. In communities of practice, it is a combination of experiences and skills about projects, products and decisions that is more often embedded in the minds of the workers, or entrenched in the organization’s culture as tacit knowledge, rather than stored in formal documents, reports and manuals as explicit knowledge.

Organizational Memory (OM) can be defined as the way an organization stores organizational knowledge and applies it to present activities. OM represents something more substantial than its contents. An effective OM should support tasks for managing knowledge (Schwartz et al., 2000). Forward-thinking OM needs to facilitate the interaction of organizational knowledge, i.e. the way knowledge is actually organized and utilized. This knowledge utilization is a continuous process whereby individuals or groups within an organization share knowledge (Lee and Choi, 2003).

Both academic and managerial literature widely recognizes OM as an important pre-requisite for organization’s survival and successful performance, especially in environments that are complex and ambiguous (Lant and Montgomery, 1987), turbulent (Carmeli and Sheaffer, 2008), as well as competitive (Garvin, 1993). Frederick (2010) supported this notion by referring to Aeschulus, *who wrote that “memory is the mother of all wisdom”*

2.2.3.1 Importance of Organizational Memory

Practice of OM in relation to employee turnover is still high today. A study of Rusaw, (2005) demonstrates how losing knowledgeable employees due to either turnover or retirement can negatively affect organization’s problem solving capacity. However, a developed OM is believed to moderate negative effects of turnover on organization’s performance (Argote, 1999; Olivera,

2000). Other benefits of OM include improved learning capabilities (Wexler, 2002); access to previous experiential knowledge which makes it possible to re-apply proven solutions and to avoid past mistakes (Kransdorff and Williams, 2000); accumulation and storage of the “best practices”, which can be integrated, analyzed and adapted to other situations (Nilakanta, Miller and Zhu, 2006). Overall, OM can even be used for purposes of coordination and organizational reconstruction (Campbell-Kelly, 1996; Yates, 1989; Olivera, 2000).

2.2.3.2 Forms and Functions of OM

OM can be viewed as abstract or concrete. It is comprised of unstructured concepts and information that exist in the organization’s culture and the minds of its members, and that can be partially represented by concrete/physical memory aids such as databases. It is also comprised of structured concepts and information that can be exactly represented by computerized records and files. Sandoe and Olfman (1992) and Morrison (1997) describe these two forms of OM as having two functions: representation and interpretation (Look at table 2.1). Representation presents just the facts (or knowledge or expertise) for a given context or situation where as interpretation promotes adaptation and learning by providing frames of reference, procedures, guidelines, or a means to synthesize past information for application to new situations (Jennex and Olfman, 2003).

Table 2.1 Forms and Functions of OM

	REPRESENTATION FUNCTION	INTERPRETATION FUNCTION
CONCRETE FORM	– data – documents and hypertext – formalized knowledge – formalized expertise – frameworks – information	– organizational device policies – standard operating procedures
ABSTRACT FORM	– cognitive maps – conceptual lenses – frameworks	– culture – ecology – language – social structures

Source: (Jennex and Olfman, 2003)

2.2.4 Organizational Learning (OL)

Organizational Learning (OL) is the development of shared meanings and interpretations of those meanings to enhance future activities. In 1996, Malhotra defined Organizational Learning (OL) as the process of detection and correction of errors. In this view, organizations learn through individuals acting as agents for them. Individual learning activities are seen as being facilitated or inhibited by an ecological system of factors that may be called an organizational learning system.

Huber, Davenport and King (1998) believe that an organization learns if, through its processing of information, its potential behaviors are changed. Huysman, Fischer and Heng (1994) as well as Walsh and Ungson (1991) believe that OL has OM as a component. In this view, OL is the process by which experience is used to modify current and future actions. Huber (1991) considers four constructs as integrally linked to OL: knowledge acquisition, information distribution, information interpretation, and OM. According to him, OM is the repository of knowledge and information acquired by the organization. OL uses OM as its knowledge base.

A different perspective on OL from Brooks et al. (1998) shows that organizations do not learn, rather only individuals that learn. Typically, most organizations consider learning, as an activity that is separate from working. However, during work, people gain experience and reproduce their know-how through making sense of what they are doing. As they analyze these experiences into general abstractions, their perceptions on how work should be done changes. As these individuals influence their co-workers, the organization learns and the process is gradually changed.

Individuals share their experiences through stories with other individuals who work in the same or similar environments. These stories are used to exchange experiences and knowledge among the other individuals within a group or community settings. These groups are sometimes identified as “communities of interpretation” or “communities of practice” because it is through the continual development of these communities that the shared means for interpreting complex activity are formed, transformed and transmitted (Atwood, 2002). In addition, the communications and interactions of the people within these groups change over time as the demands of the working environment force the group to revise knowledge in accordance with the changing needs of that environment. An important goal of an OM is to facilitate the interaction within these communities so that it can foster the organization’s learning objectives. OM cannot be separated from OL; the two are tightly intertwined (Atwood, 2002).

In summary, OL is the process by which an organization assimilates experiences of its members and uses that experience to modify the organization’s potential actions. Whether the actual organization learns or only its members learn and then share their learning with other members is not sufficient per se (Brooks et al., 1998). In both cases an OM is necessary to

facilitate the processing and retention of information and knowledge needed for the learning to take place.

2.2.5 Relationship between OM and KM

The relationship between OM and KM is another issue of debate. KM encompasses the management of organizational knowledge to enhance competitive advantage and implies an integrated approach to identifying, capturing, preserving, and retrieving the knowledge associated with the activities of an organization. Davenport and Prusak (1998), for example, define KM as the process of capturing, preserving, and distributing organizational knowledge. The question whether OM and KM are fundamentally distinct fields of enquiry, or they possess substantial commonality is unresolved. Recent KM literature has either identified OM as an element of KM or appears to have used the terms, whether by accident or design, interchangeably. Unfortunately, however, there has been little attempt to systematically address the nature of the differences and similarities between them. There is little agreement as to what, if indeed anything, distinguishes OM from KM (Davenport and Prusak, 1998; Witherspoon et al., 2013).

OM and KM seem to have evolved, at least, into close partners (Schwartz et al., 2000). Most researchers, including Kuhn and Abecker (1998), view OM as an important component of the KM perspective. The argument is that OM, being concerned with the preservation of knowledge for present and future use, must be integrated with KM. Similarly, Randall et al., (2001) consider OM to be a sister concept to KM, and the two are in practice used interchangeably. Hoog and Spek (1997) acknowledge the close relationship between OM and KM when they state that an important problem in KM is “insufficient use of knowledge possibly stored in badly organized corporate memories”. However, some researchers hold the view that OM and KM are not the

same and should not be confused. Marsh and Morris (2001), for example, draw attention to temporality, arguing that KM is of the present, while OM is of the past. They regard KM as relating to the management of knowledge that is currently in use, while OM is concerned with the storage of past knowledge for future use. Given that a central aspect of KM is the preservation and retrieval of organizational knowledge and that OM is the mechanism by which knowledge from the past is brought to bear on the present and future, it seems legitimate to regard OM as a constituent of KM. The two terms are not synonymous: KM, which addresses the entire issue of managing organizational knowledge, is a far broader area than OM. The storage and retrieval of organizational knowledge is just a part, albeit a crucial part of the whole job.

2.2.6 Organizational Memory Models

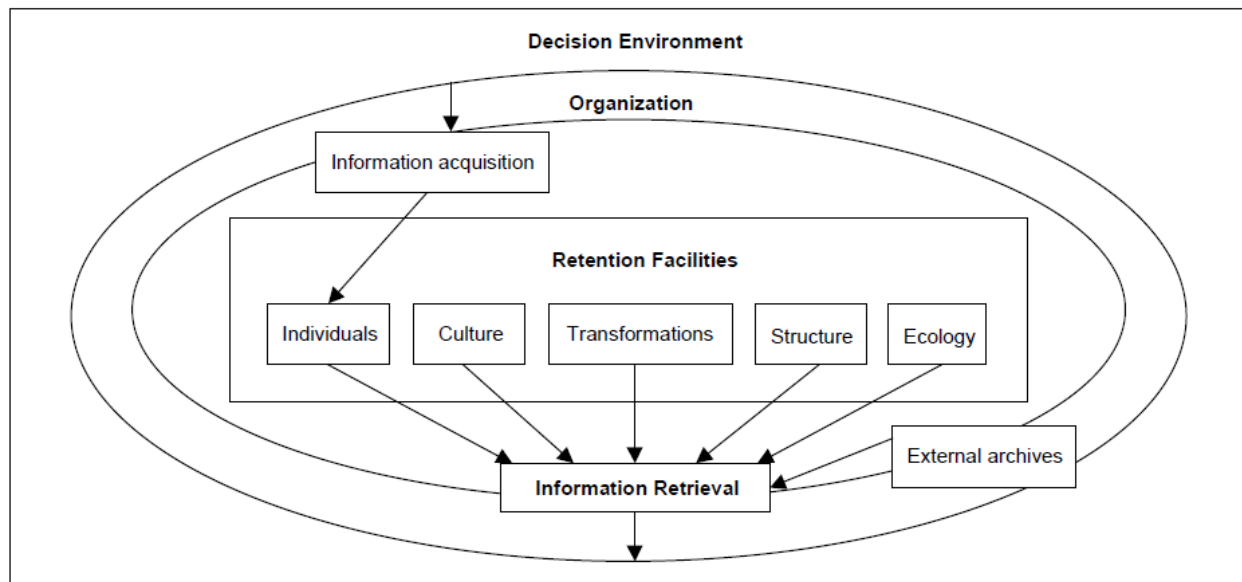
2.2.6.1 Walsh and Ungson's Organizational Memory Model

Walsh and Ungson (1991) used to call bins what others call OM storage structures. These authors consider what is remembered (OM contents) as different to how it is remembered (bins), emphasizing the importance of the contents. According to Walsh and Ungson, the bins or storage components that make up the structure of the OM are: individuals, information, culture, transformations, structures, and ecology. Human intelligence may draw from these bins and add value by creating knowledge. Stein and Zwass (1995) add "information systems" to the bins defined by Walsh and Ungson.

The individual bin: individuals have their own recollections of what has transpired in an organization. These observations should be stored in a format that human beings can use as a memory aid. Organizational memory must include direct experiences and observations of individuals in a suitable format that matches individual cognitive orientations and value systems. Examples include e-mail messages, project reports, and inter-office memos.

The information bin: the formal information system contains a wealth of data and information that represents details of transactions, decisions, and exchanges. This is a more tangible form of OM.

Figure 2.3 Walsh and Ungson's Organizational Memory Model



Source: Walsh and Ungson (1991)

The culture bin: organizational culture is a learned way of perceiving, thinking, and feeling about problems that are transmitted by members of the organization to the organization. Past experience has a direct bearing on issues to be faced in the future. Any knowledge creation must consider organizational culture. Cultural memory is difficult to change because cultural beliefs are repeatedly transmitted. And both the detail and context of the information may be lost or altered, but it can be reflected in much of the organization's documentation and information exchange.

The transformation bin: transformations are business processes within organizations that occur frequently. There is always a predictable logic that flows from a standard input to an expected output. The retrieval of how past and current processes work has a bearing on how future processes will work or how current processes might be altered.

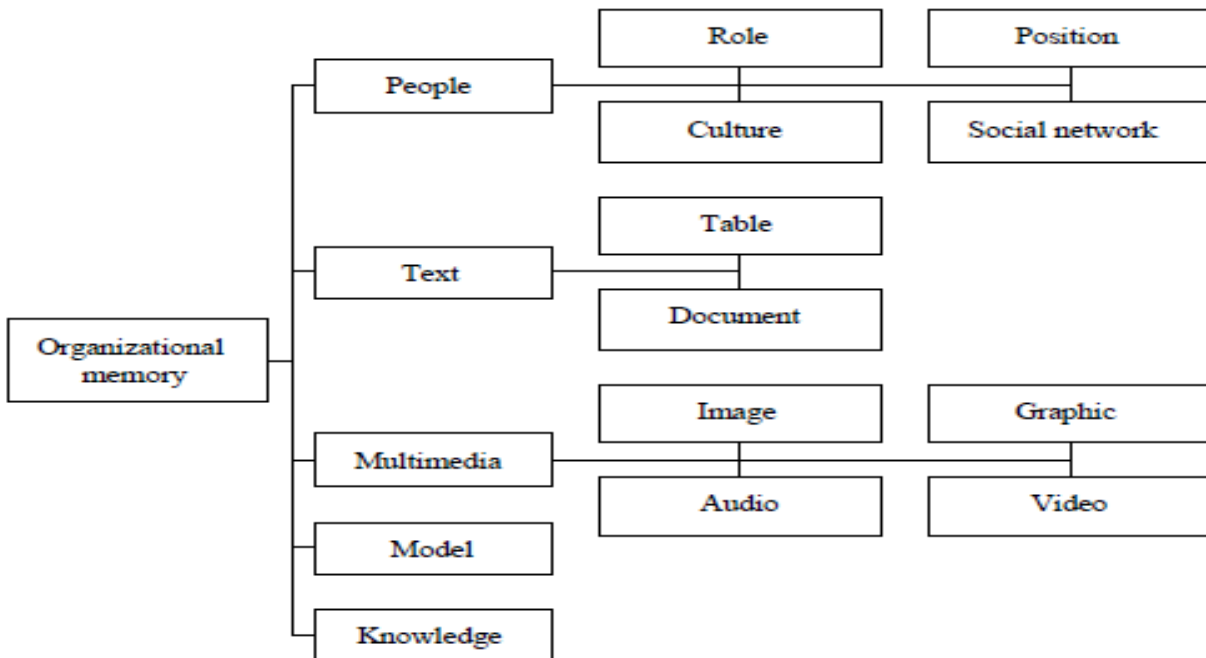
The structural bin: organizational structures must be considered in light of their implications in individual role behavior and their links with the environment. Individual roles provide a repository for OM. Power positions or positional authority all impact how information is stored or interpreted. These positions represent informal and formal rules of behavior that help put information in a situational context.

The ecology bin: ecology is the physical structure of the organization. The physical setting represents the status of the hierarchy of the organization. It also represents how members of the organization feel about the organization and how people outside of the organization view a particular organization.

2.2.6.2 Watson's Organizational Memory Model

Watson (1998) defines OM as a technological entity. According to him, the required tasks in an OM are very similar to those of data management. Watson believes there are two key questions: where and how is data stored and how that data can be accessed. Figure 2.3 shows the most relevant components of his model. Watson assumes that the organization somehow needs to store information in order to make decisions and cope with daily operations. Like Walsh and Ungson, Watson also believes that the OM can be fed with outside information.

Fig 2.4: Watson's Organizational Memory Model



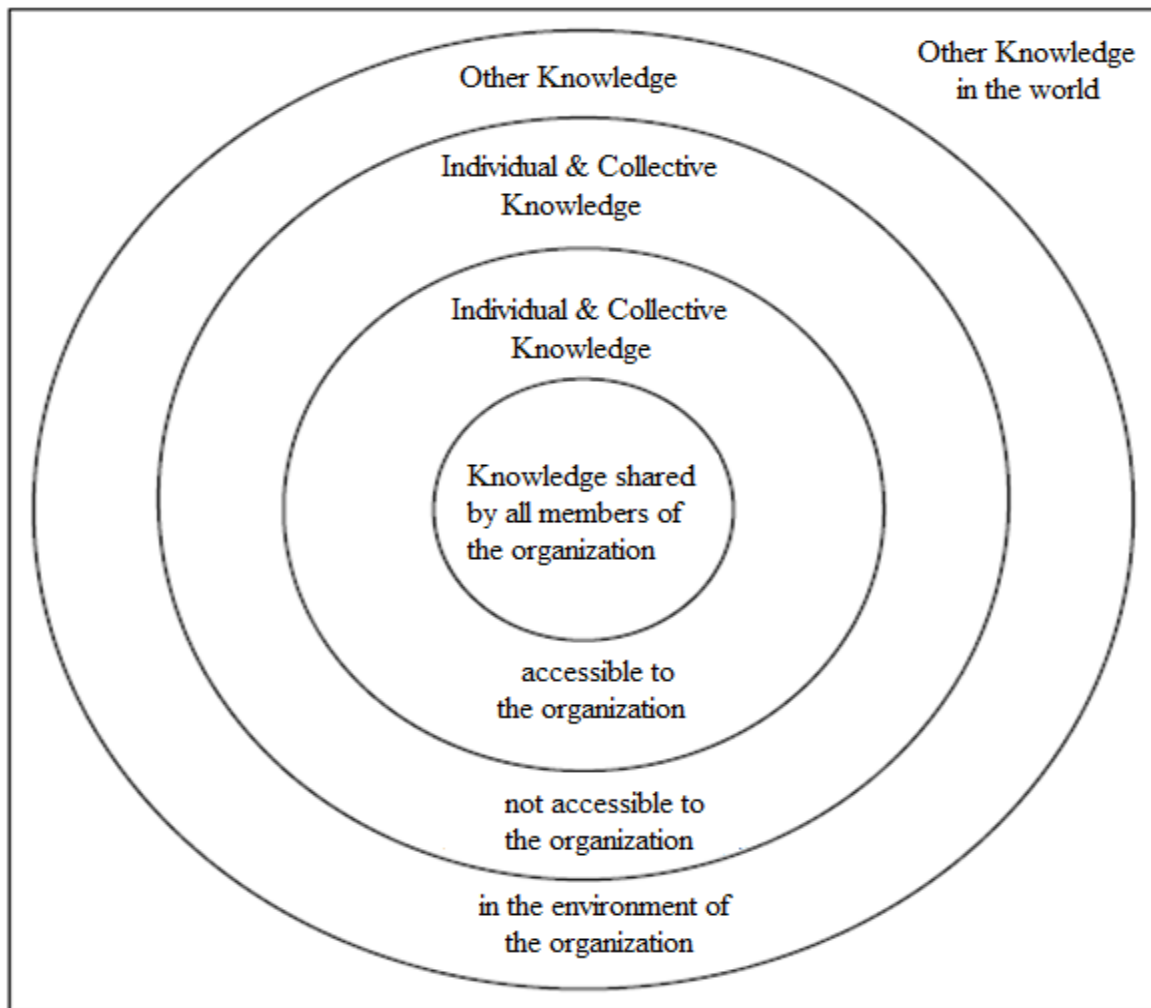
Source: Watson (1998)

To distinguish data, information and knowledge terms, Watson defines data as facts which have not yet analyzed nor summarized (raw data). Information as data processed into a meaningful form, although “meaningful” depends on the context; e.g., one person's information might be another's data. Finally, knowledge is explained as the ability to use information, i.e., know what information is required and which is the meaning of such information (Watson, 1998).

2.2.6.3 Pautzke's Organizational Knowledge Model

Pautzke (as cited in Lehner and Maier, 2000) presents a layered model of knowledge accessible or not within the organization. According to him, the first two layers, from inside, include information already shared by all employees or information which is accessible to the organization. The OM role, then, in this context is to enlarge these two layers, increasing the shared or accessible knowledge for the members of the organization. (Look at Figure 2.5 below)

Figure 2.5 Pautzke's Organizational Knowledge Layered Model



Source: Lehner and Maier (2000)

Another observation to be made about Pautzke's model concerns the third layer: knowledge which belongs to individuals but is not accessible to the organization. Part of it, one would like to make it available to the organization. Lehner and Maier suggest three ways to do this:

- Nothing special: employees use their private knowledge in whatever they do for the organization. The problem is when employees leave the organization.
- Distribute the knowledge of individuals among several employees through discussions. This assumes employees are willing to share their knowledge.

- Institutionalize knowledge: employees include in the results of their work their knowledge. This strategy is very limited as some knowledge cannot be formalized.

2.2.7 Lessons Learned from the Literature Survey

As it is noted by Walsh and Ungson (1991), OM is stored in six ‘storage bins.’ These ‘bins’ are accessed to draw on OM to use in making planned decisions. Since mission is the driving purpose of organizations, any use of OM should assist in fulfilling organizational mission (Hedberg, 1981). This can help managers and individuals to sort through information with varying degrees of relevance; if it relates to the mission, it should be included; if it doesn’t, think spending less time managing that particular piece of information or knowledge.

No two public organizations have the same resources, mission, and characteristics implying that there may not be one universal way of managing OM. Managing OM, and developing knowledge from memories, is a continuous process requiring commitment at all levels of the organization. Knowledge development relates directly to organizational culture and structure; if an organization is structured hierarchically, there is already reduced potential for OM development. Knowledge is typically developed at the bottom of the hierarchy at the individual level. In this way, they are the ones creating much of the knowledge in the organization. Individuals can encourage OM development through cultivating an open culture of trust, learning, and sharing of knowledge of employees, rather than concentrating entirely on managing organizational collections or databases.

Management is responsible for determining how the culture of the organization is expressed, and also for encouraging employee’s knowledge growth that supports the mission of the organization. Individuals are on the front lines of developing new knowledge within organization—they are working in the background, experiencing its changes day-to-day, and solving problems

as they occur. These intellectual assets, when cultivated, disseminated and used, are what will set the organization apart from others, and will determine how effective it is to encourage and manage growth.

Both tacit and explicit knowledge are valuable to public organizations, but the tacit one that is how an organization grows is what makes good individual better. If resources and techniques are not there to tap tacit knowledge, then encouraging organization-wide dissemination of knowledge could not help to hedge against loss of skills. Encouraging and providing opportunities for employees learning and development increases the capacity for OM and allows public organizations to grow and change to help fulfill their mission.

Formal dissemination programs such as mentoring, community of practice have been shown to be effective in developing ties between employees, connecting them together and making them more likely or willing to share knowledge. They help new employees assimilate into the culture faster and provide a teaching outlet for older employees to share their knowledge. In experience-based organizations, transfer of hands-on skills is critical for them to survive.

Based on the lessons learned from literature review, researches on OM in private sector organizations can be tailored to be used in public sector organizations and it helps to cultivate a culture where employees trust one another making them willing to share information, and this then encourages learning. Without an existing culture of trust and sharing, organizational memory management (OMM) will not probably be as effective a tool as it could be since there will be less potential for learning from and using OM as an essential knowledge asset. When combined with records within the OM, new knowledge can be formed that can then be disseminated and used to support the mission of the organization.

2.3 Assumptions

While proposing a unifying definition of OM is beyond the scope of this paper, two aspects of such a definition will be highlighted and will guide the discussion in the remainder of this paper. First, OM is concerned with the storage and reuse of an organization's overall experience. Second, providing effective OM is not a problem that information technology has solved and, perhaps, one that information technology alone is incapable of solving. What is more, the researcher will not distinguish between group, organizational, and community memories in this paper unless the level of analysis is critical to the argument. He will use the term OM to denote all types of memories unless the distinction is important.

To this end, the researcher took the stance of the authorities who support and appreciate OM in that it facilitates the solution of problems associated with the retention and utilization of knowledge within organizations and assumes that OM is ultimately the result of both processes and objects. Memory is both an artifact that holds its state and an artifact that is simultaneously embedded in many organizational and individual processes.

Chapter Three

Research Methodology

3.1 Introduction

Research methodology refers to the general and systematic research strategy that outlines the way in which research is undertaken and, among other things, focuses on orderly collection of data for the purpose of obtaining information to answer a particular research problem or question (Ghauri and Gronhaug, 2005; Howell, 2013).

The previous chapter described the research questions and theoretical framework that was developed from a review of the available literature. This chapter presents the way in which this study collected data to answer its research questions.

The chapter has been divided into sections: research philosophy, research approach, research design and strategies, time horizon, the population under study, sampling procedures, methods of data collection, validity and reliability tests, data analysis and ethical considerations.

3.2 Research Philosophy

Research philosophy is associated with clarification of assumption about the nature and the source of knowledge (Creswell, 2014). All studies are based on some kind of assumptions about the world and the ways of understanding the world. There is no agreement among philosophers concerning the most appropriate ways of understanding the world; therefore, the researcher is expected to clarify the philosophy he has chosen to understand the research problem (Kothari, 2004). Researchers have different views of the world, and the processes that operate within it, are part of what is known as philosophy. Philosophy is concerned with views about how the world works and, as an academic subject, focuses, primarily, on reality, knowledge and existence. The two major philosophical assumptions that dominate and influence research and tradition of

science are positivist (sometimes called scientific) and interpretivism (also known as anti-positivism) (Cohen, 1988; Creswell, 2014; Kothari, 2004).

3.2.1 Interpretivism

Philosophers of interpretivism contend that only through the subjective interpretation and intervention in reality can that reality be fully understood. Interpretivists in relation to ontology and epistemology believe that reality is multiple and relative (Hudson and Ozanne, 1988). According to them, these multiple realities also depend on other systems for meanings, which make it even more difficult to interpret in terms of fixed realities. Interpretivism considers knowledge as a subjective entity rather than objective construct. Scholars from Interpretivism argue that knowledge cannot be converted from one form to other and they assume that knowledge is a socially constructed entity through language, consciousness and shared meanings. According to them, it is impossible to articulate, share, convert and store tacit knowledge (Polanyi, 1966, 1997) and to separate knowledge from the knower and view it as object.

3.2.2 Positivism

As a research philosophy, positivism adheres to the view that only “factual” knowledge gained through observation (the senses), including measurement, is trustworthy (Collins, 2010). In positivism studies, the role of the researcher is limited to data collection and interpretation in an objective way. In these types of studies, research findings are usually observable and quantifiable. Positivism depends on quantifiable observations that lead to statistical analyses. In the words of Collins (2010), positivism, as a philosophy, is in accordance with the pragmatist view that knowledge stems from human experience and studies with positivist paradigm are based purely on facts and consider the world to be external and objective. It also has an atomistic, ontological view of the world as comprising discrete, observable elements and events

that interact in an observable, determined and regular manner. Moreover, in positivism studies the researcher is independent from the study and there are no provisions for human interests within the study (Crowther and Lancaster, 2008).

According to Hirschheim, (1985), positivism has a long and rich historical tradition. It is so embedded in our society that knowledge claims not grounded in positivist thought are simply dismissed as non-scientific and therefore invalid. This view is indirectly supported by Alavi and Carlson (1992) who found that all the empirical studies were positivist in approach. Positivism has also had a particularly successful association with the physical and natural sciences.

In the context of this study, the researcher adheres to the positivism philosophical assumptions based on the references given above.

3.3 Research Approach

An important stage in virtually any research work is gaining an understanding of the available research approaches, which can be either inductive or deductive (Saunders et al., 2012). Crowther and Lancaster (2008) argue that as a general rule, positivist studies usually adopt deductive approach, whereas inductive research approach is usually associated with a phenomenology philosophy. Moreover, positivism relates to the viewpoint that researcher needs to concentrate on facts, whereas phenomenology concentrates on the meaning and has provision for human interest. Hence, this study used a deductive research approach supporting the arguments made by Crowther and Lancaster (2008).

3.4 Research Design and Strategies

Research design provides guidance for data collection and data analysis (Bryman and Bell, 2007), enabling researchers to find answers to the questions set for any research. Within the scope of a multi-method quantitative research type and a descriptive research design, the author

adopted a case study research strategy. A case study is one of several ways of doing research whether it is social science related or even socially related because its aim is to understand human beings in a social context by interpreting their actions as a single group, community or a single event. According to Gillham (2000a), a case study is an investigation to answer specific research questions which seek a range of different evidences from the case settings. Yin (1984), on his part, advocates a case study research method as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in cases where multiple sources of evidence are used. To this end, the researcher employs a single case study as research strategy based on the fore-mentioned statements plus much is not known about OM in public sector organizations (Ferdinand, 2004).

3.5 Time Horizon

In the research design stage, the time frame needs to be taken into consideration whether to resort to cross-sectional or longitudinal studies based on the purpose of the study. In the context of this study, a cross-sectional research design was assumed to be more appropriate, for the reason that the time frame given to undertake this research project was short as it is required to be completed within a specified period of time (Saunders et al., 2012). Further, it sounds appropriate given that the data was collected at a specific point in time in order to investigate the overall practices of OM in the office (secretariat) Ethiopian Parliament.

3.6 Sources of Data

Normally, the researcher collected data from two possible sources; primary sources and secondary sources. To obtain participant's response, a survey was administered as part of primary data collection strategy and document analysis for collecting secondary data in order to

support participant's responses. Document review, also referred as documentation or literature survey (Singh, 2007), that is the analysis of published and unpublished documents, articles, journals, conference proceedings, organization reports, and memos of relevance to the topic being investigated were considered rigorously. The reason for such analysis is to fine tune the research questions and to expand the researchers understanding about the area of study.

3.7 Research Procedure

In most studies, there is a formal procedure to be followed while collecting data. In the context of this study, the research procedure undertaken was as follows: first, each participant was contacted in person and the purpose of the study was explained to them; next, the direction that the participant would be following while completing the questionnaire was explained; finally, the questionnaire was given to them and their response were collected and the process completed in two weeks' time.

3.8 Population

A research population is generally a large collection of individuals or objects that is the main focus of a scientific inquiry (Creswell, 2014). The target population for this study was employees of the office (secretariat) of Ethiopian Parliament which make up a total of 445 potential respondents.

3.9 Sampling Technique

When we conduct research, we are generally interested in drawing some conclusion about a population of individuals that have some common characteristic. However, populations are typically too large to allow observations on all individuals, and we resort to selecting a sample (Creswell, 2014). In order to make inferences about the population, the sample must be representative. Thus, the manner in which the sample is drawn is critical. Probability sampling

uses random sampling in which each element in the population (or a subgroup of the population with stratified random sampling) has an equal chance of being selected for the sample (Kothari, 2004). This technique is considered to be the best means of obtaining a representative sample.

The type of universe might be finite or infinite depending on the nature of objects in the universe. A universe is said to be finite if the number of objects in it is certain like employees of the office (secretariat) of Ethiopian Parliament or infinite if counting or listing all the members of the universe is not possible like the case of stars in the sky. The size of the sample to be estimated depends on factors like size of the population, the nature of the population, and the type of the study.

In this research, a stratified random sampling technique was adopted. Stratified random sampling is a probability sampling technique where the researcher divides the entire population into different non-overlapping subgroups or strata and randomly selects the final objects proportionally from each stratum (Creswell, 2014). The rationale behind such sampling technique is that it guarantees the representativeness of the resulting sample by making sure its proportionality in composition with that of the population. Besides, this technique gives the researcher the flexibility to select respondents independently within each category based on their chances. Moreover, it is a requirement for parametric tests in quantitative researches.

Here, in line with the nature of the sampling technique, the population was divided into units based on the structure of the organization under study. The population was categorized into twelve layers to represent the available directorates for the reason that members of the subgroups of such classification assumed to be homogeneous in the context of the organization. The researcher then used a proportional simple random sampling without replacement technique to select the respondents from each stratus.

3.9.1 Criteria for Sample Selection

3.9.1.1 Inclusion criteria

Employees at the office (secretariat) of Ethiopian Parliament with an education status of diploma and above are included in this study.

3.10 Sample Size

Most of the time, due to large sizes of populations, it is not possible for researchers to consider every individual in the population due to time and financial constraints. They use sample of the target population, instead. A sample is a subset or subgroup of the population which comprises some members selected from it. A general rule of the thumb is to always use the largest sample possible. The larger the sample the more representative it is going to be (Bryman and Bell, 2007). Smaller samples produce less accurate results because they are likely to be less representative of the population.

Since the universe for this study is finite, sample size can be obtained using formulas. Given the total population is known, there are several methods to determine sample size. For this study, the researcher used Yemane's formula to calculate sample size (Yamane, 1967). Sample size determination for descriptive studies is based on confidence intervals; that is, the level of precision required in providing estimates of the rates, proportions and means. With that said, the formula used to determine sample size is given below.

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

where

n = the sample size,

N = the population of the study, and

e = the level of precision (set as 0.05 for this study)

$$n = \frac{N}{1+N(e)^2} = \frac{N}{1+N(e)(e)} = \frac{302}{1+302(0.05)(0.05)} = \frac{302}{1.755} = 172.079 = 172$$

Based on the above formula, with 95 per cent confidence interval and 0.05 level of precision, the estimated sample size is determined to be 172. Out of the total sample size (172), sample size of each stratum is calculated as follows using the following formula.

$$\text{Sample size of a strata} = \left(\frac{\text{Size of entire Sample}}{\text{Population}} \right) (\text{Layer Size}) \dots \dots \dots (2)$$

Table3.1 Estimated sample size per stratum

Strata	1 st Strata	2 nd Strata	3 rd Strata	4 th Strata	5 th Strata	6 th Strata	7 th Strata	8 th Strata	9 th Strata	10 th Strata	11 th Strata	12 th Strata
Sub Population	6	9	124	34	10	12	27	12	7	30	7	24
Estimated Sample Per Strata	3	5	71	19	6	7	15	7	4	17	4	14

Source: own survey, June (2018)

3.11 Method of Data Collection

3.11.1 Questionnaire Development

Questionnaire is a data collection instrument consisting of a series of questions and additional prompts for the purpose of gathering information from respondents. Questionnaires allow the collection of both subjective and objective data in a large sample of the study population in order to obtain results that are statistically significant, especially when resources are limited.

In order to answer the specific research questions outlined above, both quantitative and qualitative data were collected using a survey method. The questionnaire was adapted from a dissertation of S.D. Uma Mageswari (Ph.D.), (2014) on “Knowledge Management practices in industries” at Pondicherry University and the same instrument was used by Canada’s Statistics

office for Survey of Knowledge Management Practices (2001) and by Binyam Teshome for thesis survey of “Organizational Memory for Knowledge Retention in Ethiopian Revenue and Customs Authority (2013) at Addis Ababa University.

In accordance with the objective of this study, the questionnaire was tailored towards organizational settings of the study. It was prepared in English and was subjected to a pilot test prior to the actual survey on 36 (21%) randomly selected respondents from each stratum at the office (secretariat) of Ethiopian Parliament. The pilot study revealed that the questionnaire was well received by the respondents and the data was used for estimating the sample size for the actual study. After going through the suggested minor amendments, the actual survey was conducted. In this research, a self-administered survey method was used, for such kind of approach allows the researcher to distribute questions to the respondents and then collect their response at a later time. This method is chosen over a researcher-administered survey due to its nature of letting respondents to feel at ease in completing the questionnaire. This in turn maximizes the response rate of the survey.

The questionnaire has got eight sections (see Annex I). Part (I) covers the background information of the respondents; Part (II) used to measure the personal barriers with regard to knowledge sharing in the organization; Part (III) used to assess the status of organizational support in the organization; Part (IV) concerned about infrastructural supports in the organization as far as OM is concerned. Part (V) is used to gather data about organizational culture of the organization. Part (VI) used to gather data on the processes of knowledge acquisition/knowledge capture; Part (VII) was about knowledge dissemination practices in the organization and finally part (VIII) is an open ended question that is used to cross validate or substantiate the responses of the respondents.

The questionnaire consists of multiple items of questions that are used to identify and collect the respondents' knowledge, opinion, processes and practices of OM. The respondents were requested to indicate their degree of agreement or disagreement based on a five-point Likert scale responses ranging from "strongly disagree" to "strongly agree" (1=Strongly Disagree, 2=Disagree, 3=Don't Know, 4=Agree, 5=Strongly Agree). Data was collected mainly in the form of questionnaire, supplemented by other secondary data sources, such as documents, observation and triangulation. Finally, the final questionnaire was administered to the selected respondents and the collected data were codified and used for analysis. Data analysis, interpretation and presentation are discussed in the next chapter.

3.11.2 Document Analysis

Document analysis is a form of qualitative research technique in which documents are interpreted by the researcher to give voice and meaning around an assessment topic (Bowen, 2009). According to O'Leary, (2014), there are three primary types of documents:

- Public Records: The official, ongoing records of an organization's activities. Examples include mission statements, annual reports, policy manuals, strategic plans
- Personal Documents: First-person accounts of an individual's actions, experiences, and beliefs. Examples include e-mails, curriculum vitae (CV), duty logs, incident reports, reflections.
- Physical Evidence: Physical objects found within the study setting (often called artifacts). Examples include flyers, posters, agendas, handbooks, and training materials.

3.12 Data Analysis

Data Analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data. According to Shamoo and Resnik

(2003), various analytical procedures provide a way of drawing inductive inferences from data and distinguishing the signal (the phenomenon of interest) from the noise (statistical fluctuations) present in the data. An essential component of ensuring data integrity is the accurate and appropriate analysis of research findings. For data analysis, first, the researcher used Microsoft Office Excel 2010 for data preprocessing. Next, the data was exported to IBM's Statistical Package for Social Sciences (SPSS Version 20) for analysis. Then, the researcher used descriptive statistics to describe the population in relation to the relevant study variables. Finally, the result was further interpreted, discussed and presented using table and graphs.

3.13 Validity and Reliability Tests

According to Blumberg et al., (2005), validity refers to the extent to which a test measures what we actually wish to measure. On the other side, reliability is concerned about a measurement that supplies consistent results (Blumberg et al., 2005). When looking at validity, in correlation to reliability, validity is more essential. If a research is not valid, it hardly matters if it is reliable. The research conducted need to be valid to be able to answer the research question. However, the optimal situation is to conduct research that is both reliable and valid (Blumberg et al., 2005).

In this study, the researcher took both the primary and secondary data into consideration to ensure validity and reliability. As such, reliability was checked for both the pilot and actual studies data and resulted in acceptable internal consistency measures, Cronbach's alpha. A Cranach's alpha model is used with a cutoff value of 0.7 to test reliability of the assessment of each construct as recommended by most researchers (Chin, 2010; Joseph et al., 2014) and the overall value was found to be well above 0.9 for each case indicating the reliability of the study constructs (Look at Figure 3.2). Moreover, as the majority of secondary data were collected from

established academic local and international journals, it is therefore reasonable to believe that the study and its associated data are reliable.

Fig 3.2 Indicators and their overall reliability statistics

PB(7) Alpha	OS(6) Alpha	IB(5) Alpha	OC(5) Alpha	KA(5) Alpha	KS(4) Alpha	Overall(32) Alpha
0.70	0.86	0.78	0.80	0.86	0.79	0.92

Source: own survey, June (2018), output

3.14 Ethical Considerations

In any research, the ethical implications of the study for both the researcher and the respondents must be considered. According to Sekaran (2003), ethical issues are related to how respondents are treated, and how confidential information is protected during the research process. The data for this study was collected using two possible ways. The first being a survey, in which respondents were requested to complete questionnaires, and the second being document analysis and observation.

As part of research ethics, participants were asked for their consent in participating in the study by describing the purposes of the research that the research was being conducted only for academic purposes and their responses would be treated with strict confidentiality. In addition, participants were let to know that participation is entirely voluntary and includes the right to withdraw or refuse and as part of this, an informed consent form was included in the instruments used in the study. Further, participants were notified not to provide their name on any part of the instruments used in the study. Moreover, the researcher has done his level best to treat both the participants and the information they provided with morality and respect and hence due attention was given to data collection and analysis stages. Finally, participants were informed that they have the right to know the research results if they wish to.

Chapter Four

Data Analysis, Interpretation and Presentation

4.1 Introduction

Data analysis is a process of inspecting, cleaning, transforming and modeling data with the goal of discovering useful information, informing conclusions, and supporting decision-making. In line with this, this chapter deals with data screening procedures, analysis of the demographic profile of the respondents and the response rate of the questionnaire, and finally, presenting the answers to the research questions through analysis and interpretation of the collected data.

4.2 Data Screening

As part of data screening processes, visual inspection of the data to identify and correct errors in the data set, identification of missing values and tests for violations of statistical assumptions such as normality and outliers (Hair et al., 2014) were considered. While checking for errors, values that fell outside the range of possible values due to error in data entry or due to differences in individual respondents were identified. Descriptive statistics including frequencies, minimum, maximum values and data patterns were used to identify and correct the errors. Unfortunately few missing values were found in the data set and two questionnaires were abandoned from further analysis for the following reasons:

- One respondent filled the same value for almost all questions in the questionnaire.
- One respondent left almost half of the questions unfilled in the questionnaire.

Therefore, from a total of 172 distributed questionnaires, 156 questionnaires were filled and returned by the respondents while two questionnaires were rejected due to the reason mentioned above and 14 questionnaires not returned by respondents which made the response rate of the survey to be 91%. Hence, a total of 156 questionnaires were used for further analysis.

4.3 Demographic Profile of the Respondents and the Response Rate of Questionnaires

This part of the survey was concerned with the background information of the respondents, the employees of the Secretariat of the House of Peoples' Representatives of the Federal Democratic Republic of Ethiopia (FDRE), whom the researcher invited to participate in this research. In this particular study, respondents were requested to provide their gender, age group, educational status, work experience and their position in the organization as part of background information (i.e. Worker, Professional, Team Leader, Director and Other).

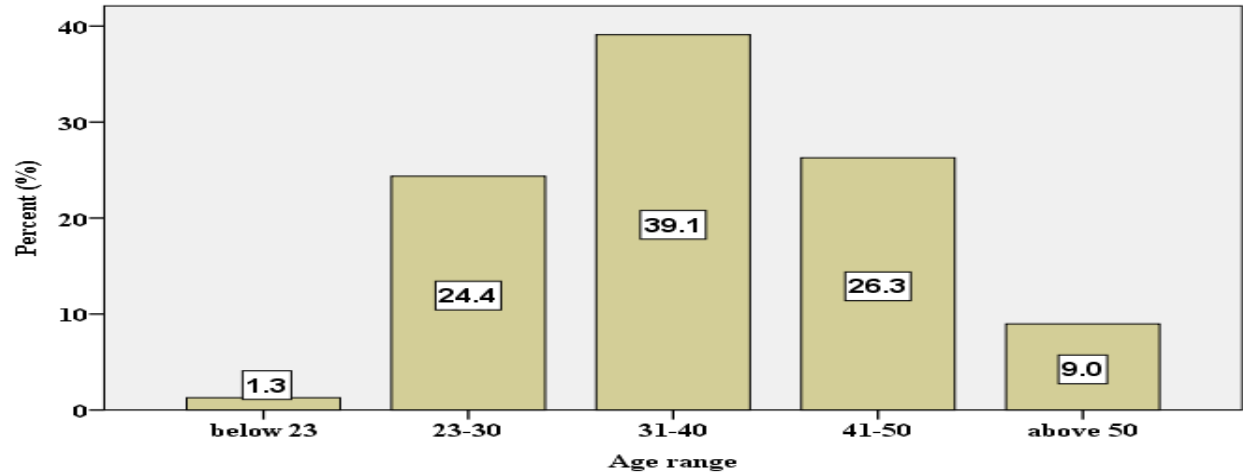
Table 4.1: Sex Distribution of the Respondents

Gender	Frequency	Percentage (%)	Valid percent (%)	Cumulative percent (%)
Male	89	57.1	57.1	57.1
Female	67	42.9	42.9	100.0
Total	156	100.0	100.0	

Source: own survey, June (2018), output

As it can be seen from Table 4.1 above, the majority of the respondents of the survey were found to be male and accounts for 57.1% (89) of the total informants; the remaining 42.9% (67) being female. This indicated that the number of male respondents of the survey was somehow larger than the number of female respondents.

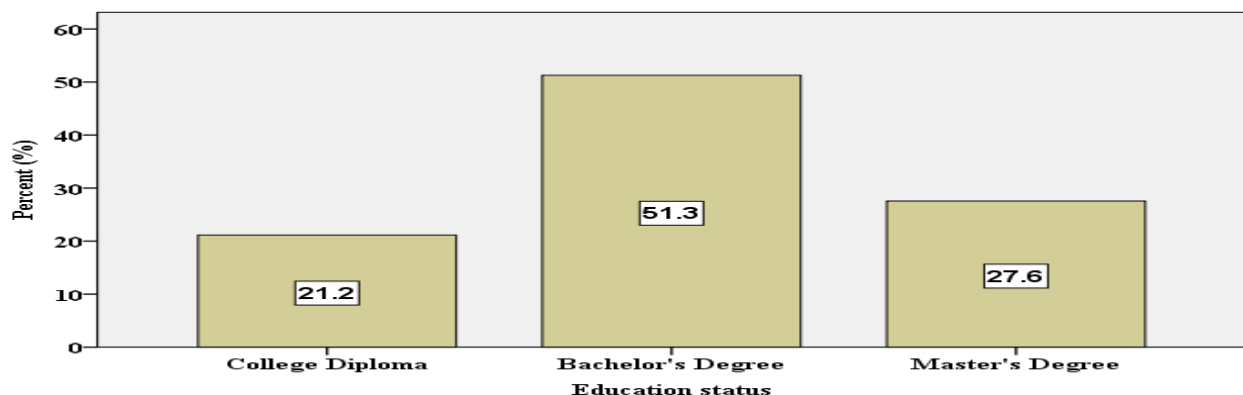
Fig 4.1: Age distribution of the respondents



Source: own survey, June (2018), output

Figure 4.1 above showed that a large percentage, i.e., 39.1% (61) of the respondents were found to be in the age range of 31-40, followed by the age range of 41-50 that accounts for 26.3% (41). Respondents in the remaining age ranges were presented as follows according to their score: 24.4% (38) of the respondents were in the age range of 23-30, 9.0% (14) were above 50 and 1.3% (2) of them were below 23. As can be seen from the bar chart, the number of respondents in the age range between 23 and 50 was well above the number of respondents in the remaining age groups and they account for about (90%) of the overall participants. Hence, they were the major participants of this study.

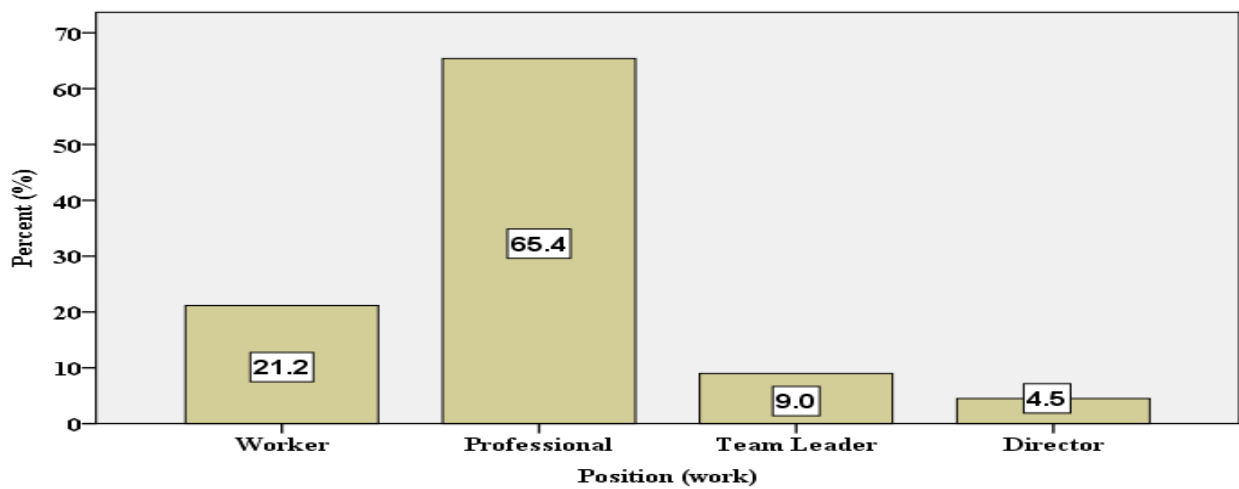
Fig 4.2: Educational Background of the Respondents



Source: own survey, June (2018), output

Referring to Figure 4.2 above, we can see that out of the 156 respondents, 51.3% (80) of them were first degree holders and 27.6% (43) of them had master's degree as far as educational background of the respondents is concerned. When both Bachelor's and Master's degree holders were taken all together, they accounted for 78.9% (123) of the total informants and the remaining 21.2% (33) of them held college diploma. The study showed that the majority (more than 3/4) of the respondents were Bachelor and Master's degree holders.

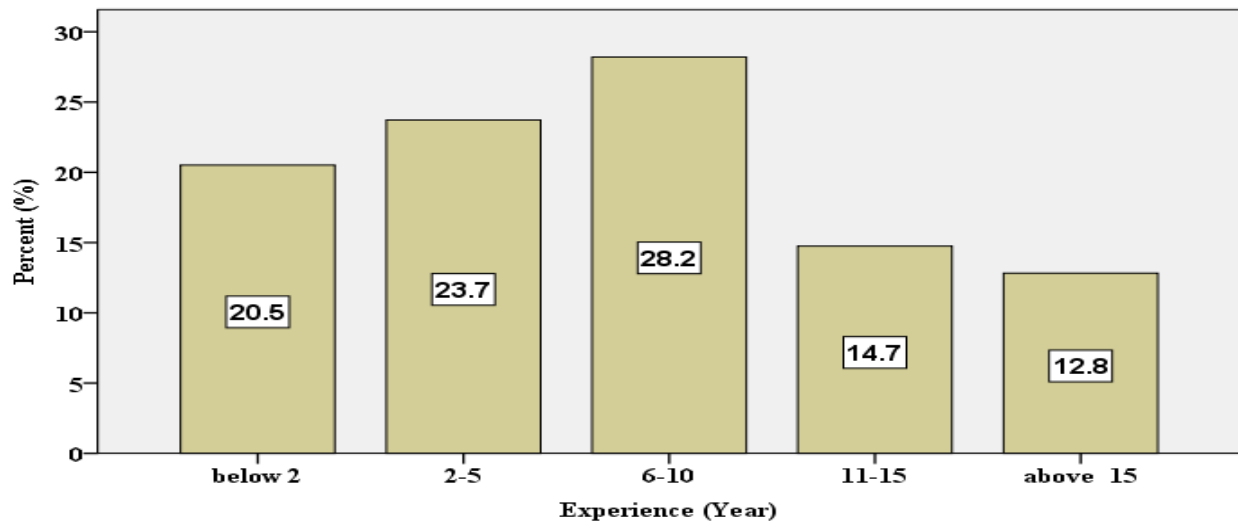
Fig 4.3: Positions of the Respondents



Source: own survey, June (2018), output

Referring to Figure 4.3 above and considering the respondents by their position in their organization, by far the highest percentage, i.e. 65.4% (102) of them were professionals who were assumed to be first and Master's degree holders followed by workers which accounted for 21.2% (33). The remaining 9% (14) and 4.5% (7) of the respondents were Team Leaders and Directors respectively. This showed that most of the participants of this study were professionals.

Fig 4.4: Work Experience of the Respondents



Source: own survey, June (2018), output

Lastly, when treating the participants from their work experience point of view, Figure 4.4 above shows us that respondents who have 6-10 years of work experience in the organization comprised 28.2% (44) of the total informants followed by 2-5 years of work experience covering 23.7% (37) of the overall respondents. Employees having 11-15 years of work experience represent 14.9% (23) of them. Finally, employees of the least work experience (less than two years of experience) comprised 20.1% (31) whereas employees of the most work experience (greater 15 years of experience) accounted for only 12.3% (19) of the respondents where tacit knowledge is at the verge of leaving the organization due to retirement. From KM perspective, employees with the most experience must be good and reliable sources of tacit knowledge for organizations as knowledge can be acquired and accumulated through experience.

Generally, according to the survey conducted, most of the participants were found to be first and Master's degree holders being within the age range of 31-50 and at the operational level.

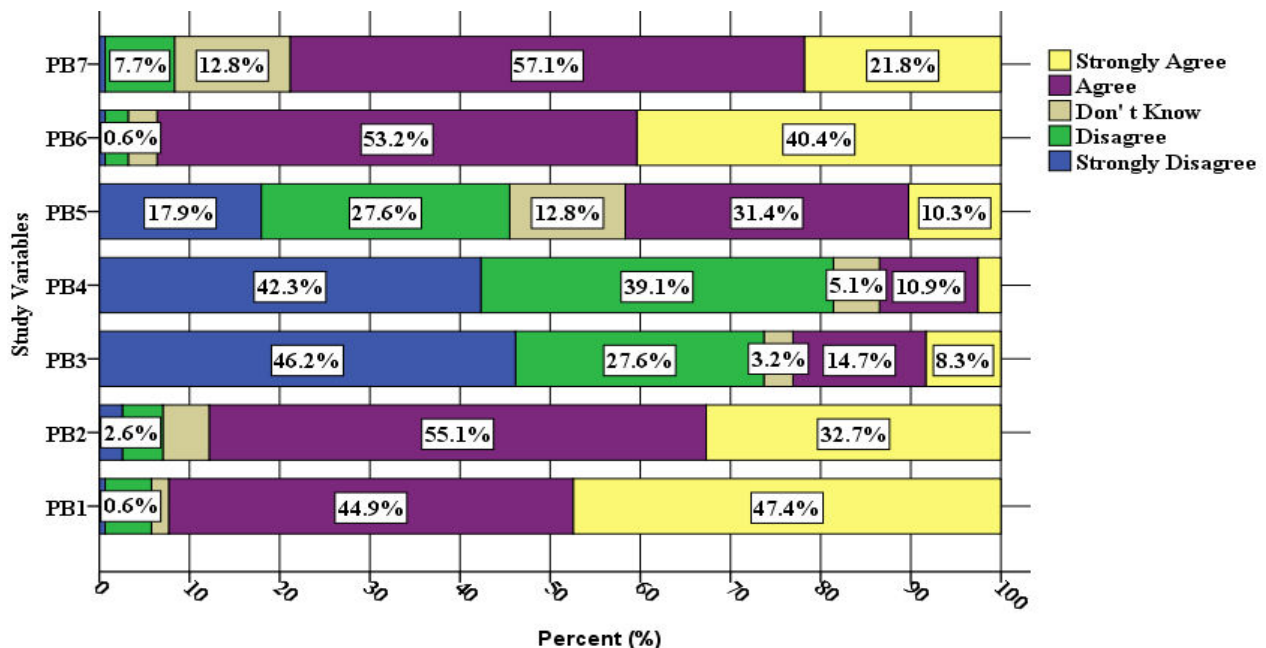
4.4 Findings and Discussion

This section presents the answers to the research questions through analysis and interpretation of the data collected.

4.4.1 Personal Barriers towards Knowledge Sharing

Part-I of the questionnaire was intended to collect the views of respondents about personal barriers towards knowledge sharing and to answer the research question **(RQ.1)** regarding individual barriers towards supporting OM practices within the office (secretariat) of Ethiopian Parliament. Figure 4.5 summarizes the result of the study variable used to assess the respondents' attitude.

Fig 4.5: Views of Respondents towards Knowledge Sharing (Personal Barriers)



Source: own survey, June (2018), output

As can be seen from Figure 4.5 above, the majority of the respondents, i.e. (92.3%) of them reported that they would gain new ideas, technologies, skills or techniques as a result of sharing knowledge. Similarly, (87.8%) of the respondents reported that knowledge sharing, would help

them avoid repeating the same mistake again. Correspondingly, (81.4%) of the study participants reported that sharing knowledge would not waste their time and would not increase their work load. Likewise, out of the respondents who were requested for their willingness towards sharing their own know-how, experience or skills to their colleagues, (93.6%) of them showed readiness towards sharing their own know-how, experience or skills to their co-workers. This being the case, out of the total respondents, who were asked whether their personal competitiveness would reduce or not following knowledge sharing, (73.7%) of them, reported that, their personal competitiveness would not be affected as a result of sharing knowledge.

On the other hand, (45.5%) of the respondents reported that exclusive ownership of knowledge would not make them outstanding and important person in their organization whereas (41.7%) of them believed that sole ownership of knowledge would make them otherwise. Besides, (78.9%) of the participants reported that they count on the knowledge of their co-workers.

An independent samples t-test was conducted to compare the knowledge sharing behavior scores for male and female respondents. There was not a significant difference in the scores for male respondents ($M = 23.36$, $SD = 3.14$) and for female respondents ($M = 23.88$, $SD = 3.67$) conditions; $t(154) = -0.96$, $p = 0.34$ (two-tailed).

Table 4.2: Group Statistics (Male, Female)

	Gender	N	Mean	Std. Deviation	Std. Error Mean
PB Mean	Male	89	23.3596	3.13792	0.33262
	Female	67	23.8806	3.66607	0.44788

Source: own survey, June (2018), output

Taking the demographic variables of the study as a splitting factor, the distribution of respondents was found to be somehow comparable for almost all the study factors under investigation. This indicated that there was no significance difference among respondents based on their demographic variables as far as sharing knowledge is concerned.

In general, it can be said that there was, reasonably, a good level of trust relationship among co-workers towards knowledge sharing in terms of willingness to accept and to share know-how, skill and expertise within their organization. This can be taken as a good starting point in the process of fostering the existing OM within the office (secretariat) of Ethiopian Parliament.

To the contrary, there happened to be a considerable percentage of employees who were resistant to knowledge sharing practices particularly regarding sole ownership of knowledge. According to the study, (41.7%) of the respondents reported that sole ownership of knowledge would make them an important person within their organization. This implied that, those who have such type of stance also have a strong fear of losing their power and competency within their organization if they share their knowledge. Still important, there were employees who support knowledge sharing yet, they thought that it would add additional work load to their daily routines. Cumulatively, these perceptions may overpower on an individual's positive attitude towards knowledge sharing practices and they will produce a negative impact on both individual and group memories. This in turn will affect the overall OM of the organization.

In conclusion, this study revealed that there was a common understanding on the importance of knowledge sharing practices and most of the respondents believed that knowledge sharing has nothing to do with their competency within their organization. However, according to the majority of the responses of the participants to the open ended questions, some resources like time and space were reported to be the most common barriers to them.

Knowledge transfer and distribution are few other terms used to represent knowledge sharing. Knowledge sharing is the most challenging KM process, for it is based on a voluntary action (Davenport, 1998). Yet, it is crucial because individual knowledge is not useful to the organizations unless shared (Jasimuddin et al., 2011; Nonaka and Takeuchi, 1995).

Individuals have their own recollections of what has been taken place in and about organizations. They store their organization's memory in their own capacity to remember and articulate experience in the cognitive orientations they employ to facilitate information processing. Moreover, individuals and organizations keep records and files as a memory aid. As Huber (1991), March and Olsen (1975), Simon (1976), Weick (1979a) and Yates (1990) observed, such information help to constitute an OM.

According to literature, in a work environment which is characterized by openness and trust (Aulawi et al., 2009), employees communicate freely and share their knowledge with their peers and managers. Moreover, similarity among the employees based on their socio-demographic profile, fair treatment, incentives and rewards motivates employees towards knowledge sharing (Witherspoon et al., 2013).

Gupta and Govindarajan (2000) classified at least five critical elements of knowledge transfer: perceived utility of the knowledge, motivation of the source to transfer (O'Dell et al, 1998), motivation of the recipient to acquire, absorptive capacity of the recipient, and the organizational context that supports the transfer. Extrinsic rewards and incentives for knowledge sharing, rather than knowledge hoarding, motivate employees to share knowledge (Burgess, 2005; Lee and Yang, 2000; Wang et al., 2014).

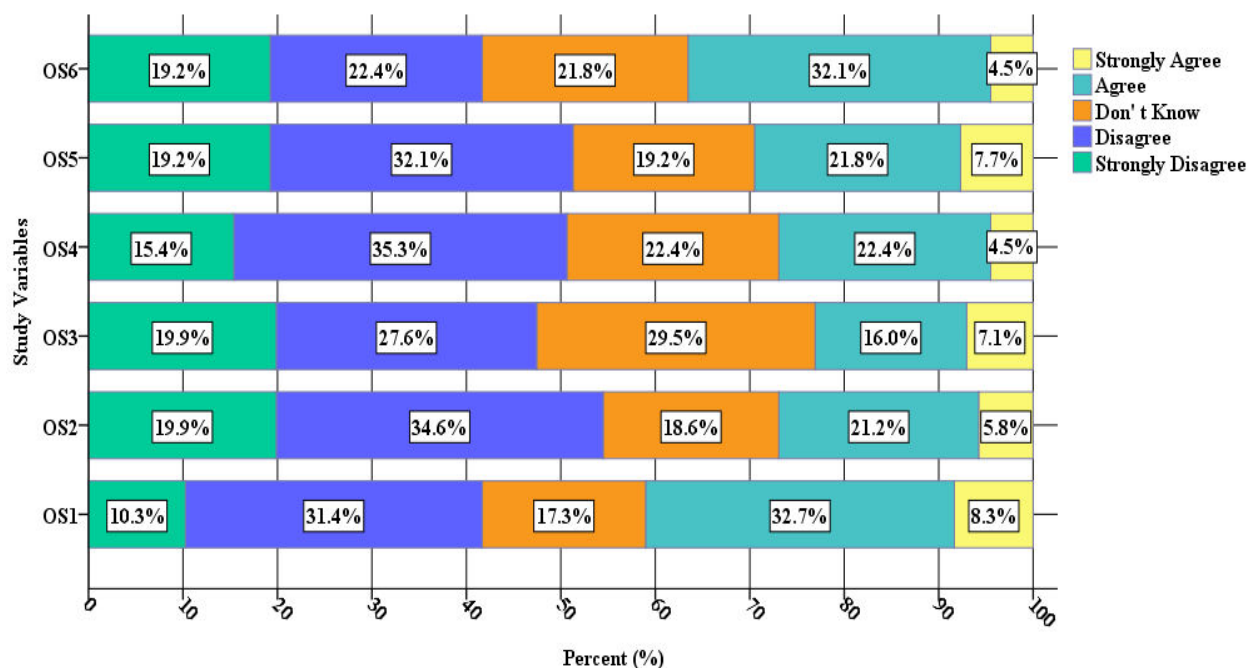
Based on result of the current study, the review of theory and research related to knowledge sharing, the following have been identified as the major factors that influence knowledge sharing

between individuals in organizations: the nature of knowledge, motivation to share, opportunities to share, organizational and infrastructural supports and the culture of the work environment.

4.4.2 Organizational Support

In this part (Part-II) of the survey, the researcher aimed at exploring the status of the provision of organizational supports in terms of involvement of management in providing the necessary infrastructure, facilities, funds, formulating a suitable OM strategies and creating conducive environment towards OM processes and practices. Figure 4.6 summarizes the result of the study variable used to assess the respondents' opinion.

Fig.4.6. Respondents' view on Organizational Support within HoPR



Source: own survey, June (2018), output

According to Figure 4.6 above, the study showed that the number of respondents who agreed to the presence of motivational scheme reported to be comparable with the number of respondents who disagreed to its presence within HoPR. Put differently, out of the 156 respondents who were asked to provide their opinion on the absence or presence of motivational

scheme, as part of organizational support, in their organization, 41.7% of them disagreed whereas nearly the same percentage i.e., 41% of them at least agreed to the presence of motivational scheme within their organization. On other hand, the remaining 17.3% of the respondents had no a say to the idea under discussion.

Similarly, the majority (47.5%) of the respondents reported that there was no specific budget dedicated to acquiring and sharing knowledge in their organization. Besides, a significant portion of the respondents (29.5%) of them were not cognizant to this notion. The remaining (23.1%) of them agreed to statement regarding the presence of specific budget dedicated to acquiring and sharing knowledge within their organization. Concerning periodic plan to acquire, organize and share knowledge, the majority (50.7%) of the participants disagreed to its presence. Moreover, (51.3%) the respondents at least disagreed to the level of readiness of management to encourage employees to suggest ideas for new opportunities.

In summary, this result revealed some vivid patterns towards organizational support within the office (secretariat) of Ethiopian Parliament. As such, nearly the same proportion of the respondents treated each variable of the study for organizational support in a similarly fashion. In other words, the majority of the respondents at least disagreed to the positively coded statements for every study variable as far as organizational support of the organization is concerned. This indicated that there was less motivational scheme in terms of incentives, rewards and conducive environments, resource allocation, periodic plan to acquire, organize and share knowledge, level of readiness of management to encourage employees to suggest ideas for new opportunities and entertaining different views within the office (secretariat) of Ethiopian Parliament. This in turn brings a negative impact on the development of a robust OM within the organization under investigation. Hence, much remains to be done in this area.

Literature tells us that, leaders need to be flexible, willing to learn and need to have a clear understanding of importance of knowledge and knowledge management at times of upheaval (Carpenter and Fredrickson, 2001). Simple implementation of KM systems cannot bring success unless employees cooperate. Winning commitment and cooperation from the employees is possible only when leaders become strategic planners of the organizations by formulating KM strategy, setting example by participation and providing necessary funds and infrastructure (McKenzie et al., 2001).

Many organizations have introduced a new job title called Chief Knowledge Officer (CKO) (Liebowitz, 2002) who will exclusively look after knowledge related activities. CKOs are the common medium through which all the KM activities are coordinated effectively and turn it into performance. The most important goal of a CKO is to endure and embed knowledge in organization's daily life. CKOs are nomads who browse the entire organization searching for opportunities and to manage organization wide knowledge creation process at the organization level (Nonaka and Takeuchi, 1995). CKOs require a blend of technical, human and financial skills that can blend the technology based explicit knowledge with the cultural and behavioral factors that impede or facilitate KM practices (Davenport, 1998).

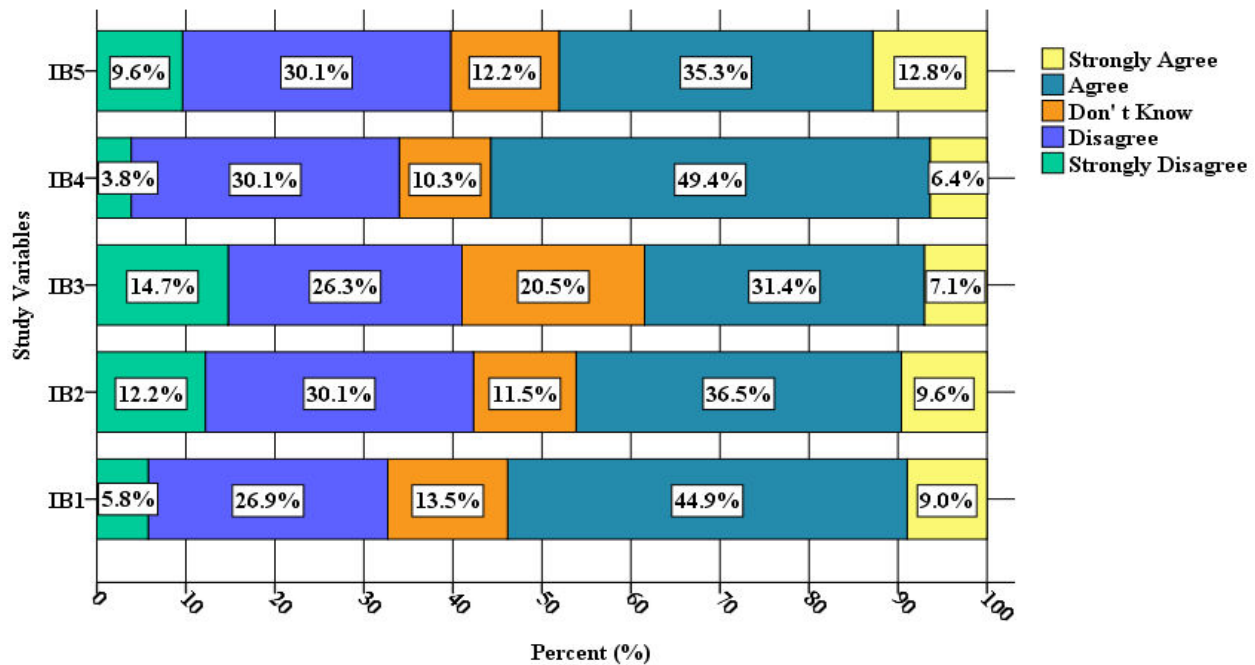
Hence it could be concluded that leadership and management support is the most essential critical success factor for fostering knowledge management in organizations as they design the organizations' strategy, create culture and provide necessary infrastructure, and other major enablers of OM practices

4.4.3 Infrastructural Support (ICT)

In this part (Part-III) of the survey, the researcher aimed at exploring the extent of use of information and communication technology tools (ICT) such as internet, intranet, ERP, Web

portals, inventory management systems, information systems, data base management systems, data warehouses for effective OM and to answer the research question **(RQ.2)** regarding infrastructural barriers towards promoting OM practices within the office (secretariat) of Ethiopian Parliament. Figure 4.7 summarizes the result of the study variable used to assess the respondents' opinion.

Fig. 4.7: Respondents' view on Infrastructural Support within HoPR



Source: own survey, June (2018), output

Referring to Figure 4.7 above, out of the total respondents who were asked to rate the statement regarding the presence or absence of up-to-date ICT infrastructure for storing, transferring and retrieving of knowledge in HoPR, more than half (53.9%) of them reported supporting its existence whereas a good number (32.7%) of them reported supporting its absence. The remaining (13.5%) of the respondents had no say about it. This indicated that these participants wanted to be neutral or had no idea about the status of the current ICT infrastructure in their organization. Regarding facilities like locations or halls for employees to socialize and

exchange knowledge, the study showed that responses of the participants who at least disagreed (42.3%) appeared to be somehow balanced with the responses of others who at least agreed (46.1%). Similarly, 64% of the respondents disagreed with the statement regarding presence or absence of personal home pages through which they can communicate their ideas.

Likewise, (55.8%) of the research participants thought that the current ICT infrastructure in HoPR is in a condition to let them identify and communicate with experts in their main functional areas or domains. The remaining (33.9%) of them reported oppositely. This study found out that the majority (48.1%) of the participants agreed with the statement regarding the presence of a well-developed intranet that is accessible to all workers within HoPR.

In summary, in spite of some positive opinions towards ICT, cumulatively, the study showed that the current ICT infrastructure in HoPR is not well developed in such a way to foster and encourage employees to store, transfer and retrieve knowledge; contributing negatively towards OM practices of the organization under investigation.

To the best of the researcher's knowledge, as he was from the same organization under study, the ICT strategy of the organization was highly gravitated to the business processes of the organization. This statement was supported by responses to the open ended questions which stated that "the management in HoPR was not in a position to think out of the box and it advocated business as usual style. Hence, much remains to be done in this context.

Technology is a key enabler of OM and it is the most effective means of capturing, storing, transforming and disseminating knowledge. Among other things, it facilitates searching, accessing and retrieving of knowledge in electronic formats. With ICT, searching and exploitation of stored knowledge becomes easier (KPMG, 1998). ICT tools such as emails, search engines, video conferencing, data-mining systems and many more (Subashini, 2012) aids

knowledge storage, knowledge transfer and knowledge dissemination through electronic documentation (Nevo, 2007).

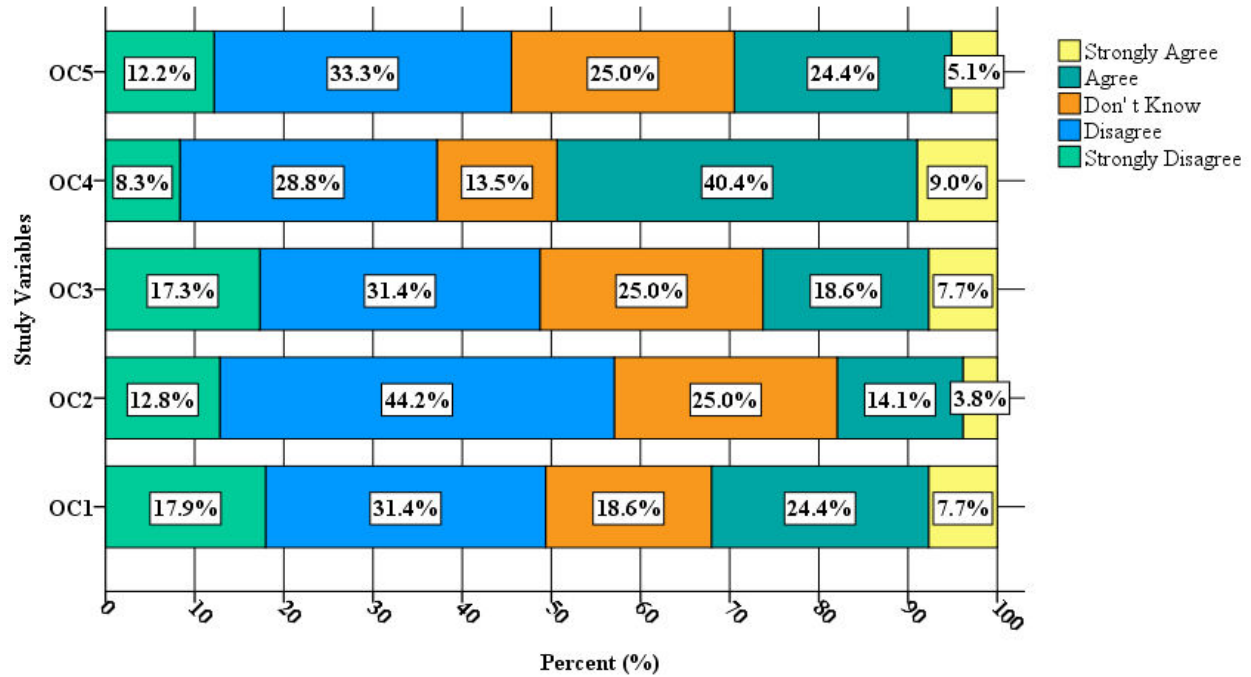
According to literature, ICT addresses knowledge coordination problems such as search for expertise on a specific domain, meta-knowledge, knowledge about knowledge, its availability and location such as who knows what and who can be asked for help (Sambamurthy and Subramani, 2005).

In general, a well-established and accessible ICT across the organization helps employees create, share, transfer knowledge, and socialize within the organization which eventually enhances OM. But organizations must understand that technology is neither a cure-all nor a short formula. As KPMG (2000) survey reported technology does not represent KM rather it facilitates KM. According to him, it is essential for KM practitioners to understand that no technology system can fully capture and exploit knowledge without human interaction. Being technologically adept is one thing but not a sufficient condition for KM. It is the alignment of technology within the cultural, managerial and organizational elements of KM that will yield better results.

4.4.4 Organizational Culture

Part-IV of the questionnaire was intended to collect the views of respondents about the nature of organizational culture and to answer the research question **(RQ.3)** regarding cultural barriers towards building or promoting OM practices within the office (secretariat) of Ethiopian Parliament. Figure 4.8 summarizes the result of the study variable used to assess the respondents' attitude.

Fig 4.8: Respondents' view on Organizational Culture within HoPR



Source: own survey, June (2018), output

From Figure 4.8 above, it can be seen that the majority (49.3%) of the respondents confirmed that there was no management commitment towards knowledge creation and sharing with in HoPR. Whereas (32.1%) of them reflected positively towards it. Similarly, out of 156 participants who were asked to rate the statement regarding organizational culture whether it encourages risk taking and experimentation without blame for mistakes or not, (57%) of them reported with opposition and (25%) of them had no say about it. Only the remaining (17.9%) of them reported it otherwise. Likewise, (48.7%) of the respondents disagreed to the statements concerning the reward system in HoPR as far as encouragement of knowledge sharing and reuse of the knowledge of others is concerned. Besides, the proportion of the respondents who agreed (26.3%) appeared to be somehow equivalent with the responses of others who did not have a say (25%).

In a similar fashion, 49.4% of the respondents believed that training and development activities within HoPR encourage individuals to develop their personal knowledge and skills in order to acquire, share and use new knowledge, yet the remaining (50.6%) of them either disagreed or not cognizant about it. This showed that the attention given to training and development activities in HoPR was minimal in encouraging individuals to develop their personal knowledge and skills in order to acquire, share and use new knowledge.

Finally, the study showed that most of the respondents (45.5%) reported that they do not make use of cross functional, cross-divisional or international best practices for decisions of strategic importance to their organization.

In conclusion, the culture of HoPR was not good enough in terms of commitment of management, encouragement towards risk taking activities, reward system, training and development activities and encouraging employees to use cross functional, cross-divisional or international best practices for betterment of their own organization.

Culture is a set of norms and values which collectively guide and influence the behavior of employees in an organization (Smith et al. 2003). The development of an organizational culture that is suitable for OM practices is the most important and difficult challenge in OM practices. The success of OM initiatives depends on the motivation, availability and the skills of employees to share and exchange knowledge. People in organizations could act as either enablers or barriers to effective OM practices.

Culture is reflected in values, norms and practices. Values are not visible and are observed only in behavior whereas norms and practices are explicit derived from values (David and Fahey, 2000). Culture is an ongoing process of reality construction, providing a pattern of understanding that helps members of organizations to interpret events and to give meaning to their working

worlds (Nwugwo, 2001). Organizational culture provides a sense of identity for members (Robbins et al., 2010) and it is inextricably related to employees' satisfaction, social trust, organizational commitment and hence organizational performance (Cardoso, 2012).

Modern organizations are characterized by job interdependencies, information explosion resulting from interconnectivity and rapid change, resulting in fragmented information with the individuals and –no one knows it all (Stauffer, 1999). Davenport (1998) contended that without organizational culture favorable to KM, no amount of technology, knowledge content or good project management will make the effort successful. Hence, shaping organizational culture is central for successful KM. Only by facilitating interactions between individuals, groups both formally and informally lead to creation of new ideas which eventually lead to innovation (Gold et al., 2001). Studies that investigated the KM failures in organizations have reported organizational culture as the barrier (Tuggle, 2000). Culture to adopt KM and encourage people to share knowledge within organizations pose challenges for implementation of KM. Scholars believe that organizational culture should be nurtured if KM is to succeed. Organizational culture influences KM through its influence on the values the members attribute to their behavior. It influences evolution of KM initiatives and migration of knowledge, over time, KM becomes part of organizational culture (Alavi and Leidener, 2008).

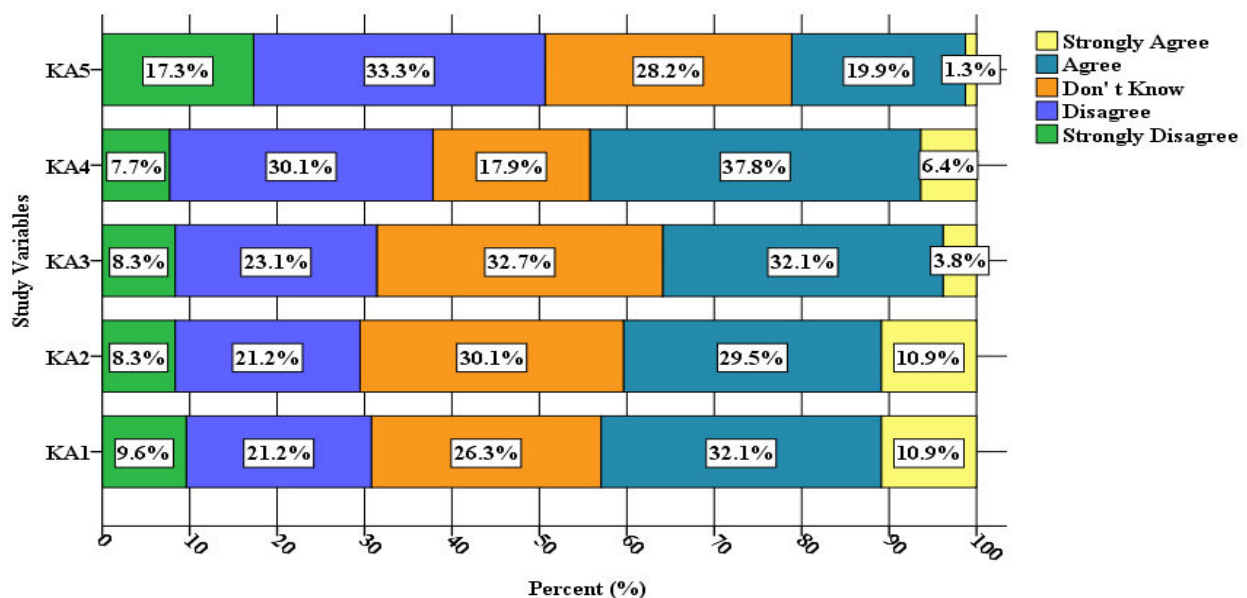
In summary, for OM to be useful and effective for an organization, it is necessary that the organization need to tailor its strategy to the creation of a favorable environment that fosters and encourages collaboration and the sharing of knowledge, ideas, experiences and relevant information among its members. OM works best in an organizational culture that encourages knowledge sharing and reuse. Organizations, whose culture does not support knowledge sharing, need to manage expectations of the benefits of OM and OMS while they undertake actions to

change the culture to one that supports sharing. This takes time and effort and tends to require a top down approach.

4.4.5 Knowledge Acquisition

Part-V of the questionnaire is intended to assess the views of respondents about the acquisition of knowledge as part of KM process in HoPR. Figure 4.9 summarizes the result of the study variable used to measure the respondents' report.

Fig 4.9 Respondents' view on Knowledge Acquisition within HoPR



Source: own survey, June (2018), output

As can be seen from Figure 4.9 above, (43%) of the participants said that their organization captures and uses knowledge obtained from other external sources such as related government offices, private sectors, and associations and the remaining (57%) of them reported with either opposition or did not have a say. Similarly, (40.4%) of them confirmed that their organization captures and uses knowledge obtained from public research institutions including universities. On the other side, relatively a large percent (30.1%) of the participants did not have a say about it and the remaining (29.5%) of them reported differently.

In a similar fashion, the majority (35.9%) of the respondents agreed to the statement regarding allocation of resources to detecting and obtaining external knowledge and communicating it within the organization, (32.7%) of them are not aware about it and the remaining (31.4%) of them did not agree with it. Regarding reviewing and learning from work done, (44.2%) of them reported with confirmation whereas (37.8%) of them reported with opposition. Finally, a large percent (50.6%) of the participants thought that their organization do not encourage workers to participate in projects with external experts and (28.2%) of them preferred not say at all.

Overall, the study revealed that there was a practice of acquisition of knowledge as part of KM process in HoPR in terms of capturing and using knowledge obtained from other external sources, allocating resources to detecting and obtaining external knowledge, reviewing and learning from work done and encouraging employees to participate in projects with external experts. But it needs to be reinforced to promote a well-established OM.

In 1983, Sternberg defined knowledge acquisition as a process of learning, filtering new information and storing it in memory. Knowledge acquisition or capture is defined as the retrieval of relevant and valuable knowledge from individuals that is then documented and transferred to other individuals, customers, or business partners (Lawson, 2003). Holsapple (2001), on his part, defines knowledge acquisition as a process of identifying relevant knowledge from external environment and transforming it into a form that is suitable for assimilation or internalization in an organization's context that can be applied for knowledge creation.

Learning is fundamental to acquire knowledge (Senge, 1990). A diverse set of knowledge acquisition practices reported in literature include mentorship programs, cross functional teams, communities of practices (CoP) and RD fairs (Madhavan and Grover, 1998). These programs

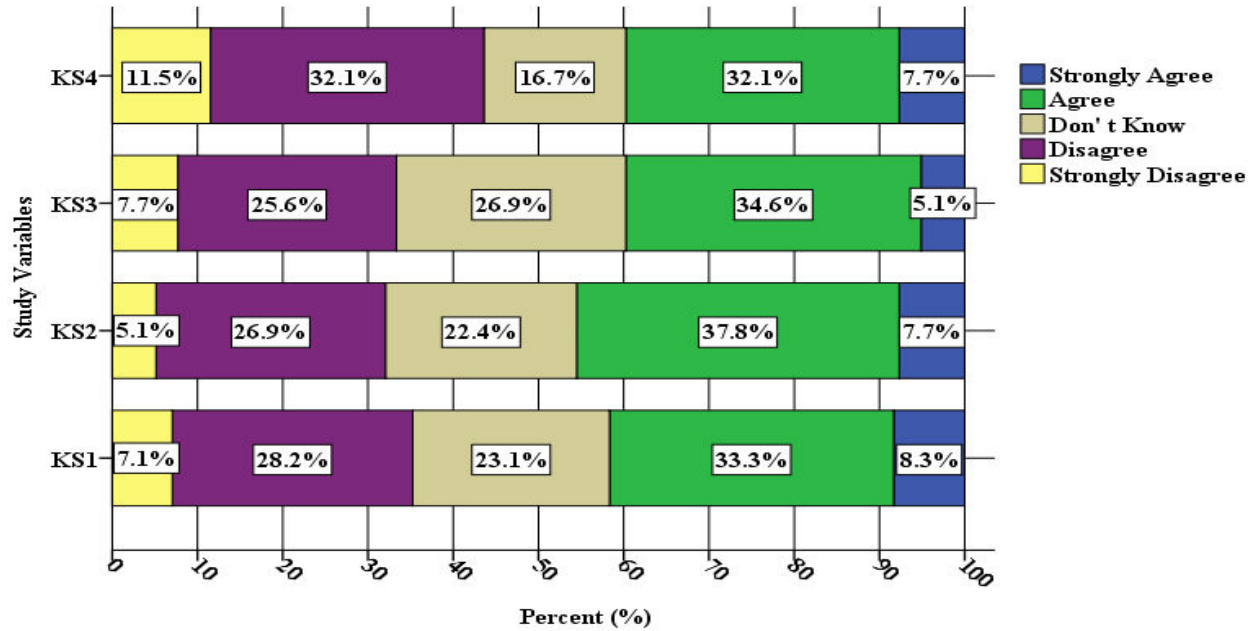
involve knowledge sharing extensively and provide a good platform for capturing knowledge. Use of informal contacts, advice from consultants, imitation of role models, knowledge sharing, training and development activities could also prove to be potential knowledge sources (Friesl, 2011). Kim and Lee (2010) advocate that joint ventures, technology sharing and collaboration facilitates knowledge acquisition. By hiring individuals with the required knowledge, borrowing best practices, acquiring organizations for their knowledge and hiring consultants are some strategies that could help to capture new knowledge. Similarly, benchmarking and collaboration are referred to as effective knowledge acquisition tools (O'Dell and Grayson, 1998). Identifying the outstanding practices of the competitors and performing a gap analysis will enable the organizations to capture the required knowledge for internal use. A study conducted in small and medium enterprises in Netherlands listed a number of knowledge acquisition practices (Beijerse, 2000) as the most commonly used, such as, active networking, facilitating self-study, job rotation, apprenticing, training, hiring expertise, hiring new employees, tutorship /mentoring, participation in conferences etc.

Therefore, the organization under investigation may take these tested or best practices into consideration and put them into practice to take the most out of OM.

4.4.6 Knowledge Dissemination

Part-VI of the questionnaire is particularly intended to assess the views of respondents on the availability of organizational repositories as means of disseminating knowledge in HoPR. Figure 4.10 summarizes the result of the study variable used to measure the respondents' report.

Fig 4.10 Respondents' view on Knowledge Dissemination Practices within HoPR



Source: own survey, June (2018), output

From Figure 4.10 above, it can be said that the majority (41.6%) of the participants agreed with the idea that employees in HoPR disseminate knowledge through regularly updating databases of good work practices, lessons learned or listings of experts and making it available via the organization's portal. Nonetheless, the fraction of respondents who did not agree to and who did not have a say accounted for (58.4%) which was well above half of the overall participants. In a similar fashion, it was only (45.5%) of the respondents who confirmed that their organization disseminate knowledge through preparing written documentation such as lessons learned, training manuals, good work practices, articles for publication, etc. Likewise, (39.7%) and (39.8) of the overall respondents reported with agreement with respect to facilitating collaborative team works and knowledge sharing ways respectively.

In general, according to the study, it can be concluded that there was no or little practice of dissemination of knowledge in HoPR in terms of updating databases of good work practices;

lessons learned or listings of experts and making it available via the organization's portal on a regular basis; preparing written documentation such as lessons learned, training manuals, good work practices; facilitating collaborative team works that are physically separated and knowledge sharing ways such as workshops, seminars within departments or other organizational units on a regular basis. Hence, much remains to be done in this area.

Knowledge dissemination refers to the human processes and technical infrastructures that make embodied knowledge available to the people and identify who to use a particular body of knowledge within an organization (Armbrecht et al., 2001). Research over the past 10 years has concluded that knowledge is not a 'thing'—a static inert object to be sent and received. Disseminating new findings or information involves communicating through certain channels over time among members of a social system (Rogers, 1995). It requires an analysis of the communicator and the user because knowledge is a fluid set of understandings shaped both by those who originate it and by those who receive it (Hutchinson and Huberman, 1993).

All in all, maintaining or changing to a suitable organizational environment and culture for knowledge management, by no means is an easy task. It is a long-term process and results cannot be expected over night. However if organizations have made up their decision of creating such environment and culture then they have to be consistent with this goal. That includes being willing to fire, not hire, or encourage to leave people who may have talent but whose goals and behaviors are too deviated from the targeted organizational environment and culture. This requires making tough judgments and being willing to act on those judgments.

4.4.7 Challenges towards Organizational Memory Practices within HoPR

Part-VI of the questionnaire was intended to collect the views of respondents about barriers and challenges towards OM practices and to answer the research question **(RQ.4)** regarding challenges in OM practices within the office (secretariat) of Ethiopian Parliament. Responses to this questionnaire was thematically analyzed and presented in support of the main survey.

Based on the literature survey and the results of this study, factors such as organizational culture, organizational support and infrastructural supports have been identified as the major challenges that affect OM practices with HoPR. (Please look at on sections 4.4.1-4.4.6)

Chapter Five

Conclusion and Recommendations

5.1 Introduction

Organizational memory is the function of the organization in which organizational knowledge is stored and retrieved for present and future use, and thus contributes significantly to the processes of designing and creating the future of the organization. Although it has interested researchers for several years, many aspects remain unclear and contradictory. The author hopes that this study has provided insight into these aspects and recommends a pluralistic stance to them.

The aim of this research was to assess the overall organizational memory practices (knowledge acquisition, knowledge retention and knowledge transfer) and organizational memory enablers such as organizational culture, organizational infrastructures, and organizational support and finally, to forward recommendations towards organizational memory to the organization under investigation.

In order to carry out this study, extensive literature survey was made, views of selected respondents on OM processes and practices were collected, then observation, as a secondary data collection, was made, and finally, both the primary and secondary data were analyzed, interpreted and presented based on the proposed methodology. This being the case, after observing the results of the study, the author came up with the following conclusions.

5.2 Conclusion

According to the study, the level of trust relationship among co-workers towards knowledge sharing in terms of willingness to accept and to share know-how, skill and expertise within their organization is good. On the one hand, the motivational scheme in terms of incentives, rewards

and conducive environments; resource allocation, periodic plan to acquire, organize and share knowledge; level of readiness of management to encourage employees to suggest ideas for new opportunities and entertaining different views within the office (secretariat) of Ethiopian Parliament is at its minimal.

The current ICT infrastructure in HoPR is not well developed in such a way to help and encourage employees to store, transfer and retrieve knowledge. This being the case, the organizational culture of HoPR is not suitable in terms of commitment of management; encouraging employees towards risk taking activities and experimentation without blame; reward system; training and development activities and encouraging employees to use cross functional, cross-divisional or international best practices for the betterment of their own organization.

Lastly, the practice of acquiring knowledge in HoPR in terms of capturing and using knowledge obtained from other external sources; allocating resources to detecting and obtaining external knowledge; reviewing and learning from work done and encouraging employees to participate in projects with external experts is at its minimal. Still, there is little practice of knowledge dissemination in HoPR in terms of updating databases of good work practices; lessons learned or listings of experts and making it available via the organization's portal on a regular basis; preparing written documentation such as lessons learned, training manuals, good work practices; facilitating collaborative team works and knowledge sharing ways such as workshops, seminars within departments or other organizational units on a regular basis.

5.3 Recommendations

Based on the literature survey and the finding of this research, the researcher came up with the following recommendations.

- Management of HoPR at all level should facilitate and support KM initiatives.
- Employees at HoPR should be encouraged to share knowledge both within departments and across organization.
- HoPR should renovate or enhance the current ICT infrastructure and tools in such a way that it encourages KM processes.
- HoPR needs to hire Chief Knowledge Officer (CKO) who will exclusively look after knowledge related activities.
- HoPR should integrate the activities of knowledge management processes as part of daily routines.
- HoPR should reshape its organizational culture and align it with organizational goal to foster its OM.
- At HoPR, there should be policies and strategies put in place for KM processes and practices to expand.
- HoPR should create conducive work environment that motivates employees to learn from each other, share their experience and let them build their intellectual capital for better organizational performance.
- HoPR should facilitate collaborative team works and knowledge sharing ways such as workshops and seminars within departments or other organizational units on a regular basis.

5.4 Suggestions for Future Research

I have considered internal factors, factors within the organization, towards OM practices. Future studies may explore the role of government and the use of government facilities in enhancing OM. It can also be of interest to compare contribution of OM and external knowledge sources to innovative behaviors shown by new employees. One might also need to address an issue of perceived knowledge novelty. Being new in organization, employees face too much novel knowledge both from the OM and from the external sources. Thus, facing some external knowledge or coming up with a new idea, they cannot say if it will be perceived as “new” or “old” for the organization.

5.5 Managerial Implications

In situation where the largest part of OM is retrieved from people –either as knowledge repositories themselves or as access methods –it makes sense to think about the dangers of over-reliance on people, such as forgetting, turnover, and impossibility to share knowledge with other at all. In addition, one must remember that what knowledge employees obtain depends on whom they connect with and how which gives a certain degree of risk that they can miss some important knowledge by not being connected to the right people. Considering all said above, an organization like HoPR may focus its efforts on two dimensions: (1) improving personal communication, though it demands a great deal of effort, for knowledge sharing through personal communication is deeply embedded in organizational culture; (2) developing memory systems and access methods that are not so dependent on the personal communication. Moreover, to take the most out of the above proposed directions, the organization may consider combining both approaches.

References

- Ackerman, M. (1994). Augmenting the OM: A field study of answer garden. *Proceedings of Conference on Computer-Supported Cooperative Work (CSCW'94)*, 243-252.
- Ackerman, M. & Halverson, C. (2000). Re-examining organizational memory. *Communications of the ACM*, 43(1), 58-63.
- Al-Ali, N. (2003). Comprehensive intellectual capital management: Step-by-step, New Jersey: John Wiley and Sons.
- Al-Gharibeh, K. (2011). The knowledge enablers of knowledge transfer: An empirical study in telecommunications companies, *IBIMA Business Review*, 20, 1-13.
- Alavi, M. & Leidner, D. (2001). Review: Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues, *MIS Quarterly*, 25(1), 107-136.
- Alwis, R., & Evi, H. (2008). The use of tacit knowledge within innovative companies: Knowledge management in innovative enterprises. *Journal of Knowledge Management* 12(1):133-147
- Anderson M. & Sun, P. (2010). What have scholars retrieved from Walsh and Ungson, (1991). A citation context study. *Management Learning*, 41, 131-145.
- Antonie B. & Retha S. (2008). Coping with continuous change in the business environment: Knowledge management and knowledge management technology, *Chandos Publishing Oxford*, England.
- Argote, L. (2013). Organizational learning: Creating, retaining, and transferring knowledge. Boston, MA: Kluwer Academic Publishers, 2nd edition.
- Argote, L. & Ingram, P. (2000). Knowledge transfer: A basis for competitive advantage in firms, *Organizational behavior and human decision processes*, 82(1), 150-169.
- Beijerse, R. (2000). Knowledge management in small and medium sized companies: knowledge management for entrepreneurs, *Journal of knowledge management*, 4(2), 162-179.
- Bhatt, D. (2000). Organizing knowledge in the knowledge development cycle, *Journal of Knowledge Management*, Vol. 4, No. 1, pp. 15-26.
- Binyam, T. (2013). OM for knowledge retention in Ethiopian revenue and customs authority. Thesis, *School of Information Science*, Addis Ababa University.
- Bowen, G. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40. Retrieved from <https://doi.org/10.3316/QRJ0902027>
- Blumberg, B., Cooper, D. & Schindler, P. (2005). Business research methods. Berkshire: McGraw Hill Education.
- Burgess, D. (2005). What motivates employees to transfer knowledge outside their work unit? *Journal of Business Communication*, 42(4), 324-348.

- Cardoso L., Meireles A. & Peralta C. (2012). Knowledge management and its critical factors in social economy organizations. *Journal of Knowledge Management*, 16(2), 267-284.
- Carley, K. (1992). Organizational learning and personnel turnover. *Organization Science* 3(1):20.
- Caron, J. (1994). Business reengineering at CIGNA Corporation: Experiences and lessons learned from the first five years. *MIS Quarterly*, 233-249.
- Carpenter, M. & Fredrickson, J. (2001). Top management teams, global strategic posture, and the moderating role of uncertainty. *Academy of Management Journal*, 44(3), 533-545.
- Casey, A. & Olivera, F. (2011). Reflections on organizational memory and forgetting. *Journal of Management Inquiry*, 20:3, 305-310.
- Casey, A. (1997). Collective memory in organizations. *Advances in Strategic Management*, 14, 111-146.
- Chen, A. & Theresa, M. (2005). Assessing Value in organizational knowledge creation: Considerations for knowledge workers." *MIS Quarterly* 29(2):279-309.
- Coffey, J. & Robert, R. (2003). "Knowledge modeling for the preservation of institutional memory." *Journal of Knowledge Management* 7(3):38-52.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences. NJ, USA: Lawrence Erlbaum Associates.
- Collins, H. (2010). Creative research: The theory and practice of research for the creative industries. AVA Publications, p.38.
- Corbett, M. (2000). On being an elephant in the age of oblivion: Computer-based information systems and organizational memory. *Information, Technology, and People*, 13, 282-297.
- Creswell, J. (2014). Research design: Qualitative, quantitative, and mixed methods approaches, 4th ed., *SAGE Publications*, Inc.
- Crowther, D. & Lancaster, G. (2008). Research methods: A concise introduction to research in management and business consultancy, Butterworth-Heinemann.
- Davenport, T. & Prusak, L. (1998). Working knowledge: How organizations manage what they know, Harvard Business School Press, Boston, MA.
- Davenport, T. (1996). Some principles of knowledge management: Strategy and business, 1(2), 34-40.
- David, W. & Fahey, L. (2000). Diagnosing cultural barriers to knowledge management. *The Academy of Management Executive*, 14(4), 113-127
- Destler, I. (1981). Implementing Reorganization. In P. Szantos (Ed.) *Federal Reorganization: What have we learned?* Chatham House, London.
- Duffy, J. (2000). Knowledge management: To be or not to be? *Information Management Journal*, Vol. 34, No. 1, pp. 64-67.
- Feldman, R. & Steven P. (2006). What links the chain: An essay on organizational remembering as practice. *Organization* 13(6): 861-887.

- Fellers, J. (1993). Teaching teamwork: An exploration of using cooperative learning teams. *Proceedings of the Fourteenth International Conference on Information Systems*, December 5-8, Orlando, Florida.
- Ferdinand, J. (2004). Power, politics and state intervention in organizational learning. *Management Learning*, vol. 35(4), 435-450.
- Finger, M. & Brand, S. (1999). The concept of the 'Learning Organization' applied to the transformation of the public sector. In M. Easterby-Smith, L. Araujo and J. Burgoyne (Eds.), *Organizational Learning and the Learning Organization: Developments in Theory and Practice*
- Frederik, A. (2010). Confronting corporate amnesia. Retrieved from http://www.pillsburylaw.com/siteFiles/Publications/ExecutiveCounsel_06-07-2010.pdf
- Friesl M., Sackmann A. & Kremser S. (2011). Knowledge sharing in new organizational entities: The impact of hierarchy, organizational context, micro-politics and suspicion. *Cross cultural management: An International Journal*, 18(1), 71-86.
- Ghauri, P. & Gronhaug, K. (2005). *Research Methods in Business Studies*, 3rd edition, London: FT.
- Gillham, B. (200a). Case Study Research Methods: *Real world Research*
- Gold H., Malhotra, A. & Segars, H. (2001). Knowledge management: An organizational capabilities perspective, *Journal of Management Information Systems*, 18(1), 185-214.
- Gore, C. & Gore, E. (1999). Knowledge management: The way forward, *Total Quality Management*, Vol. 10, No. 4-5, pp. 554-560.
- Gupta, A. & Govindarajan, V. (2000). Knowledge management's social dimension: Lessons from Nucor Steel, *Sloan Management Review*, 42(1), 71-80.
- Habte, R. (2014). Knowledge management practices of commercial banks in Ethiopia. Thesis, *School of Information Science*, Addis Ababa University.
- Hair, J., Ringle, C. & Sarstedt, M. (2014). A Primer on partial least squares structural equation modeling (PLS-SEM), Sage publications, Inc.
- Haldin-Herrgard, T. (2000). Difficulties in diffusion of tacit knowledge in organizations, *Journal of Intellectual Capital*, Vol. 1, No. 4, pp. 357-365.
- Hall, S. & Raffaele, C. (2013). Corporate amnesia in the micro business environment. In *Computer Science and Information Systems*, FedCSIS, pp. IEEE, 1247-1251
- Hodgkinson, G., & Healey, M. (2008). Cognition in organizations. *Annual Review of Psychology*, 59, 387-417.
- Holsapple, C. & Joshi, K. (2001). Organizational knowledge resources. *Decision support systems*, 31(1), 39-54.
- Hoog, D., & Spek, R. (1997). Knowledge management: Hope or hype? *Expert systems with applications*, 13(1), v-vi.
- Howell, K. (2013) *Introduction to the Philosophy of Methodology*. London: Sage Publications.

- Huber, G. (1991). Organizational learning: The contributing processes and the literatures. *Organization Science* 2(1), 88–115.
- Huber G. (1990). Theory of the effects of advanced information technologies on organizational design, intelligence, and decision making. *Academy of Management Review*, 15(1): 47-71.
- Huber G. (1998). Some Perspectives on OM, Unpublished Working Paper for the Task Force on OM, F. Burstein, G. Huber, M. Mandviwalla, J. Morrison, and L. Olfman, (eds.) Presented at the 31st Annual Hawaii International Conference on System Sciences. Hawaii, HI.
- Hutchinson, J., & Huberman, M. (1993). Knowledge dissemination and utilization in science and mathematics education: A literature review. Washington, DC: National Science Foundation
- Huysman, M. (1994). An organizational learning perspective on information systems planning. *Journal of Strategic Information Systems*, Vol. 3, No. 3, 165-177.
- Jasimuddin, S. & Zhang, Z. (2011). Transferring stored knowledge and storing transferred knowledge. *Information Systems Management*, 28(1), 84-94.
- Jennex, M. (2005). What is KM? *International Journal of Knowledge Management*, i-iv.
- Jennex, M. (2005). The issue of system use in knowledge management systems: *Proceedings of the 38th Hawaii International Conference on System Sciences*
- Johnson, J., & Paper, J. (1998). An exploration of empowerment and organizational memory. *Journal of Managerial Issues*, 10, 503-520.
- Kanti, S. & Koenig, D. (2000). Knowledge management for the information professional, Medford, NJ: Information Today, c2000.
- Kim, S. & Lee, H. (2010). The impact of organizational context and information technology on employee knowledge-sharing capabilities. *Public Administration Review*, 66(3), 370–385
- Kogut, B. & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology, *Organization Science*, Vol. 3, No. 3, pp. 557-606.
- Kothari, C. (2004). Research methodology methods & techniques, 2nd ed., New Delhi: New Age International publisher.
- KPMG (2000). Knowledge management research report. Retrieved from http://www.providersedge.com/docs/km_articles/kpmg_km_research_report_2000.pdf
- Kransdorff A. (1998). Corporate Amnesia, Woburn, MA: Butterworth Heine man.
- Kransdorff, A. & Russell W. (2000). Managing OM: The new competitive imperative. *Organization Development Journal*, 18 (1), 107-117
- Kuhn, O. & Abecker, A. (1998). In U.M. Borghoff & R. Pareschi (Eds.), corporate memories for knowledge management in industrial practice: Prospects and challenges, Berlin: Springer. (pp. 183-206).

- Lapalombara, J. (2000). Power and politics in organizations: Public and private sector comparisons. In M. Dierkes, A. Antal, J. Child and I. Nonaka (Eds.), *The Handbook of Organizational Learning and Knowledge*. Oxford University Press, Oxford.
- Lawson S. (2003). Examining the relationship between organizational culture and knowledge management. Doctoral dissertation, Nova Southeastern University.
- Lee, C. & Yang, J. (2000). Knowledge value chain. *Journal of management development*, 19(9), 783-794.
- Lee, H. & Choi, B. (2003). Knowledge management enablers, processes, and organizational performance: An integrative view and empirical examination. *Journal of management information systems*, 20(1), 179-228.
- Lehner, F. & Maier, R. (2000). How can organizational memory theories contribute to organizational memory systems? *Journal Information Systems Frontiers*, 277-298.
- Levin, M. & Sanger, M. (1994). *Making government work: How entrepreneurial execution turn bright ideas into real results*. Jossey-Bass, San Francisco.
- Levitt, B. & March, G. (1988). Organizational learning. *Annual Review of Sociology*, 14, 3 19-340.
- Liebowitz, J. & Beckman, T. (1998). *Knowledge organizations: What every manager should know*, Prot St Lucie, Florida: St Lucie Press.
- Liudmila, Z. (2012). OM systems as a source of learning for new employees in an innovation context. Thesis, *School of Business and Engineering*, Halmstad University.
- Madhavan, R. & Grover, R. (1998). From embedded knowledge to embodied knowledge: New product development as knowledge management. *The Journal of marketing*, 1-12.
- Mageswari, U. (2014). Knowledge management practices in manufacturing companies in Thiruvallur District, Tamil Nadu. PhD thesis, Pondicherry University, India.
- Malhotra, Y. (1996). Organizational learning and learning organizations: An overview. www.brint.com/papers/orglrng.htm
- Mark, N. (2002). "Organizational memory and intellectual capital", *Journal of Intellectual Capital*, Vol. 3 Issue: 4, pp.393-414, <https://doi.org/10.1108/14691930210448314>
- Marsh S. (2016). Retention of institutional memory via knowledge management: Perceptions regarding the effectiveness of corporate approaches, Applied in higher education. *LSU, Doctoral Dissertations*, 972.
- Marsh, C. & Morris, C. (2001). Corporate memory and technical communicators: A relationship with a new urgency. IEEE on Communication Dimensions Proceedings, IEEE International.
- McKenzie, J., Truc A. & Winkelen, C. (2001). Winning commitment for knowledge management initiatives. *Journal of Change Management*, 2(2), 115-127.
- Michael, A. (2002). Organizational memory systems: Challenges for information technology. Drexel University, College of Information Science and Technology. *Proceedings of the 35th Hawaii International Conference on System Sciences*.

- Morgeson, P. & Hofmann, A. (1999). The structure and function of collective constructs: Implications for multilevel research and theory development. *Academy of Management Review*, 24, 249-266
- Morrison, J. (1997). Organizational memory information systems: Characteristics and development strategies. *Proceedings of the Thirtieth Annual Hawaii International Conference on System Sciences*, IEEE Computer Society Press.
- Morrison, J. (1993). Team memory: Information management for business teams. *Proceedings of 26th Hawaii International Conference on System Sciences*, 1993: 122-131.
- Nelson, R. & Winter, G. (1982). An Evolutionary theory of economic change. Thesis, Belknap Press of Harvard University, Cambridge.
- Neustadt, R. (1986). Thinking in time: The uses of history for decision makers. New York: Free Press
- Nevo, D., & Chan, E. (2007). A Delphi study of knowledge management systems: Scope and requirements. *Information & Management*, 44(6), 583-597.
- Nilakanta, S., Miller, L., & Zhu, D. (2006). Organizational memory management: Technological and research issues. *Journal of Database Management; ABI/INFORM*, Global, pp. 85.
- Nonaka, I. & Takeuchi, H. (1995). The knowledge creating company: How Japanese companies create the dynamics of innovation, Oxford University Press. Oxford. UK.
- Nonaka, I. (1994). Dynamic theory of organizational knowledge creation. *Organization Science*, Vol. 5, No. 1.
- Nonaka, I. (1991). The Knowledge creating Company: Harvard business review, November-December, pp. 143-37.
- Nwugwo, B. (2001). The impact of organizational culture on employee behavior and attitude. Retrieved from http://www.btctechnologies.com/boni/od501_paper.pdf
- O'Dell, C. & Grayson, J. (1998). If only we knew what we know: Identification and transfer of internal best practices, *California Management Review*, 40, 154-174.
- O'Leary, Z. (2014). The essential guide to doing your research project. Thousand Oaks, CA: SAGE Publications, Inc.
- Olivera, F. (2000). Memory systems in organizations: An empirical investigation of mechanisms for knowledge collection, storage and access. *Journal of Management Studies*, 37(2), pp. 811-832.
- Patel, M., McCarthy, T., Morris, P. & Elhag T. (1999). The role of IT in capturing and managing knowledge for organization learning on construction projects, *Centre for Research in Management Projects (CRMP)*, UMIST, UK.
- Perez, G. & Ramos, I. (2013). Understanding Organizational Memory from the integrated management systems (ERP). *Journal of Information Systems and Technology Management*, 10(3), 541-560. Retrieved from <https://doi.org/10.4301/S1807-17752013000300005>
- Pillania, R. (2007). Organizational issues for knowledge management in SMEs. *International Journal of Business and Systems Research*, 1(3), 367- 379.

- Polanyi, M. (1996). *The Tacit Dimension*, Routledge and Kegan Paul, London.
- Polanyi, M. (1967). *The tacit dimension*. Doubleday, New York, NY.
- Pollitt, C. (2000). Institutional amnesia: A paradox of the information age. *Prometheus* 1 (1):5-16.
- Randall, D., Hughes, J., O'Brien, J., Rouncefield, M. & Tolmie, P. (2001) Memories are made of this: Explicating organizational knowledge and memory. *European Journal of Information Systems*, 10, 113-21.
- Rainey, H. & Milward, H. (1981). Public organizations, policy network and environments. In R. A. Hall and R. E. Quinn (Eds.), *Organization Theory and Public Policy*. Sage, Beverly Hills, California.
- Robbins, S. & Judge, T. (2010). *Essentials of organizational behavior*. New Jersey: Prentice Hall. ISBN, 10.0136124011.
- Rogers M. (1995). The challenge: Lessons for guidelines from the diffusion of innovations. *Journal on Quality Improvement*, 21:324-328.
- Rusaw, A. (2005). How downsizing affects OM in government: Some implications for professional and organizational development. *Public Administration Quarterly*, 28 (3/4), pp. 482-500.
- Sandoe, K. (1998). Additional perspectives on organizational memory, “*Unpublished Working Paper for the Task Force on Organizational Memory*, F. Burstein, G. Huber, M. Mandviwalla, J. Morrison, and L. Olfman, (eds.) Presented at the 31st Annual Hawaii International Conference on System Sciences. Hawaii, HI.
- Sandoe, K. & Olfman, L. (1999). Anticipating the mnemonic shift: Organizational remembering and forgetting in 2001.” *Proceedings of the Thirteenth International Conference on Information Systems*, ACM Press, pp. 127-137.
- Saunders, M. (2012). *Research methods for business student*. 6th Edition. Essex: Pearson Education.
- Schein, E. (1996). Three cultures of management: The key to organizational learning. *Sloan Management Review*, 38, 9-20.
- Schwartz, D., Divitini, M. & Brasethvik, T. (2000). On knowledge management in the internet age. In D. G. Schwartz, M. Divitini, & T. B. Hersey (Eds.), *Internet-based organizational memory and knowledge management*. Hershey: Idea Group Publishing, pp. 1–23.
- Senge, P. (1990). The fifth discipline: Measuring business excellence, 1(3), 46-51.
- Shamoo, A. & Resnik, B. (2003). *Responsible Conduct of Research*. Oxford University Press.
- Singh, P. (2007). What are we managing, knowledge or information? *VINE*, 169-179.
- Smith, H. & McKeen, D. (2003). Instilling a knowledge-sharing culture. *Queen’s Centre for Knowledge-Based Enterprises*, 20(1), 1-17.
- Spender, J. (1996). Organizational knowledge, learning and memory: Three concepts in search of a theory. *Journal of Organizational Change Management*, 9, 63-78.
- Stauffer, D. (1999). Why people hoard knowledge: Across the board, 36(8), 16-21.

- Stein, E. (1995). Organizational Memory: Review of concepts and recommendations for management. *International Journal of information Management*. Vol. 15, No. 2, pp.17-32.
- Stein, E. & Zwass, V. (1995). Actualizing OM with information systems information systems research. Vol. 6, No. 2, pp. 85-117.
- Sternberg, R. (1983). Components of human intelligence. *Cognition*, 15, 1 – 48.
- Subashini, R., Rita, S. & Vivek, M. (2012). The role of ICTs in knowledge management (KM) for organizational effectiveness. In *Global Trends in Information Systems and Software Applications, Springer Berlin Heidelberg*, (542-549)
- Tuggle, F. & Shaw, N. (2000). The effect of organizational culture on the implementation of knowledge management. In *FLAIRS Conference*, (166-169).
- Tuomi, I. (1995). Abstraction and history: From institutional amnesia to organizational memory. *Proceedings of the Hawaii International Conference on System Sciences* 28, V4: pp. 303-312.
- Vikas A., Manz, C. & Klick, W. (1998). An OM approach to information management. *Academy of Management Review*, 23(4), 796-809
- Vince, R. (2000). Learning in public organizations. *Public money and management*, January-March, pp. 39-44.
- Walsh, J. & Ungson, G. (1991). Organizational memory. *Academy of Management Review*, Vol. 16, No.1, pp. 57-91.
- Wang, S., Noe, R., & Wang, Z. (2014). Motivating knowledge sharing in knowledge management systems. A Quasi-Field Experiment. *Journal of Management*, 40(4), 978-1009.
- Watson, I. (2003). Applying knowledge management techniques for building corporate memories, Morgan Kaufmann Publishers.
- Watson, R. (1998): Data Management: Databases and organizations. John Wiley & Sons, Inc. 2nd edition, New York. Retrieved from <http://www.hopr.gov.et/web/guest;jsessionid=7F5AF47C412E5D42A64B1B07EFF17BD9>
- Weick, K. Gilfillan, D. (1971). Fate of arbitrary traditions in a laboratory micro culture. *Journal of Personality and Social Psychology*, 17(2), 179-191.
- Wijnhoven, F. (1999). Development scenarios for organizational memory information systems. *Journal of Management Information Systems*, 16, 121-147
- Witherspoon, C., Bergner, J. Cockrell, C. & Stone, D. (2013). Antecedents of organizational knowledge sharing: A meta-analysis and critique. *Journal of Knowledge Management*, 17(2), 250-277.
- Yamane, T. (1967). Statistics: An Introductory Analysis, 2nd Edition, Harper and Row, New York.
- Yin, K. (1984). Case study: Research design and methods. Beverly Hills, Calif. *Sage Publications*. Capital, 3(4), pp. 393-414

Appendix

Annex I

Research Questionnaire

Dear Respondent,

I, the researcher, am a post graduate student at Addis Ababa University (AAU), School of Information Science (SIS). Currently I am carrying out a research for my Master's thesis at AAU with a topic "Assessment of Organizational Memory Practices: the case of Ethiopian Parliament (HoPR)" as part of partial fulfillment of the requirements for the Degree of Masters of Science in Information Science. This questionnaire is prepared to collect the necessary data in carrying out this research.

The purpose of this research is to assess the overall Organizational Memory Practices (Knowledge Creation, Knowledge Retention and Knowledge Transfer) and organizational memory enablers such as (Organizational Culture, Organizational Infrastructures, and Organizational Support) and finally to forward recommendations towards organizational memory to the organization under investigation

I am hereby requesting you to assist me in completing this questionnaire in order to achieve the research objective. I kindly request you, once more, to carefully and attentively read all the questions and give your genuine answers to the best of your knowledge. If you have any question or concern regarding completing the questionnaire, feel free to contact the researcher through the address provided below.

The researcher hereby would like to assure you that the information you will be providing will be used purely for academic purposes and will be treated with strict confidentiality and shall not be used for purposes other than the intended plan of this research. Participation is entirely voluntary and includes the right to withdraw or refuse. You don't have to take part in this research if you do not wish to do so, and choosing to participate will not affect your job or job-related evaluations in any way.

Note:

1. You are kindly requested to use either blue or black ink pen while completing this questionnaire.
2. Use the "X" symbol as your response to each of the questions and statements that follow.
3. No need to write your name on any part of this questionnaire.

Daniel Demissew

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Informed Consent Form

This informed consent form is for employees of the Secretariat of the House of Peoples' Representatives of the Federal Democratic Republic of Ethiopia (FDRE) whom the researcher is inviting to participate in this research, titled "Assessment of Organizational Memory Practices: the case of Ethiopian Parliament. "By completing and submitting this survey, you are indicating your consent to participate in this study. Your participation is appreciated.

Signature _____

Date _____

Part I: Demographic Profile (Background Information of the respondent)

Please use the “X” symbol as your response to each item of the following background information.				
1. Gender				
☐ Male	☐ Female			
2. Age group				
☐ Less than 23 Years	☐ 23-30 Years	☐ 31-40 Years	☐ 41-50 Years	☐ Above 50 Years
3. Educational Status				
☐ College Diploma	☐ Bachelor’s Degree	☐ Master’s Degree	☐ Above Master’s Degree	
4. Position				
☐ Worker	☐ Professional	☐ Team Leader	☐ Director	☐ Other
5. Years of experience in the current organization				
☐ Less than 2 Years	☐ 2-5 Years	☐ 6-10 Years	☐ 11-15 Years	☐ Greater than 15 Years

Part II: Main Survey Questions

Please indicate the extent to which the following statements related to Organizational Memory Practices apply to your organization/department by indicating the degree of agreement or disagreement that fits the situation in your organization or unit.

Part 1: Personal Barriers						
Please use the “X” symbol as your response to each of the following statements. The responses are presented in a scale ranging from 1 to 5. 1=Strongly Disagree, 2=Disagree, 3= Don’t Know, 4=Agree, 5=Strongly Agree.						
Statements to measure personal barriers regarding knowledge sharing within HoPR (PB)		SD (1)	D (2)	DN (3)	A (4)	SA (5)
PB1	I believe that I would gain new ideas, technologies, skills or techniques as a result of sharing knowledge.					
PB2	Knowledge sharing would help me not to repeat the same mistake again.					
PB3	Sharing knowledge would reduce my personal competitiveness.					
BB4	Sharing knowledge would waste my time or increase my work load.					
PB5	Exclusive ownership of knowledge would make me outstanding and important person in my organization.					
PB6	I am willing to explain my know-how, experience or skills to my colleagues.					
PB7	I trust the knowledge of my co-workers.					

Part 2: Organizational Support

Please use the “X” symbol as your response to each of the following statements. The responses are presented in a scale ranging from 1 to 5. 1=Strongly Disagree, 2=Disagree, 3= Don’t Know, 4=Agree, 5=Strongly Agree.

Statements to measure the status of organizational support in HoPR (OS)		SD (1)	D (2)	DN (3)	A (4)	SA (5)
OS1	In my organization, there is a motivational scheme to encourage staff to share their knowledge.					
OS2	There is an incentive in my organization for me in order to improve my knowledge sharing attitude.					
OS3	There is a specific budget dedicated to acquire, and share knowledge in my organization.					
OS4	There is periodic plan to acquire, organize and share knowledge in my organization.					
OS5	Managers in my organization encourage employees to suggest ideas for new opportunities.					
OS6	Managers in my organization consult team members to make decision and solve problems.					

Part 3: Infrastructural Support

Please use the “X” symbol as your response to each of the following statements. The responses are presented in a scale ranging from 1 to 5. 1=Strongly Disagree, 2=Disagree, 3= Don’t Know, 4=Agree, 5=Strongly Agree.

Statements to measure the status of organizational infrastructure in HoPR (IB)		SD (1)	D (2)	DN (3)	A (4)	SA (5)
IB1	My organization has a very up-to-date ICT infrastructure that facilitates knowledge sharing.					
IB2	There are enough locations (halls) within my organization where staff can socialize and exchange knowledge.					
IB3	Staffs do have personal home pages through which they can communicate their ideas.					
IB4	The current ICT infrastructure in my organization enables me to identify and communicate with experts in my main functional areas or activities quickly.					
IB5	My organization has a well-developed intranet that is accessible to all workers.					

Part 4: Organizational Culture

Please use the “X” symbol as your response to each of the following statements. The responses are presented in a scale ranging from 1 to 5. 1=Strongly Disagree, 2=Disagree, 3= Don’t Know, 4=Agree, 5=Strongly Agree.

Statements to measure organizational culture (OC) in HoPR		SD (1)	D (2)	DN (3)	A (4)	SA (5)
OC1	There is strong commitment from my management for knowledge creation and sharing.					
OC2	We have a culture that encourages risk taking and experimentation without blame for mistakes.					
OC3	The reward system in my organization encourages knowledge sharing and helps employees to reuse the knowledge of others.					
OC4	Training and development activities in my organization encourage individuals to develop their personal knowledge and skills in order to acquire, share and use new knowledge.					
OC5	For decisions of strategic importance to my organization, I make use of cross functional, cross-divisional or international best practices.					

Part 5: Knowledge acquisition / knowledge capture

Please use the “X” symbol as your response to each of the following statements. The responses are presented in a scale ranging from 1 to 5. 1=Strongly Disagree, 2=Disagree, 3= Don’t Know, 4=Agree, 5=Strongly Agree.

Statements to measure knowledge acquisition processes (KA) in HoPR		SD (1)	D (2)	DN (3)	A (4)	SA (5)
KA1	My organization captures and uses knowledge obtained from other external sources such as related government offices, private sectors, and associations.					
KA2	My organization captures and uses knowledge obtained from public research institutions including universities.					
KA3	My organization allocates resources to detecting and obtaining external knowledge and communicating it within the organization.					
KA4	My organization is good at reviewing and learning from work done.					
KA5	My organization encourages workers to participate in projects with external experts.					

Part 6: Knowledge Dissemination

Please use the “X” symbol as your response to each of the following statements. The responses are presented in a scale ranging from 1 to 5. 1=Strongly Disagree, 2=Disagree, 3= Don’t Know, 4=Agree, 5=Strongly Agree.

In HoPR, employees share knowledge/ information through:		SD (1)	D (2)	DN (3)	A (4)	SA (5)
KS1	Regularly updating databases of good work practices, lessons learned or listings of experts and making it available via the organization’s portal.					
KS2	Preparing written documentation such as lessons learned, training manuals, good work practices, articles for publication, etc.					
KS3	Facilitating collaborative team works that are physically separated (virtual teams).					
KS4	Facilitating knowledge sharing ways (workshops, seminars, etc) within departments or other organizational units on a regular basis.					

Part III: Open ended Questions

1. A challenge is something new and difficult which requires great effort and determination. It is not uncommon for employees to face some sort of challenges within their organization as far as capturing, storing and sharing of knowledge is concerned. That said, what challenges are there in your organization?

2. A barrier is something such as a rule, law, policy that makes it difficult or impossible for something to happen or be achieved. What are the things that can be considered to be barriers in creating, storing and sharing of knowledge within your organization? Please list them down under each category.

- a) Cultural barriers

- b. Infrastructural barriers

c. Personal barriers

3. What opportunities are there within your organization towards organizational memory?

Annex II

Declaration

I, the under signed, hereby declare that the research work in this thesis entitled “Assessment of Organizational Memory Practices: the case of Ethiopian Parliament” is my original work under the guidance of Getachew Jemaneh, School of Information Science, Addis Ababa University. I further declare that the content of this thesis, in full or in parts, have not been submitted by me to any other Institution or University for award of any degree or diploma and all the sources used or quoted have been indicated and acknowledged as complete references.

Candidate:

Daniel Demissew
(Typed)

Signature _____ Date _____

Advisor:

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

Getachew Jemaneh
(Typed)

Signature _____ Date _____