ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

SCHOOL OF BUSINESS

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EFFECT OF KNOWLEDGE MANAGEMENT ON ORGANIZATIONAL PERFORMANCE: THE CASE OF CONSTRUCTION PROJECTS UNDER CARE ETHIOPIA

BY

BIRHAN YASIN

February, 2025
Addis Ababa Ethiopia

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A THESIS SUBMITTED TO ST. MARY'S UNIVERSITY SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT FOR THE REQUIREMENTS OF MASTER ARTS DEGREE IN PROJECT MANAGEMENT

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DECLARATION

I, Birhan Yasin , do hereby declare that this is my original study, and has never been submitted to any other examination body.

Birhan Yasin _____ _____

Name Signature Date

ENDORSEMENT

This thesis has been submitted to St. Mary's University for examination with my approval as a university advisor.

Temesgen Belayneh (PHD)	_____	_____
Name	Signature	Date

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List of Acronyms

CoPs: Communities 'of Practices

IC: Intellectual Capital

ICT: Information Communication Technology

KA: Knowledge Application

KAQ: Knowledge Acquisition

KBV: Knowledge Based View

KM: Knowledge Management

KS: Knowledge Sharing

Op: Organizational performance

RBV: Resource Based View

TQM: Total Quality Management

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Abstract

In today's knowledge-based economy, organizations are expected to manage their knowledge in scientific and well-organized way in order to sustain their competitive advantages since knowledge-based view theory identified knowledge as what organizations dominate in their business life. The purpose of study was aimed to examine the practices of KM and its effects on organizational performance of CARE ETHIOPIA. To achieve the purpose, the study employed explanatory and descriptive research design by focusing on all staffs of CARE with a sample of 110 staffs. Quantitative and qualitative data collected through questionnaire and interview was analyzed in descriptive and inferential statistics and SPSS 27 versions was used for descriptive analysis while regression was used inferential statistics. The findings of the study established as there is a great gap in practicing KM (knowledge acquisition, sharing and application), there is no KM policies and procedures, knowledge sharing and knowledge application have a significant direct effect on organizational performance and intellectual capital has a significant mediating effect on performance. The management of the company can use these findings to develop KM policies and procedures, facilitate KM practices by using various mechanisms and the company should establish a system of reward management to motivate staffs as well as it should have a mechanism to retain the knowledge from staffs who leave the company.

Key words: *Knowledge Management, Knowledge Acquisition, Knowledge Sharing, Knowledge Application, performance*

CHAPTER 1

1. INTRODUCTION

1.1 Background of the Study

Organizational performance refers to the overall effectiveness and efficiency of an organization in achieving its goals and objectives. It can be measured using various key performance indicators (KPIs) such as profitability, productivity, innovation, customer satisfaction, and market share. In developed economies like the United States and the United Kingdom, there are notable trends in organizational performance over the past few years. In the United States, according to data from the Bureau of Economic Analysis (BEA), the Gross Domestic Product (GDP) has shown a consistent upward trend, growing at an average annual rate of 2.3% from 2017 to 2021. This suggests that the overall economic performance of the country has been positive. Additionally, a study by Smith and Johnson (2018) found that companies in the USA that invested in innovation and research and development (R&D) initiatives experienced higher organizational performance in terms of revenue growth and market competitiveness.

Knowledge management is as old as the existence of human beings (Lytras and Pouloudi 2003, Wigg, 1999). Nicou et al. (1994) stated that the prime commodity for a professional is brainpower and knowledge provides as a competitive strategy that goes beyond products and services. Business focus keep evolving, it changed from people focus in the 70s to team focus in the 80s, then followed by process focus in the 90s to knowledge and adaptability focus in the 20s now (Convey, 2004). Prusak (2001) stated that globalization is the most obvious and clearest culprit. Mertins et al.(2003) noted that a critical mass of researchers, academics, businesses and knowledge workers has been reconfigured, restructured and consolidated into a coherent framework to address current and future research needs for knowledge management. Besides, the increasing number of organizations implementing or interested in the implementation of knowledge management (KM) demonstrate the importance of managing organizational knowledge (Al-Ghassani et al., 2002).Wigg (1999) noted that KM will continue to evolve and draw support from many theoretical and methodological areas.

Kelleher and Levene (2001) highlighted some good practice examples of KM adoption;

industries that benefited from KM adoption include consultancy, consulting firms, financial services and oil companies. A study conducted by Ernst and Young in 1997 among 431 US and European companies found many reported benefits from having organised KM programs (Koenig and Srikantaiah, 2003). They include increased innovativeness, enhanced efficiency, better decision making, faster responsiveness, enhanced flexibility, improved quality, reduced duplication of effort and greater employee empowerment.

The construction industry delivers large, expensive, custom-built facilities at the end of a construction process. This is a strong, knowledge-based industry that relies heavily on the knowledge input by different participants in a project team (Carrillo et al., 2004). Earlier one, Robinson et al. (2001) found that only a relatively small proportion of construction organizations have implemented KM systems. Carrillo et al. (2003) noted that in a recent survey of construction organizations, about 40% already have a KM strategy and another 41% plan to have a strategy within a year; 81% perceived KM as having the potential to provide benefits to their organizations, and some have already appointed a senior person or group of people to implement their KM strategy. Though there is an increasing awareness of the importance of KM concept, it still takes some time for the construction industry to invest on it as the construction industry always needs to face increasing demands.

Knowledge management practices (KMPs) encompass a structured framework of processes and strategies that organizations employ to efficiently generate, capture, store, and disseminate knowledge, with the aim of achieving their objectives. In the context of rural African residents, the implementation of these KMPs holds immense potential for enhancing organizational performance. Four fundamental KMPs, namely knowledge sharing, knowledge creation, knowledge retention, and knowledge utilization, play pivotal roles in this context. Knowledge sharing facilitates the exchange of information and experiences among rural community members, thereby fostering a collective understanding of local issues and enabling improved decision-making and community initiatives. Knowledge creation fuels innovation in sectors like agriculture and healthcare, propelling economic development. Knowledge retention through training programs ensures the preservation and transmission of valuable skills and practices to successive generations, thereby sustaining community development efforts. Lastly, knowledge utilization empowers rural organizations to employ evidence-based policies

and strategies, leading to more effective resource allocation and overall improved performance (Smith, 2023).

1.2 Statement of the Problem

In today ‘s knowledge-based economy, the world become a full of complexity that puts both public and private organizations in challenge in terms of growth and excellence and the ability to manage knowledge is grow as a fundamental instrument of competition. So, in order to remain competitive and to survive in complex and dynamic world, knowledge has to be scientifically managed for ensuring sustainable organizational innovation through integrated KM strategy (Holsapple and Jones2011).

Knowledge management is a mechanism of strategies and practices that used in organizations which is fundamentally important for the growth of construction companies. Within the construction industry, it is increasingly being acknowledged that knowledge management can bring about the much-needed innovation and improved business performance the industry requires (Webb,1998; Egbu et al. 1999). Kamara et al. (2002) noted that the effective knowledge management is being recognized as a vehicle through which organizations can address their need for innovation and improved business performance. Furthermore, several studies indicate that the company's business performance depends on n the efficiency of knowledge management (Davenport and Prusak, 1998; Brush, 1992; Nonaka and Takeuchi, 1995).

In most developing countries, like Ethiopia, the industry has faced the challenge of adopting and using modern technologies to ensure effective resource management and improve efficiency and effectiveness (Odubiyi et al., 2019). Construction companies in developing countries need help managing information and knowledge-related resources in construction project management. Much of the information about past projects is not used again, resulting in poor quality of work and project delays (Ferrada et al., 2013).

Successful implementation of KM system and its subsequent process has been challenging for many organizations. Ulrich Remus (2012) also stated that without the use of professional knowledge management practices, it is difficult to gain adequate knowledge retention. Remus (2012) breaks knowledge management challenges into two different characteristics: insufficient collection of processes used in the past and legacy of knowledge, and difficulties with the knowledge management integration and training processes that provide users with the ability to fully realize the benefits of the new

knowledge management processes and systems.

There is also another argument on the issue. According to Britten, there is a common belief among companies that KM practices and principles applied in the business sector may not be effective to all sectors of businesses, mainly because they are adopting the knowledge management strategies inappropriate to their situation.

Generally, i observed that in the KM system and the activities in the process are the major concerns. However, among the literatures reviewed, no adequate research has been done to evaluate implementation of KM in the various sectors, particularly in the Ethiopian context, which enable us identify the challenges and provide with recommendations.

Therefore, this research is undertaken in order to assess the current practice of KM and its impacts, identify the observed gaps in the current practice, if any, of KM and provide a basis upon which improved performance can be achieved through it. While researching on the above-mentioned points, this study investigates on the KM trends and resulting impacts on performance of projects in CARE ETHIOPIA.

1.3 Research Question

In order to achieve a practical and credible conclusion the study try to answer the following questions:

1. What seem the current practices of KM and organizational performance in CARE Ethiopia?
2. How does a knowledge acquisition (KAQ) practice influence the performance of CARE Ethiopia?
3. To what extent knowledge sharing (KS) practices influence the performance of CARE Ethiopia?
4. How knowledge application (KA) practice does affect the performance of CARE Ethiopia?

1.4 Research Objective

Research objectives describe concisely what the research is trying to achieve and it summarizes the accomplishments a researcher wishes to achieve through the study and it provides a direction to the study. Accordingly, this study has two research objectives the

general and specific objectives that has showed where the researcher wants to go.

1.4.1 General Objective

The general objective of this study are to examine the practices of KM and its effect on organizational performance in CARE Ethiopia.

1.4.2. Specific Objective

The specific objectives of the study are;

- to assess the current practices of KM and organizational performance in CARE Ethiopia.
- to examine the effect of knowledge acquisition on organization's performance.
- to explain the effect of Knowledge sharing on organization 's performance.
- to determine the effect of knowledge application on selected organization's performance.

1.5 Significance of the Study

As most of the studies in knowledge Management focus on the business organizations, it provokes researchers in the area to get a chance to critically view the subject under discussion from different perspective, particularly in the context of non-for-profit organizations and fill the gap which they can critically consider in their future works.

In addition, it enables the construction sectors stakeholders, which are investing and allocating significant amount of their resources, (which includes fund, time and manpower) to deal with activities such as collecting, analyzing, storing, sharing relevant knowledge and aspire to look into the outcome of their investment. This research initiate them test if it enables them achieve their intended objective.

It can be the guideline or reference to the project manager, consultants and client, to let them identify well important factors of cost overrun. So, the findings of this study would beneficial to the project manager, consultants and clients in construction project.

1.6 Scope of the Study

This study is limited to construction project in Ethiopia and is conducted among client, consultant and contractors in order to identify the cost overrun factor, to analyze and rank in their order of significance, and theimportance of the causes cost overruns perceptions of

the three major parties in, namely; clients, contractors and consultants, and to analyze and rank the categories of the relevant respondent parties to the effect of knowledge management on the construction sector.

1.7 Organization of the Study

A thorough literature review follows the identification and approval of the research problem various documents and relevant information were collected. The collected information along with data retrieved from questionnaire respondents will be discussed and analyzed. The results are interpreted and based on the results conclusions and recommendations are made. In general, the study is organized into five major chapters:

Chapter 1: Introduction to the study. This provides a background to the study, statement of the Problem, research questions, objectives, and significance of the study and limitations.

Chapter 2: Literature Review. The chapter discusses theories relevant to the study and provides Literature previously done by other authors on the knowledge management

Chapter 3: Research Methodology. This chapter discusses the research design, sampling Procedures, data collection methods and analyses that would have been used in the research.

Chapter 4: This chapter presents and discuss the results in relation to the research Questions.

Chapter 5: Conclusions Recommendations and. The findings will be summarized and Recommendations and conclusions given based on the results.

CHAPTER 2

2. REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter gives further details about concepts of KM and reviews of some research studies and published literature on KM and organizational innovation and the chapter focused on concepts of organizational innovation, knowledge and KM, KM processes, KM strategies and techniques for KM, practices of KM in public universities, and effects of KM on organizational innovation, intellectual capital and the conceptual framework and the hypothesis of the study also included in this chapter.

2.2 Theoretical Literature Review

2.2.1 Knowledge Management (KM) and its Concepts

As understood from different literatures, it is difficult to reach on universally accepted and concise definition of KM and generally accepted standard of KM framework that specifies the scope, boundaries and activities associated with KM (Marin et al 2007).

In 1990s and recently since 2000 onwards KM is generally used as a process of transforming information and intellectual assets of the organization in to value-adding activities by making knowledge accessible to take action when users need it. It is also seen as key to generate innovative ideas and the real focus of KM is providing a framework in which the organization views knowledge processes and all business processes, that includes knowledge creation, dissemination and application of knowledge towards organizational development and existence (Dhamdhere 2015).

Furthermore, Meher and Mishra (2022) portrayed that KM practices are not only meant to develop the skills and knowledge of employees but also focus on the individual benefit of the employee. Different studies reveal that KM practices are helpful only at the organizational level, such as organizational performance, job satisfaction, organizational innovation practices, and strategic decision-making processes are in the place (Meher & Mishra, 2022).

The construction industry in developing countries faces significant problems and challenges today. Ethiopia's construction industry is not different from any other developing or African country’s current practices. To transform, the industry needs due attention from public and

private stakeholders. Therefore, this study aims to examine the effect of KM practices on organizational performance in Ethiopia's construction industry**.**

The fundamental problems the construction industry faces today in developing countries are unreliable contractors, poor image of the industry, problems related to safety issues, lack of skilled labor, bureaucracy, corruption, competitive tendering procedures, over-specification or/ over design, failure of sub-contractors, reliance on traditional procurement, late payment, cost overrun, late completion are among others (Yap et al., 2019).

According to Malhotra and Segars (2001) KM has described as the methodology, instrument and technique required to acquire, convert and disseminating knowledge within an organization. Thus; an efficient and effective use of knowledge through KM enhances an organization ‘s competitive advantage, as effective use of organization ‘s knowledge assets and resources support essential operations and innovative activities in response to the demands of fast changing environment (Kipley et al. 2008; Mohamed et al. 2009; Sandhawalia and Dalcher 2011).

Consequently; in this study the working definitions of KM is taken from the definition of Segars (2001) and Gold et al. (2001) those have seen KM as a tool that used in the processes of knowledge acquisition, dissemination/sharing and application.

2.2.2 KM Processes and Its Elements

According to Alaviet al. (2001) and Bhatt (2005) the processes of KM gives a clear understanding about the way in which organizations generate new knowledge, sustain the available knowledge and disposed the ―old‖ knowledge and it can be undertaken in diverse contexts and differs from organization to organization based on the organization‘s knowledge management focus. For instance, Grover and Davenport (2001) see KM processes as knowledge generation, codification and transfer. Skyrme (2002) on the other hand classifies KM process as knowledge creation, transfer, assembly, integration and exploitation. Moreover, Daghfous (2003) also categorizes the KM process as knowledge acquisition, knowledge sharing and utilization. Bhatt also (2001) categorized KM processes as knowledge creation, validation, presentation, distribution, and application. Gold et al. (2001) classify the KM processes into knowledge acquisition, dissemination and application. Thus, the elements of KM process for the study was based on the classification of Gold et al. (2001) which is focused on knowledge acquisition, dissemination/sharing, and application.

2.3 Knowledge Acquisition

Knowledge acquisition is the most and vital process of KM and it is one of the most complex and expensive processes (Obeidat et al. 2016). It is the process which involves in creating and developing of new ideas, knowledge, and skills to increase the currently existing stock of organizational knowledge as evidenced by Choo (2003), Holsapple and Singh (2001). As stated by Feliciano (2007); knowledge acquisition is the process which is involved in extracting of knowledge from experts and structuring and organizing of that knowledge in a readable and easily accessible form. Knowledge acquisition is the process of developing and obtaining insights, skills and relationships either from internal or from external sources in order to create useful knowledge in the organization (Frost 2014).

Thus, organizations can acquire knowledge internally by tapping into the knowledge of its staff, learning from experiences and implementing continuous process improvements (Nemani 2010) and in companies, trust, willingness, openness, communication and collaboration predict successful knowledge acquisition (Dei Johnson2017). In this study knowledge acquisition can be seen from organization's ability and willingness to search and acquire knowledge from its internal and external sources via different mechanisms as knowledge acquisition is an important activity in knowledge management process of the university.

2.4 Knowledge Sharing

According to Gharakhani and Mousakhani (2012, Knowledge sharing is an organizational belief, behavior, culture or network, that shows the exchange of knowledge, skills and experience among staffs and departments of the organization. It can also be defined as an instrument that facilitates dissemination of knowledge within the organization (Yang et al.2005). So, knowledge sharing process has a greater importance in universities in promoting research collaboration among academic staffs (Tan and Md Noor 2013).As stated by Tseng (2010) it is a social process where individuals interact with different knowledgeable and experienced individuals or groups in order to create new knowledge which improve the quality and quantity of both tacit and explicit knowledge of the organization.

Moreover, as stated by Chen and Huang (2009), Knowledge sharing is an organizational activity that desires collective knowledge, skills and expertise, and distribution of knowledge crosswise the organizational parts. It comprises the exchange of employee

knowledge, experiences, and skills throughout the organization and the whole firm to build new mental models (Lin 2007). The members of organization can simply reach the knowledge by sharing knowledge among themselves and/or across diverse units, which decrease the amount of time and investment needed to collect information. Thus, through reduction of time and investment for collecting information and building new mental models, organizations can transfer their valuable resources to innovation processes. Additionally, sharing and exchanging of knowledge can cause high level of participation in learning new knowledge, which are essential for the development innovative ideas and a knowledge-sharing process is positively associated with innovation (Chen and Huang 2009).

Thus, from a university perspective, group interactions, lectures, workshops, seminars, meetings and conferences are common platforms where tacit knowledge, experience, skills, know-how are shared among members of the university and the researcher has seen the knowledge sharing process by assessing the participation of academic staffs in the above knowledge sharing mechanisms.

2.5 Knowledge Application

According Zaim (2013); knowledge application involves in the process of using knowledge that has been acquired by the organization. It is the process of KM that involves in integrating and changing of acquired and created knowledge into products, processes, and services of the organization in order to sustain its competitive advantage (Bhatt, 2001; Daghfous 2003). Knowledge application is not depending only on the users‘capacity to acquire and assimilate knowledge, but also on the ability of the organization to be aware of the value of new knowledge and use it since effective utilization of knowledge will result in competitive advantage, improve efficiency and reduce costs by promoting organizational innovation. Most of the researchers have stated that, knowledge application process is denoted as actual utilization of the knowledge in developing new and improved services, management systems, techniques and procedures based on changes in customers‘needs and preferences (Asoh et al., 2007; Zaim 2010; McInerney and Koenig 2011).

From academic perspectives, knowledge application refers to the university‘s ability in actually using and sharing of the captured and created knowledge through different techniques like: internal newsletters, circulars, knowledge sharing boards, technical conferences and seminars, communities of practices, mentoring and coaching, etc. in order to sustain organizational innovation and performance of organization (Karadsheh et al.

2009).So, the researcher has examined the practice of knowledge application of the selected university in line with the stated knowledge application mechanisms.

2.6 Knowledge Management and Organizational Performance and Excellence

Today, the concept of Knowledge Management has become the most important concern for governmental, non-governmental organizations, multinational corporations, and a multitude of companies, around the globe (Kimiz Dalkir, 2005).

That is mainly because there is a clear understanding among experts in the area that KM, as an important asset, significantly impacts the success of organizations. This has been tested and approved among many of organizations, be it profit making, non-for profit (including CONSTRUCTION COMPANIESs), small or big enterprises, religious or non-religious or any organizations established with various types of goals and objectives.

Literatures in KM today indicate that we are now in the knowledge age. Drucker, one of the prominent management thinkers, also supports the idea that we are now moved into a knowledge-based economy (Drucker, 1994), where competitions and success of organization against their rivalries, depends on their ability to apply and utilize the Knowledge available to them. According to Savage, in the knowledge age, which he referred to as "the 3rd wave", organizations accumulate wealth based upon the ownership of knowledge and the ability to create or improve goods and services (Charles Savage in Fifth Generation Management, 2008).

KM has become a phenomenon since the 1980's and organizations of various natures, established to meet any objective in a society, started considering knowledge as an important resource for their success. Organizations give paramount importance to KM and apply KMS suitable to their context for various reasons. It is, of course, obvious that many of the researches are made around the business sector, whose prime objectives are profit making. The business sector mostly is the first to introduce any improvement initiative to beat its rivalries and appear as the most competitive in the areas they are operating. Knowledge management can be considered as a good example in this regard. Construction companies are also applying the improvement initiatives developed to the business sector, adopting to fit their situation. (Kimiz Dalkir, 2005).

For being successful, Construction companies are obliged to be or become knowledge-based organizations, a task not easily achieved considering their external and internal

environment in which they operate. On the one hand, Construction companies are experiencing constant changes in their external environment with governmental policies, funding opportunities and volunteers' attraction being subject to significant volatility. On the other, Construction companies personnel is both loyal, as it is attracted not just by the employment opportunity but also by the cause served by the organization they belong to, and at times very mobile, as it is not always easy for Construction companies to offer long-term contracts and employment insecurity can become an issue.

Nevertheless, Construction companies have been capitalizing on aspects of organizational theory that are not so evident in other sector of human activity while, at least to a certain degree, knowledge transfer is also achieved between various Construction companies through numerous networking and sharing processes. In effect, the Construction companies ecosystem is considered as rather open and cooperative with co-creation systems being set on an ad-hoc, i.e. based on specific funding opportunities, as well as a more permanent basis, i.e. through secondary or tertiary organizations. (Corfield, Paton and Little, 2013).

Despite the match between knowledge and Construction companies the interest in knowledge management in the third sector is relatively recent. Thin traces of the academic interest go back for several decades (Rainey et al., 1976; Martinsons and Hosely 1993), but more consistent research has been developed in the past decade Hume. In mid 2000s, several authors were stressing the importance of knowledge management for nonprofit organizations (Lettieri et al., 2004; Hurley and Green, 2005; Vasconcelos et al., 2005; Hume and Hume, 2008).

Previous research on knowledge management in Construction companies tends to have in mind the organizational context. A large part of the research is dedicated to knowledge transfer, especially considered from the perspective of infrastructure and organizational facilitators (check the studies reflecting the specificities of the nonprofit sector - Hasnain and Jasimuddin, 2012; Rathi et al., 2014). A reduced number of studies concentrate on human behavior and personal factors influencing knowledge sharing (Casimir, Lee and Loon, 2012; Chiu et al., 2006; Hsu et al., 2007; Hung, Lai and Chou, 2010; McCall et al., 2008; Teng and Song, 2011; Wang and Noe, 2010).

A significant body from these studies consider the dynamics associated to virtual communities and how the new technologies are used by individuals to share information (Chiu et al., 2006; Matschke, Moskaliuc and Cress, 2012; Phang, Kankanhalli and

Sabherwal, 2009; Ma and Agarwal, 2007). Nevertheless, the evidence offered by the existing studies are in most cases associated with business-contexts. The present paper sets a more personal framework, investigating the aspects associated to individuals working for Construction companies that affect knowledge sharing.

2.6.1 Knowledge Management in CONSTRUCTION COMPANIES

The dynamics of the operating environment for Construction companies and the increasing globalization with many of its subsequent challenges has made their management complex (J Gretchen et al, 2008). These challenges required Construction companies to find new ways of doing things and various types of improvement initiatives (Mitlin, Hickey & Bebbington 2006). The Construction companies nowadays are focusing on Information and Knowledge Management to implement new and innovative ways to manage their operations (Cummings, Heeks & Huysman 2003)

2.6.2 Roles of CONSTRUCTION COMPANIESs in knowledge management

Historically, Construction companies started their operation as a relief organization, which provides relief services to war and natural disaster affected communities. However, over the years their role is changing and has been expanding to the areas of development, advocacy and political (Ahmed, 2013). According to Lewis, the role of Construction companies is stated in terms of three main sets of roles they are involved in and can be defined as implementers, catalysts and partners (Lewis 2007).

However, it should be noted that all Construction companies play a role in all of the three sets. Based on the nature of their purpose they established for, there is a great probability that they change their role and engage in all the three areas as the context and the situation in their operation areas change. (David Lewis and Nazneen Kanji, 2009).

There are some arguments on the improvement initiative tools, which says these tools developed and successfully applied in the business sector, should not be transferred or applied to the Construction companies. However, still others argue that the similarity of the organizational structures in both the business and Construction companies Construction companies sectors, makes it possible to apply to the Construction companies sector for many of the improvement initiative tools, which makes them more

effective and more accountable as it makes business organizations more profitable (Walsh & Lenihan, 2005).

Literatures indicate that these tools adopted in the business sector can, in practice, be effectively applied in the Construction companies working environment. Welsh and Lenihan still argue, considering the challenging environment Construction companies are operating and the complex nature of their programs, the management structure they should adopt must be much stronger and even more developed than the management structure in the business sector (Walsh & Lenihan, 2005).

Construction companies are investing much to apply KM system and other improvement initiatives in their organizations. For instance, CARE in Ethiopia linked to the KM platform established at a global system, where it can collect, store, analyze and share knowledge, manage the knowledge and apply to the effective and efficient implementation of its programs and projects.

As a known global learning organization, it also designed specific, tailored trainings and provide them to staff on/off-line to enhance their skill, knowledge and understanding about their organization, the programs and projects they are working on and other required knowledge obtained from various sources including beneficiaries and host community where respective country programs are operating. In some of the situations, improvement initiative models specific to some of functional areas such as finance, HR, Program has been applied separately. In addition, Construction companies are "staffed by hardworking and dedicated employees" (Walsh &Lenihan, 2005), even though many of their staff are staying with them for relatively short-term depending on the funding availability. However, it doesn't seem that they managed to be successful in capitalizing these qualified staff. (Smillie, 1999; Cracknell, 2000) and perform their programs and projects effectively and efficiently.

Construction companies have also direct contact with the community they are serving and this opportunity enabled them build up and accumulate local knowledge. However, this accumulated knowledge, doesn't seem properly used and managed to solve problems, to direct actions and to make decisions, together with any lessons learnt.

The knowledge accumulated and not appropriately utilized is referred to as "lost" knowledge (Vasconcelos et al, 2003). In addition, the knowledge that is with the individual and those gained from experience and used to solve problems and make decisions, are not usually properly managed. It is important for the Construction

companies to manage the knowledge in the people's mind and the knowledge stored in various means for future reference and successful implementation of their programs and projects (Hildreth and Kimble, 2000).

However, the question to focus on is, do organizations in the Construction companies sector, investing in KM and other improvement initiatives, are benefiting from their investments and their accumulated knowledge as they expected, is something to be assessed or evaluated. As we repeatedly indicated above, KM both as practice and theoretical construct, emerged in the business sector, where it proved its ability to contribute to business effectiveness. Considering this practical relevance, organizations active in other sectors consider increasingly more the adoption of the KM specific approaches. The importance of knowledge for Construction companies is revealed by its impact (Corfield et al., 2013).

Even if sometimes the benefits are hard to measure, the employees of the nonprofit organizations using knowledge management strategies are strong supporters of the associated practices. This might be related with the recognition of knowledge as being of high importance for Construction companies (Zbuchea et al., 2017).

Despite its relevance and potential positive impact on Construction companies, designing and implementing knowledge management strategies is a challenge even for mature, large Construction companies. Knowledge management depends on understanding the concepts and processes associated to it (Hume et al., 2012a), but including it in various components of the business model of a Construction Companies would lead to its sustainable development (Cullom and Cullom, 2011).

Knowledge management is, therefore, connected to the human dimension of a Construction Companies. It should not only be top-down adopted, but also assumed by its workforce, both employees and volunteers. We mention that, especially in the case of volunteers, the workforce might not feel obliged to share the information they possess, or not understand the importance of the knowledge they have or the relevance of its transfer towards coworkers or other stakeholders. Human resources strategies connected to promoting knowledge management and transfer, an organizational culture encouraging knowledge sharing, as well as internal marketing practices incorporating knowledge communities of practice, might give those Construction Companies a competitive advantage. Another factor influencing knowledge management and transfer positively is the connectedness of an organization. In respect with the networking strategies and

interests of the Construction Companies, we observe a paradox. On the one hand, organizations are actively involved in networks and umbrella organizations to gain knowledge but, on the other hand, they do not integrate the networking strategies formally in coherent knowledge management strategies or in their managerial approaches and processes (Zbuchea and Leon, 2015; Zbuchea et al., 2017, 2018).

At least in some countries, studies show that even large organizations and well-established Construction Companies are not to be considered models in terms of knowledge management practices.This might be surprising considering that knowledge management made its case based on the impact it has in business organizations on profits and competitive advantage, leading to the adoption of knowledge management-related business practices in Construction Companies. Nevertheless, as other researchers show, the implementation of knowledge-management theories and practices should be adapted to the specificities of Construction Companies (Bloice and Burnett, 2016; Hume and Hume, 2015). For instance, stakeholders as sources of knowledge should be a concern for knowledge management strategies, considering stakeholders and decision-making actors (Rossi et al., 2015).

2.7. Knowledge Management Implementation Process

As we discussed above, success of any organization significantly depends on its ability to generate or gather, organize, store and use of the prevailing knowledge. Knowledge requires appropriate management system just like any other resources in organizations such as human, financial or material resources. It is very common to find the practices of management in the areas of human resource and financial resources. However, it is not as such long to hear about managing knowledge until the last two decades. It is not also difficult to witness that organizations able to manage the explicit or tacit knowledge prevailing in the organization ultimately ensures their competitive advantage over its competitors, and escalates its performance through time, which ultimately ensures the organizational excellence. It is worth discussing some of the important concepts commonly used in KM implementation processes. Knowledge Management Processes: Most of the concepts and the management schools see that knowledge management represents processes, and knowledge and information come from internal and external sources do not mean anything without these processes. Knowledge management processes define as the degree to which the company creates in them the knowledge and

participate in it, distribute and benefit from it in the job limits (Momeni et al., 2011).

Knowledge Management Processes also represents the process of discovering new knowledge, which might be explicit or implicit, discovered from data or information, or by working on previous knowledge. This is done through blending and collecting explicit knowledge available, data or information to be new set, more complex than the present knowledge (Jaradat et al., 2011, p. 12, p. 134).

This process involves three issues such as learning, excellence and teams work. Another important concept is Knowledge Acquisition. It is when the organization determines the required level of knowledge; it determines the cognitive gap that should be reached and requires the look inside. The organization some time may demand technical support from external companies in developing its capabilities to attain the needed knowledge, or buys the advanced technology from the market. Organization also can cooperate through combining its resources by merging the processes or the unification, this can also help the organization attains its need of knowledge (Gasik& Poland, 2011).

Knowledge acquisition indicates at the organization ability to develop or forming knowledge sources through the jobs' limits, this comes through enabling the processes and activities to interact, creating, brainstorming, setting the standards and evaluation. Researchers and studies indicate at strong and positive links between knowledge acquisition and performance measures (Emadzade et al., 2012).

Kotecki (2011, p. 253), Amirkhani et al. (2012, p. 142), studies determined that the elements of knowledge acquisition represent by external sourcing, strategic alliances, mutual agreements, and scientific conferences. Knowledge Evaluation is also an important term in the process. This process includes the necessity for knowledge evaluation through the availability of intellectual capital, and developing its account, this is through the presence of strategic perspectives for knowledge management. Knowledge Development and Discrimination, still as part of the process, is about passing the written knowledge that takes the form storable documents and sharing them between the employees to be able to use them. The social interaction, knowledge exchange, and change management might do this discrimination. Knowledge application as a concept in the process is also indicates the degree to which the company applies the cognitive source to be shard thorough the Job limits. It allows the company to generate the revenues for its knowledge and the ability to benefit from knowledge base with the importance in decision making and problems solving, and enables respond more

effectively to the environmental changes. Then knowledge is used in the context, which enables the users to learn, then producing new knowledge. Many organizations, particularly in the business sector, encourage the organizational learning of the individuals in which it is possible to apply knowledge to the initiatives, such as developing new products, improving performance, speed of innovation, and market need, because it affects the organizational performance and support the company's processes (Alhawari, Talet, & Al-Jarrah, 2011).

This determines the importance of applying knowledge by empowerment, decision making and the organizational routine. As the final concept, Knowledge Accumulation together with Knowledge evaluation in the process and confirms the building of cognitive storage, determining and distributing knowledge in the organization to achieve excellence. (Mciver& Hall, 2011, p. 185; Amirkhani et al., 2012, p. 142).

Studies determined the importance of this process by the cognitive storage of knowledge map and excellence. As it has been indicated earlier, most of the literatures reviewed on this subject, focus mainly on the business sector, but much is not done to the Construction Companies sector, particularly, with respect to the relationships between implementation and performances. Construction Companies have models of their own to evaluate their performance in the organization.

Construction Companies investment in this important sector is not given much attention and does not seem examined adequately as it was done to the business sectors. This research strives to fill this gap. Implementing knowledge management thus has several dimensions to consider including:

Strategy: Knowledge management strategy must be dependent on corporate strategy. The objective is to manage, share, and create relevant knowledge assets that will help meet tactical and strategic requirements.

Organizational Culture: The organizational culture influences the way people interact, the context within which knowledge is created, the resistance they will have towards certain changes, and ultimately the way they share (or the way they do not share) knowledge.

Organizational Processes: The right processes, environments, and systems that enable KM to be implemented in the organization.

Management & Leadership: KM requires competent and experienced leadership at all levels. There are a wide variety of KM-related roles that an organization may or may not

need to implement, knowledge managers, knowledge brokers and so on.

Technology: The systems, tools, and technologies that fit the organization's requirements properly designed and implemented.

2.8 Empirical Review

2.8.1 Practices of Knowledge Management (KM) in constructions

Knowledge is generally one of the most fundamental keys for development of organizational performance as it promotes activities that create or improve the organizations processes (Kumar et al. 2000). Rhodes et al. (2008) also supports this belief by stating that, knowledge is a significant resource for strategic organization to enhance innovation and improve organizational performance. Many studies also have examined the positive relationship between knowledge and performance. Majchrzak et al. (2004) also confirmed that the implementation of KM is a strategy which is used to improve organizational innovation and it is considered as the best way to foster organizational performance.

In Ethiopia, knowledge management (KM) hap-pens often person to person. The few past efforts such as the WoredaNet initiative by the Govern-ment of Ethiopia to facilitate knowledge sharing were not as successful because IT based KM is still in its infancy stage. Also, in Ethiopia, little or no attention is provided to knowledge generation and sharing mechanisms and approaches. (Fanos Mekonnen et al., 2012) The study used a theoretical approach in 10 pilot districts of 4 regional states of the country. The results of his study show IPMS project followed systematic and step - wise approaches of KM and capacity development by support of various ICT and non-ICT tools that facilitated multidirectional knowledge flows, empowerment of practitioners and linkage creation to improve productivity, profitability and sustainability of market-oriented agricultural development. According to the authors, the major tools and processes are establishment of agricultural knowledge centers for up to date and relevant information resource delivery, enhancement of program deliery and technical skills through participatory training; establishing partnership with various stakeholders and institutions at all levels and developing a web-based platform. A lesson from IPMS on implementing the above components with the need for an overall understanding of knowledge as a critical ‘input’ to agricultural development being internalized among program implementers at all levels and importance in building capacity of actors, not only to have implementers but also to have those who forge link-ages, identify need s and manage partnership processes.

Another study done in Ethiopia, was KMP in development and humanitarian aid organization in by Hermella (Hermella, 2000), whose research done by using qualitative research methods via online survey. The study shows that KM in an organization describes the technological readiness of the organization. Similarly, formulation of KM principles, policy and strategy in an organization and 'implementation of KM in an organization' touch upon the processes involved for the smooth implementation of KM and facilitators are essential for establishing a successful KM initiative in an aid organization. According to Hermela's results, staff and knowledge workers in these organizations are actively involved in sharing information and knowledge resources when required to speed up working processes. In another way her result shows absence of proper organizational guidelines on knowledge sharing, lack of knowledge of what colleague's need and shortage of time and resources to facilitate knowledge sharing. In conclusion, there are many empirical studies that have been carried out on KM. However, as observed by Syed Ikhsan and Rowland (2004), only a few of these empirical studies have been carried out in developing countries. The empirical studies reviewed have convergent results which show that KM influences performance of the studied organizations (Marques & Simon, 2006; Wu & Lin, 2009; Yusoff&Daudi, 2010). The previous study considers knowledge process including knowledge acquisition, Knowledge sharing and enabling factors such as organizational structure and technology as an antecedent factor to knowledge management components. (Taejun Cho, 2011).

Additionally, Yahya and Goh (2002) have explained as KM is a process of enhancing knowledge application to achieve organizational progress and improving organization‘s performance, meanwhile; the innovation process involves the acquisition, dissemination, and use of new and existing knowledge. Thus, an organization's innovation is closely attached to organization ‘s ability to utilize its knowledge resources. So, the positive relationship between KM and organizational performance has been proved and gain popularity in literature as KM practices in terms of knowledge acquisition, conversion, and application provides a positive contribution to the organizational innovation (Chen and Huang 2009). They also explained as an effective KM help in knowledge communication and exchange necessary information in innovation process and further enhances organizational innovation and performance through the development of new insights and capabilities. KM plays an essential role in supporting and fostering organizational

innovation and it has a great role for the improvement of innovation capacity of organizations (Jyoti et al. 2013). As a result, in this study the researcher examined the relationship between KM practices (knowledge creation, conversion, storage and application) and universities innovation (service, administrative and technical innovations) by testing hypothesis after describing the existing practices.

2.9. Conceptual framework

According to Svinicki (2010), a conceptual framework is an interconnected set of ideas (theories) about how a particular phenomenon functions or is related to its parts and serves as the basis for understanding the causal or correlational patterns of interconnections across events, ideas, observations, concepts, knowledge, interpretations and other components of experience.

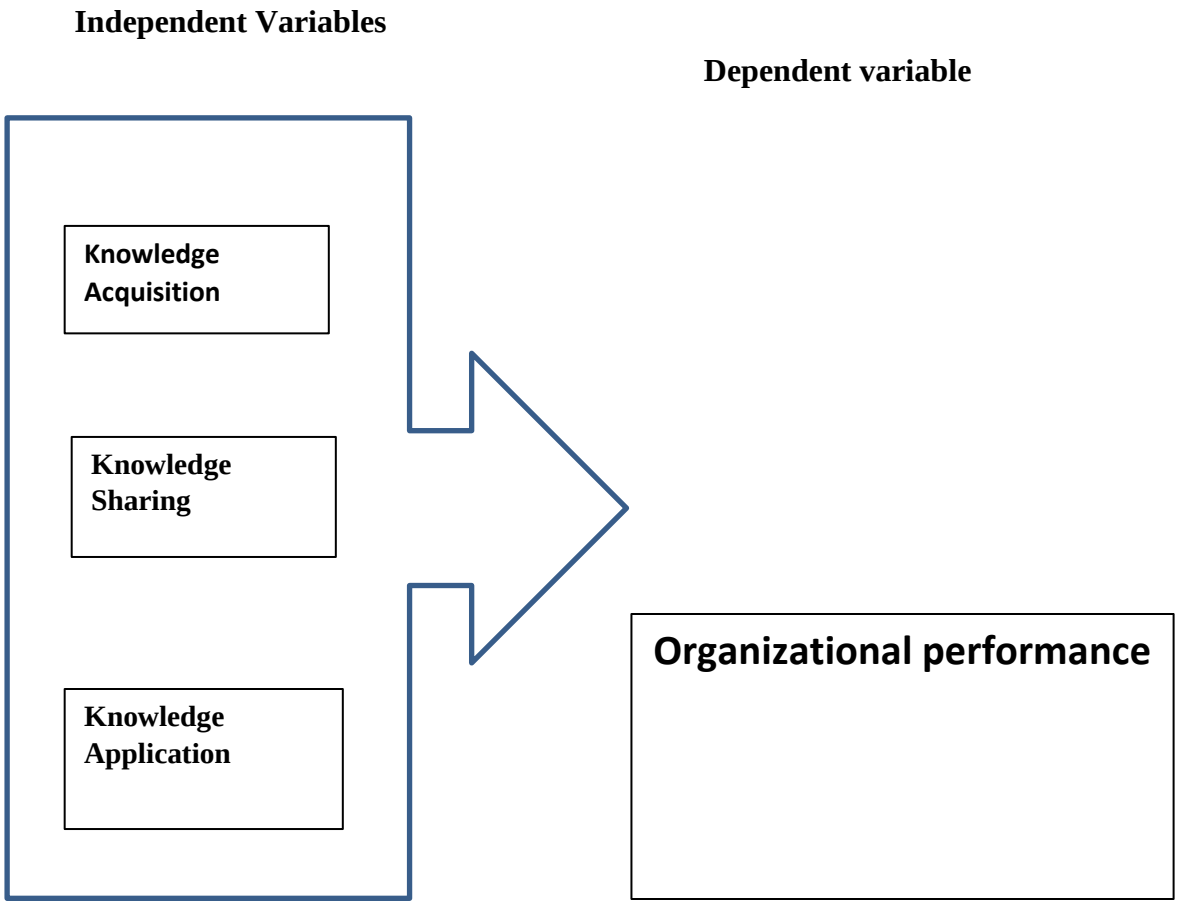

Figure 1: Detailed conceptual framework

CHAPTER 3

3. RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

Under this chapter the researcher presents an overview of methodology that are applied in the study with detail justification of the use and application of each selected methods and techniques. The chapter also described different procedures and processes employed to collect and analyze the data and explained the population as well as sampling procedures and techniques which were used for the study. Data collection instruments that were employed to gather data with the explanation of why they were considered as appropriate also discussed. Likewise, procedures and techniques of data analysis also discussed in detail.

3.2 Description of Study Area

In order to respond severe drought and famine that killed nearly one people Care Ethiopia adopts construction project that will address the root causes of poverty and vulnerability through inappropriate treatment of miss located citizens throughout the country.

More recently, millions of Ethiopians have been forced to flee their homes to escape violence. This conflict, centered in the northern part of Ethiopia, in turn has made difficulties for the peoples who have flied to get fresh water residence and education. As part of project under CARE Ethiopia's focuses on the availing of these shortages in the rural areas of the country to construct residential centers. Schools and underground water excavation to provide fresh water mainly road infrastructures to mobilize societies from one location to the other for medical requirements in the long-term program approach to prioritize working with women and girls in rural and urban areas.

3.3 Research Design

A research design is a master plan of researcher that specifies the methods and procedures for collecting and analyzing the needed data/information for empirical research and it is aimed at answering specific research questions or testing of specific hypotheses and there are three types of research design namely: descriptive, exploratory and explanatory research designs (Robson 2002). This study was conducted using Explanatory and descriptive research design to demonstrate associations or relationships between the variables in order to establish causal

relationship between variables on how KM influences the performance of CARE Ethiopia. Descriptive research designs are concerned with describing the characteristics of an individual or of a group and as certain whether variables are associated (Kothari, 2004). explanatory approach of research design Establishing the cause-and-effect link between variables is the goal of explanatory study.

3.4 Research Approach

As stated by Creswell and Garrett (2008) the design of any study starts with the selection of a topic and a research approach and they identified three main types of research approaches as qualitative, quantitative and mixed. For this study, quantitative design approach is used to describe the prevalence or frequency of certain behaviors or characteristics within the studied population. This will help to grasp a wider understanding of the study.

3.5 Population and Sample

3.5.1 Population of the Study

In research, population refers to an identified group of interest to the researcher and the group to which the research results would be generalized (Saunders et al.2007; Johnson and Christensen 2015). For this study the population was the staffs of CARE Ethiopia which is a total of 153 .

3.5.2 Sampling Frame

Sampling frame is list of all sampling units from which sample is drawn, thus for this study the list of all staffs will be taken as the sampling frame of the study which has obtained from the HR directorate office.

3.5.3 Sample Size Determination

Researchers in the early 19th century strove to survey the entire population, however, researchers in the 21st century work only with a portion of the entire population (a sample) from which the researcher draws inferences about the population or generalizes the result (Creswell 2014). Therefore, for this study the researcher used the sample size determination formula which was developed by Yemane (1967) for staffs of the organization as shown in the following formula,

n=N/1+N (e) 2

n=153/1+153*(0.05)2 n=110

3.6 Sampling Design

According to Saunders et al. (2007) there are two main sampling techniques- probability and non-probability sampling techniques. Probability sampling enhances the likelihood of accomplishing the objective of selecting elements that accurately represent the total population

from which the elements was drawn and it may consist of stratified, simple random sampling, systematic random sampling and cluster sampling techniques. Whereas non-probability sampling is a sampling technique in which some units of the population have zero chance of selection and applied where the probability sampling cannot be accurately determined and the units are selected based on certain non-random criteria. It includes: convenience, purposive, quota and snowball sampling techniques.

Thus, for this study probability and non-probability sampling techniques was employed. From probability sampling, lottery method of simple random sampling was used to select the sampled respondents.

3.7 Unit of analysis

Unit of analysis describes the level at which the research is performed and which objects are researched and people or individuals are common units of analysis. Other units of analysis can be organizations, divisions, departments, etc. and generally there are four different unit of analysis which are common in the social sciences: -individuals, groups, organizations, and social artefacts (Creswell, 2007). Accordingly, the unit analysis of this study was the company.

3.8 Data Sources and Types

In conducting a study, a researcher needed to plan and identify in advance about the types and sources of data, data collection instruments and how to analyze the collected data, because an inappropriate sources and type of data can result with a negative impact on the results of a study and can ultimately lead to invalid findings (Cooper and Schindler 2011).

3.8.1 Primary Data

Primary data are first hand data or fresh data that the researcher collects from different respondents with regard to the inquiry by using various data gathering tools (Cooper and Schindler 2011). So, for this study primary data are collected from sampled staffs and managers of the company through questionnaire but there is no any secondary data or documents related to KM practices and innovation of the organization.

3.8.2 Secondary Data

The researcher used the selected organization‘s KM related documents, policies, procedures and strategies to evaluate their practices and overall KM implementation.

3.9 Data Collection Instruments

3.9.1 Survey Data Collection Instrument (Questionnaire)

A questionnaire is a commonly used data gathering tool that consist a series of questions in order to get relevant information from respondents (Saunders 2007). Questionnaire can either be

open-ended or closed-ended. In this study, both closed and open-ended questions are used to gather a primary data from sample academic staffs and the instrument was adapted from Nguyen Ngoc Tan and Aleš Gregar (2018) Debowski (2006), Lawson (2003), and Marsack & Watkins (2003). Closed-ended questionnaires consist of questions that restrict respondents to select or pick from a list of available or proposed choices of responses and for this study the closed-ended questions that consist of a one to five pre-coded Likert scale type questions (1=strongly disagree to 5=strongly agree).In addition, the researcher was used an open-ended question as this type of question help to avoid bias that a list of responses could have introduced; to yield rich and detailed comments and give the respondents opportunity to answer in detail and to qualify and clarify possible responses.

3.9.2 Interview Guides

Interview is a conversation which is hold among two or more individuals which involves in asking of questions by someone (interviewer) to draw facts or statements from the other person (interviewee) that is relevant to the study. It can be taken in the form of telephone, face-to-face, internet interviews and it would be conducted as structured, unstructured and semi-structured one.

3.10 Data Collection Procedures

After some modification of data gathering instruments, the researcher has consult expertise and finalize the development of instruments by incorporating the comments from experts that help to test the validity. The researcher will collect data with mixed methods by using concurrent form of data collection in which both the quantitative and qualitative data was collected concurrently from respondents after confirming consent with participants.

3.11 Methods of Analysis

The surveys were initially checked for errors or missing data before the data was analyzed. Statistical tools were employed and presented in tabular and graphic forms to effectively present the acquired data. The Statistical Package for the Social Science, version 27, was used to analyze the data that were obtained from the questionnaires. The research's multiple regression model is presented below:

$$Y=B0+B1X1+B2X2+B3X3++e$$

Where, Y was organizational performance (endogenous variable)

B0 is the intercept of the model

B1 …. B3 - regression coefficients

X1 was knowledge acquisition items

X2 was knowledge sharing items

X3 was knowledge application items

e was standard error

3.12 Reliability and validity

3.12.1 Reliability test

Reliability refers to consistency of measurement; the more reliable an instrument is, the more consistent the measure. There is different criterion for evaluating the research tools. For this study the researcher checked the consistency of attributes within the questionnaire by using Cronbach's alpha test as recommended by George and Mallery, (2003). The data collected was analyzed using correlation and regression analysis and SPSS computer software. Cronbach's alpha can be written as a function of the number of test items and the average inter- correlation among the items.

The Cronbach's Alpha Test was conducted on all measures for the independent and dependent variables with a threshold of 0.7 As shown in table 3.1, the value of the Cronbach's Alpha for five dimension of both dependent and independent variables was found to be above 0.7 which is an indication of acceptability of the scale for further study.

Table 1: -Cronbach's Alpha Test for Variables.

	Cronbach's Alpha	Composite Reliability	AVE
Knowledge Sharing	0.848	0.911	0.74
Knowledge Acquisition	0.726	0.818	0.63
Knowledge Application	0.834	0.892	0.66
Organizational performance	0.863	0.937	0.60

Source: own survey, Dec 2024

3.12.2 Validity test

Validity refers to the degree to which an instrument measures what is supposed to measure (Pilot and Hunger, 1985). The researcher conducted the instrument validity using IBM SPSS version 27 with construct and structure-related tests using Pearson correlation.

In this study, the first step in testing the instrument was using criterion- related validity test (Pearson test) which measures the correlation coefficient between each paragraph in one field and the whole field. As demonstrated in the appendix provided at the back, the p-

values (sig.) are less than 0.05 for all results, so the correlation coefficients of each field are significant at α=0.05, so it can be said that the paragraphs of each field are consistent and valid to measure what they were set for.

3.13 Ethical Consideration

The basic principle of ethical research is to preserve and protect the human dignity and rights of all subjects involved in a research project (Leedy and Ormrod 2013). Thus, in conducting the survey and distribution of the questionnaires to sampled academic staffs the questionnaires are pretested and modify as possible. Then formal letter was obtained from AAU School of Commerce and it has communicated to selected university and informed to the respondents to confirm their voluntarily participation and get consent from them. Then the data was collected without any force and the collected data has been used only for academic purpose and kept strictly confidential.

CHAPTER 4

4. DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the descriptive and inferential analysis of the collected, data and the tested hypothesis which involves on examining and testing the proposed assumptions. In addition to this it discusses the results of the study based on the theoretical and empirical literatures reviewed and in relation to objectives and basic research questions stated so far.

4.2 Response Rate of the Study

To achieve the research objectives and to get relevant answers that addressed the research questions 110 questionnaire were distributed to sampled respondents of CARE ETHIOPIA staffs out of which 93(84.5%) was returned, while the rest 17(16.5%) was not returned.

Table 2 Response Rate

Target Number of respondents	**Number of questionnaires Returned**	**Response Rate (%)**
110	93	84.5%

Source: own survey, Dec 2024

4.3 Demographic Profile of Respondents

Under this particular section of the study, background information of sampled respondents in terms of their sex, age, educational qualification and work experience has been analyzed and interpreted.

Table .3 Demographic information of respondents

S. No.	**Demographic Variable**	**Category**	**Frequency**	**Percentage (%)**
1	**Sex**	Male	68	73.11%
		Female	25	26.89%
		Total	93	100%
2	**Age**	20-30 years	37	39.78%
		31-40 years	24	25.80%

		41-50 years	19	20.43%
		51years&above	13	13.97%
		Total	93	100%
3	**Respondent Designation**	Project Manager	7	7.52%
		Site Engineer	46	49.46%
		Team leaders	14	15.05%
		Others	26	27.95%
		Total	93	100%
4	**Level of Education**	PhD	1	1.07%
		Masters	28	30.10%
		First Degree	53	56.98%
		Diploma	11	11.82%
		Total	93	100%
5	**Years of work experience**	<5 Years	41	44.08%
		5-10 Years	36	38.70%
		10-15 Years	11	11.82%
		>15 Years	5	5.37%
		Total	93	100%

Table 3 displays data about responders in six groups. Their gender, age, level of education, years of work experience, professional background, and employment category (company) this was done to verify that respondents had the necessary information, comprehension, and expertise to respond accurately to the survey. In terms of gender, the majority of respondents (68) are male (73.11%), while the remaining 25 are female (26.89%). This indicates that the male population in CARE ETHIOPIA is greater than the female population.

39.78% of the total participants were in the age range of 20 to 30 years old, which included 37 of the participants. The age group of 31 to 40 years old accounted for 25.8% of all participants, with 24 of them falling into this age range. Of the total participants, 19 (or

20.43% of the total) were in the age range of 41 to 50. Finally, thirteen individuals, or 13.97% of the total participants, were 51 years of age or older. This suggests that nearly every participant was within the range of productive ages. Regarding education, 53 (56.98%) of the participants had a first degree. Of all respondents, 28 (30.1%) had a master's degree, and respondents with a diploma made up the remaining respondents.

According to the findings, 41 (44.08%) of the respondents had less than five years of work experience, 36 (38.70%) had five to ten years, 11 (11.82%) had ten to fifteen years, and five (5.37%) had more than fifteen years. This indicates that most responders have worked for more than five years.

Seven (7.52%) of respondents were project managers, forty-six (49.46%) were site engineers, fourteen (15.05%) were team leaders, and twenty-six (27.95%) were in a different field of study not listed in this category of educational background.

4.4 Descriptive Analysis for KMP and Organizational performance

The first objective of the study was to assess and evaluate the practices of knowledge management (knowledge acquisition, sharing, and application) and performance at organization level and each of the elements in KM practices and performance were assessed and described as follows.

Table 4 Respondents opinion on Knowledge acquisition

4.4.1 Knowledge Acquisition Practices

items	**Levels of agreement**						**Mean**	**St.dv**
	DA		**Neutral**		**Agr**			
	fr	**%**	**fr**	**%**	**fr**	**%**		
The organization use its external knowledge in knowledge acquisition process (KAQ1)	71	76.34	6	6.45	16	17.20	1.95	1.04
The organization encourages the exchange of ideas and knowledge among its members (KAQ2)	75	80.64	9	9.67	9	9.67	2.09	1.26
The organization establishes mechanisms for acquiring of knowledge from d/t sources of knowledge (KAQ3)	63	67.74	7	7.52	23	24.73	2.35	1.37

it has a KM policy that promote KM practices (KAQ4)	82	88.17	3	3.22	8	8.60	1.81	1.03
The organization create a conducive environment for conversion of tacit knowledge to explicit knowledge (KAQ5)	67	72.04	5	5.37	21	22.58	2.24	1.33
it has an appropriate mechanism for conversion of tacit knowledge to explicit knowledge (KAQ6)	85	91.39	2	2.15	6	6.45	1.71	0.87
The organization has an open communication system that facilitate knowledge acquisition (KAQ7)	72	77.41	10	10.75	11	11.82	2.01	1.16
The organization has a cooperative culture that support knowledge acquisition (KAQ8)	75	80.64	0	0	18	19.35	2.16	1.27
The organization benchmarks other organizations in its knowledge acquisition activity (KAQ9)	80	86.02	1	1.07	12	12.90	1.95	1.08
The organization rewards its employees who contribute in knowledge creation /acquisition (KAQ10)	77	82.79	4	4.30	12	12.90	1.91	1.18
Aggregate Mean and SD							2.01	1.15

Knowledge acquisition is the process of gaining or creation and development of new ideas, knowledge, and skills that add to the existing stock of organizational knowledge (Choo 2003; Holsapple and Singh 2001). It is the most activity of the company' in KM practices which shows the organization 's ability to acquire knowledge from its internal and external sources of knowledge through different mechanisms of knowledge acquisition. Thus, regarding KAQ1, most (76.34%) of the respondents were replied disagree, 6(6.45%) responded ―neutral‖, the rest 16 (17.20%) replied agree on the practice of the company's in level of using its external knowledge sources. This shows that the CARE ETHIOPIA is not able to use external sources of knowledge in its knowledge acquisition process and this

also supported with a mean value of 1.95 which failed in range of disagree. In relation to KAQ2, most (80.64%) of respondents were disagreed on the company's ability to encourage the exchange of ideas and knowledge among individuals and groups, about 9 (9.67%) of them replied ―neutral‖ for the same question, the remaining 9(9.67%) of respondents were responded agree. This indicates that the company is not working on encouraging the exchange of ideas and knowledge between its members as required as this result is supported with a mean of 2.09 which is approximately disagree.

On KAQ3, the majority of respondents (67.74%) disagreed, 7 (7.52%) were "neutral," and the remaining 23 (24.73%) agreed that the company has various mechanisms for learning from both internal and external sources. This suggests that the company has established various mechanisms to learn from its customers, employees, and other sources, as evidenced by the mean score of 2.35. The majority of respondents (88.17%) in KAQ4 disagreed with the availability of KM policies that support KM practice, whereas 3 (3.22%) were indifferent and the remaining 8 (8.60%) disagreed. The study found that the absence of a knowledge management policy inside the organization hinders the efficient appreciation and management of the company's knowledge.

As far as KAQ5, majority (72.04%) replied disagree, 5(5.37%) responded ―neutral‖ and 21(22.58%) were agreed on company‘s practices in creating conducive environment for conversion of tacit knowledge to explicit knowledge. From this it is easy to understand as the organization is not initiated on creating a suitable environment that help to convert the tacit knowledge which exists in its employees mind to different documented knowledge and this finding is supported with mean of 2.24. On KAQ6 majority (91.39%) replied disagree, about 2(2.15%) were ―neutral‖, and 6(6.45%) agreed on the availability of appropriate mechanisms for conversion of tacit knowledge to explicit knowledge. These shows as the company has no mechanisms like R&D, CoPs, that help to convert employee's knowledge to documented /explicit/ knowledge and this result was supported by a mean of 1.71 that failed on level of disagree.

On the same table 4.3 above regarding KAQ7 majority (77.41%) of respondents were disagreed on company ‘s practices in creating open communication system that facilitate knowledge acquisition, 10(10.75%) of them were ―neutral‖, 11(11.82%) were agreed. This indicates as the company is not as such establish a communication system that promotes knowledge acquisition from its internal and external sources and this also supported with a mean result of 2.01 which is approximately disagree. Additionally, on

KAQ8 majority (80.62%) of the respondents were disagreed on the practice of company to establish cooperative cultures that support knowledge acquisition and the remaining 18(19.35%) were agreed. This showed as the company is not able to create a cooperative culture among its members that facilitate knowledge acquisition and this is also seen in a mean result of 2.33 which was failed under disagree.

Moreover, on KAQ9 the researcher was interested to understand whether the university benchmarks other organizations in its knowledge acquisition activity on the same table above, and the responses showed as large number (86.02%) of respondents were disagreed, 1(1.07%) were ―neutral‖ and about 12 (12.90%) agreed. This indicates that the company is not used lessons from other companies as input on how knowledge is acquired effectively as needed and this result was supported with the mean value of 1.95 that failed under disagreed. Finally, on KAQ10 researcher was aimed to know whether the company rewards its employees who contribute in knowledge creation /acquisition and the results revealed that most (82.79%) of the respondents were disagreed, 4(4.30%) of them neutral‖ and the remaining 12(12.90%) were agreed. This entails that the company is not able to encourage its employees by rewarding them based on their contribution in knowledge acquisition or creation and this finding is supported with a mean result of 1.91.

According to Mikulecká and Mikulecký (2000) in companies, knowledge has been always created and companies are designed for advanced instructions and research in several branches of learning. Thus, organizations are expected to acquire knowledge internally by tapping into the knowledge of its staff, learning from experiences and implementing continuous process improvements and also strive to search knowledge from external sources like customers, suppliers, partners, etc.(Nemani 2010). However, as seen from the result, the company is not initiated to acquire knowledge from its employees and from its external sources by establishing different mechanisms and policies or procedures as supported with aggregate mean score of 2.01 and 1.15 standard deviation. Responses from interviews of different participants and open ended questions also revealed as there is a no any specified policies and procedures of KM that facilitate the knowledge acquisition practices and the response also showed that even if there is R&D, CoPs to some extent it is not aimed to encourage staffs to convert their tacit knowledge to explicit knowledge as well as the environment is not encourage the staffs even though there is ICT infrastructure.

4.4.2 Knowledge sharing practices

Universities have recognized that knowledge comprises a value adding, intangible resources for creating and ensuring sustainable competitive advantages (Anduvare 2015).

Table 4.5 Knowledge Sharing Practices

items	Levels of agreement							
	DA		Neutral		Agr		Mean	St.dv
	Fr	%	Fr	%	Fr	%		
The organization use internet technologies, office automation, teamwork and joint conferences to share among its staffs (KS1)	57	61.29	8	8.60	29	31.1	2.55	1.47
The organization make knowledge easily accessible to all levels of employees (KS2)	73	78.49	2	2.15	18	19.35	2.10	1.25
The organization has various publications to display the captured knowledge (KS3)	80	86.02	4	4.30	9	9.67	1.83	1.03
The organization has a regular meeting for the purpose of knowledge sharing among its academic staffs (KS4)	77	82.79	5	5.37	11	11.82	1.95	1.09
The organization used techniques like apprenticeship, mentoring and coaching in knowledge sharing process (KS5)	69	74.19	7	7.52	17	18.27	2.17	1.25
The organization publicized the works of innovative staffs via internet, electronic magazines, etc (KS6)	64	68.81	10	10.75	19	20.43	2.32	1.29
The organization has knowledge sharing policy and procedures that promote knowledge sharing activities (KS7)	82	88.17	1	1.07	10	10.75	1.96	1.05

The organization has virtual space like website, intranet, e-mail, etc. for exchanging of ideas and knowledge among its employees (KS8)	73	78.49	8	8.60	12	12.90	2.09	1.12
The organization sent reports to its staffs timely (KS9)	71	76.34	3	3.22	19	20.43	2.24	1.36
The organization has standardized process in knowledge sharing (KS10)	85	91.39	4	4.30	4	4.30	1.68	0.83
Aggregate Mean and SD							2.08	1.17

Source: own survey, Dec 2024

To gain an idea on the practices of knowledge sharing different questions were raised and the responses were summarized below. In table 4.4 above, on KS1, about 57(61.29%) respondents were disagreed on the organization ‘s practice in using internet technologies, office automation, teamwork and joint conferences to share among its staffs,8(8.60%) were ―neutral‖ and about 29(31.1%) were agreed on raised question. This showed that the company has used internet technologies, teamwork and joint conferences to share information and knowledge among staffs to some extent as this result was supported with a mean value of 2.55 which approaches to agree. On the same table 4.4 above, item KS2 required the opinion of respondents regarding the company's practice in making knowledge easily accessible to all levels of employees and the result revealed that the majority (78.49%) replied disagree, 2(2.16%) were ―neutral‖, the rest 18 (19.34%) were agreed. From this the researcher can understood as the company is not able to easily access knowledge for its staffs as required and this result also supported with a mean of 2.10 which failed in disagree.

In KS3 the researcher was initiated to understood the availability of various publications to display the captured knowledge and the responses showed that most (86.02%) were disagreed, 4(4.30%) were ―neutral‖ and the remaining 9(9.67%) replied agree. This indicates that the company has no established different publication systems to share the created knowledge and this is supported with 1.83 mean which showed disagreement of respondents.

Additionally, the researcher directed question on the availability of regular meeting for sharing of knowledge on item KS4 and the responses revealed that majority (82.8%) responded disagree,5(5.36%) ―neutral‖, and the reaming 11(11.82%) of them agreed and this showed as the company has no regular meeting for the purpose of knowledge sharing

among its staffs and this was supported by 1.95 mean. In KS5 the majority (74.19%) of the respondents replied disagree, about 7(7.52%) responded ―neutral‖ and the rest 17(18.27%) were agree concerning the techniques used in the company like apprenticeship, mentoring and coaching in knowledge sharing process. This implies that, the company has not used the techniques to facilitate knowledge sharing practice as the mean result was 2.17 which failed under disagree.

Besides, in KS6 question was raised to know whether the company publicized the works of innovative staffs via internet, electronic magazines, etc. and the responses point out that most (68.81%) were disagreed, 10(10.75%) were ―neutral‖, 19(20.43%) and 15(12%) were agreed and this showed as there is a limitation on sharing of the works of its innovative staffs within and out of the company and this also supported with mean of 2.32.

As far as, the availability of company ‘s knowledge sharing policy and procedures on item KS7, 82(88.16%) of respondents replied disagree, 1(1.08%) were ―neutral‖ and 10(10.75%) were agreed. From this the researcher can understood as the company has no formal policies and procedures that promotes sharing of knowledge as the finding supported with a mean value of 1.96. In KS8, question was raised regarding the utilization of virtual space like website, intranet, e-mail, etc. for exchanging of ideas and knowledge among its employees and more than half 73(78.49%) of them replied disagree, about 12(12.90.%) responded agree, 8(8.60%) were ―neutral‖ and disagree with a mean of 2.09. which approaches to agree. This showed as the company has not as such used the available virtual spaces and websites to support the knowledge sharing processes. On KS9 the researcher wants to know whether the company used open communication system and the mass (76.34%) of the respondents were disagreed, 3(3.22%) of them ―neutral‖ and the remaining 19(20.43%) were agreed. This indicates that the company has low practices in creating and using open communication system and this is supported with a mean of 2.24 which was failed under disagree.

Moreover, the researcher was interested to understand whether the company has standardized process in knowledge sharing in KS10 and the most (91.39%) of participants were disagreed, about 4(4.30%) of them replied ―neutral‖ and the rest 4(4.30%) were agreed. This showed as the company is not to establish standardized knowledge sharing process and this was also supported with a mean result of 1.68.

As stated by Lin (2007) Knowledge sharing is an organizational practice that needs

collective knowledge, skills and expertise, and distribution of knowledge crosswise the organizational parts and it involves on the exchanging of employee knowledge, experiences, and skills throughout the organization via different mechanisms to build new mental models. Conversely, the overall mean value of 2.08 and 1.17 standard deviation responses reveals as there is no knowledge sharing practice as the company is not encourage knowledge sharing processes and not able to establish mechanism and knowledge sharing policies and procedures that facilitates exchanging of skills and experiences throughout the university. Additionally, the interview and open ended questions responses support this finding as the respondents and interviewees explained that, in the organization there is a huge gap on understanding on the purpose of knowledge sharing among staffs, the importance of different techniques of knowledge sharing like apprenticeship, mentoring and coaching of staffs, utilization of available virtual spaces and meetings for knowledge sharing purpose and also displaying of innovate works via different publication methods to promote knowledge sharing in the company.

Table 5 Practices of Knowledge Application

4.4.3 Knowledge Application Practices

items	**Levels of agreement**						**mean**	**St.dv**
	DA		**Neutral**		**Agr**			
	Fr	**%**	**Fr**	**%**	**Fr**	**%**		
The organization used its employee ‘s knowledge, skills, abilities in doing things like curriculum development (KAP1)	70	75.26	6	6.45	17	18.27	2.15	1.28
The organization apply the existing knowledge to ensure critical competitive needs (KAP2)	74	79.56	11	11.82	8	8.60	2.02	1.06
The organization used new created ideas in organizational process (KAP3)	58	62.36	14	15.05	21	22.58	2.40	1.35
The organization has different methods for its further development of knowledge and its application to new situations (KAP4)	77	82.79	6	6.45	10	10.75	1.96	1.10
The organization has a mechanism for filtering, cross-	52	55.91	11	11.82	20	21.50	2.62	1.42

listing and integrating of different sources and types of knowledge (KAP5)								
The organization apply lessons learnt for application of knowledge (KAP6)	80	86.02	1	1.07	12	12.90	1.76	1.25
The organization actually used the created and captured knowledge for different interventions (KAP7)	69	74.19	7	7.52	17	18.27	2.37	1.28
Staffs has an awareness on organization ‘s database (repositories) (KAP8	47	50.53	9	9.67	37	39.78	2.90	1.52
digital repository is accessible and easy to use (KAP9)	81	87.09	2	2.15	10	10.75	1.94	1.15
The organization used different techniques like of knowledge application (KAP10)	73	78.49	4	4.30	16	17.20	2.13	1.26
Aggregate Mean and SD							2.37	1.06

Source: own survey, dec 2024

Knowledge application is based on the ability of users 'that to be aware of the value of new knowledge and use it since effective utilization of knowledge will result in competitive advantage, improve efficiency and reduce costs by promoting organizational performance (Asoh et al. 2007). Accordingly, the researcher was aimed to know the practices of knowledge application of the company. As a result, the respondents were asked whether the company used the staff ‘s skills, abilities, knowledge and information in doing things like curriculum development on item KAP1 on table 4.5 above, and the mass (75.26%) were disagreed,6(6.45%) of them ―neutral‖, and 17(18.27%) were agreed. This showed as the company is not able to use its staff ‘s knowledge and experience in performing its activity like in curriculum development and this is supported with a mean of 2.15 which showed disagreement of respondents.

Under item KAP2, majority (79.56%) of the respondents replied disagree, 11(11.82%) were agreed, the rest 8(8.60 %/) agreed on whether the company apply the existing knowledge to ensure critical competitive needs. This indicates as the company is not able to use the existing knowledge to achieve its critical competitive needs as this also supported with 2.02 mean. On the same table 4.5, in item KAP3 the researcher raised a question whether the company use new created ideas in organizational process and the responses showed that more than half (62.36%) of respondents were disagreed, about

14(15.05%) were ―neutral‖ whereas, 21(22.58%) of them were agreed with a mean of 2.4. This indicates that the company has not initiated to use new ideas created by its employees in its business process as needed.

On the same table 4.5 above, under KAP4 the majority (82.79%) of the respondents replied disagree, 6(6.45%) were ―neutral‖, 10(10.74%) responded agreed on the question whether the company has different methods for its further development of knowledge and its application to new situations. This implies as the company doesn‘t has different methods that help for further development of knowledge and utilization of knowledge in new situations as expected and a mean result of 1.96 also support the finding.

On the same table 4.5 above, under item KAP5 the respondents were asked as the company has a mechanism for filtering, cross-listing and integrating of different sources and types of knowledge and most (55.91%) of respondents were disagreed, abut 11(11.82%) of them were replied ―neutral‖ and the rest 20(21.50%) were agreed. From this the researcher can understood as the company has not establish the mechanism for filtering, cross-listing and integration of various sources and types of knowledge among its departments and this result also supported with a mean value of 2.62. On item KAP6, respondents were asked as the company used lessons learnt for application of knowledge and responses showed that the mass (86.02%) of the respondents was replied disagree, about 1(1.07%) of the responded ―neutral‖ and 12(12.90%) were agreed. This implies that in the company there are no practices of using lessons learned from other as input in application of knowledge as supported with a mean score of 1.76.

Besides, in item KAP7 the researcher was interested to know as the company actually used the created and captured knowledge for different interventions and majority (74.19%) were disagreed, and about 7(7.52%) of respondents were ―neutral‖ and the remaining 17(18.27%) of them agreed. This showed that the company has not tried to use the acquired knowledge for interventions as supported with a mean value of 2.37 which failed under disagreed. On item KAP8 respondents were asked their awareness regarding company's database (repositories) and about 47(50.53%) were disagreed, whereas less than half (49.5%) of respondents were agreed. The analysis showed that the majority of the staffs are aware of the company's existing database (repositories) system and a mean value of 2.90 also supports the result.

Additionally, under item KAP9 respondents were asked about the accessibility of the digital repository and as it is simplicity to use and the majority (87.09%) were disagreed, 2

(2.15%) were responded ―neutral‖, and the remaining 10(10.75%) of them were agreed and this implies as the existing digital repository is not accessible for all even if it is easy as supported by a mean value of 1.94.

Finally on item KAP10, the researcher was interested to know as the company used different techniques of knowledge application as a result mass (78.49%) of the respondents were disagreed, about 4(4.30%) were answered ―neutral‖ and the rest 16(17.20%) were agreed with a mean of 2.13.This indicates that the company hasn ‘t tried to use techniques of knowledge application like circulars and knowledge sharing boards as expected.

As explained by various researchers like McInerney and Koenig (2011), knowledge application is a process that indicates the actual utilization of the knowledge in developing new and improved services, management systems, techniques and procedures based on changes in customers 'needs and preferences. In the company perspective knowledge application refers to the company's ability in actually using of its captured and created knowledge through different techniques in order to sustain organizational innovation and performance of organization (Karadsheh et al. (2009).

While, in this study the aggregated mean scores of 2.37 and standard deviation 1.06 showed as the company has not practiced the application of existing knowledge through different techniques since the cumulative response showed disagreement of respondent with medium variability of responses.

Furthermore, regarding practices and challenges of KM, interview participants explained as the company has no established KM policies and procedures, the company has a limitation in establishing different mechanisms to facilitate KM activities, there is no responsible body who identify the knowledge gap and work on it, no rewarding management that motivate staffs to create new knowledge and apply it, lack of responsive and participatory leadership that take a part in KM and also encourages the staffs for creativity.

4.5 Inferential analysis

In this specific section researcher evaluated the basic requirements of SPSS that help to evaluate the casual related research questions in order to achieve the study objectives.

4.5.1 Evaluation of Collinearity statistics

Before proceeding to evaluate the Pearson ‘s coefficient (R-squared) and path coefficients of the model a study based on Smart PLS requires the issue of assessing the Collinearity among predictor constructs (Sarstedt et al. 2014).

Table 6 Collinearity statistics (Inner model VIF Values)

	Knowledge Sharing	**Knowledge Acquisition**	**Knowledge Application**	**Organizational performance**
Knowledge Sharing	3.126			2.650
Knowledge Acquisition	3.314			3.976
Knowledge Application	2.072			3.340
Organizational performance				2.271

Source: own survey, Dec 2024

the variance inflation factor (VIF) is always greater or equal to 1 and the values that 5-10 are often regarded as indicating multi-Collinearity which indicates as the two constructs are highly correlated and it may be a problematic for prediction of a model as suggested Hair et al. (2014). Collinearity statistic measures the increase in the variance of an estimated regression coefficient when predictor constructs are correlated. Accordingly, the model found that the values of VIF is greater than 1 and less than the maximum threshold (5) for all indicators in which ranges from 2.033-3.911 as displayed in the table 4.9 above.

4.6. Coefficient Determination (R-squared) of the model

Table 7 R-Squared result

MODEL	**R**	**R(square)**	**Adjusted R square**	**St. Error**
1	.805	.657	.632	3.001

Source: own survey, Dec 2024

And the R-squared for endogenous variable (organizational performance) was 0.657 which indicates that 65% of variance in organizational performance was explained by independent variables (knowledge acquisition, and knowledge sharing and knowledge application).

4.7 Multiple Regression Analysis

Multiple regression analysis aided the analysis of the variable relationships as follows: $Y= \beta 0+\beta_1 X_1+ \beta_2 X_2+ \beta_3 X_3+ e_0$ Where; Y= Project performance (dependent variable) βo = Constant (Coefficient of intercept) X_1= knowledge acquisition X_2= knowledge sharing X_3=

knowledge application ɵ0=Error term β_1, β_2, β_3, = regression coefficient of the three variables.

The regression model is derived from Table is:

$Y = 11.883 + 0.745X_1 + (0.73)\ X_2 + 0.329X_3 + ɵo$

Where Y = Project Performance

X_1 = knowledge acquisition

X_2 = knowledge sharing

X_3 = knowledge application

ϵ = Standard Error

The regression model provided statistical control through which the study established the influence of each predictor variable. Holding all variables at zero will result in a positive project performance equal to 11.883. In a similar way, keeping all other independent variables constant, a unit change on knowledge acquisition will result in 0.745 increments in project performance. This means that knowledge acquisition had a great influence on increasing the project's performance in the CARE Ethiopia. The statistically significance level of this variable is 0.01 which is less than (<) p-value (0.05).

The other interesting variable in this regression model is knowledge sharing. As can be derived from the table, knowledge sharing has a negative effect on project performance. knowledge sharing has a value of B = 0.073 with p value < 0.05. The result implies that knowledge sharing has a positive and significant effect on project performance. The third findings indicate that knowledge application will result in a 0.329 increment in project performance, while holding the rest of independent variables constant would lead to a increase in project performance.

4.8 Discussion of the results

As indicated on the above tables respondents were asked whether the company frequently used senior 's experience to improve its process and service on items and the majority (85.6%) were disagreed, while 4(3.2%) were ―neutral‖ and the rest 14 (11.2%) of them were agreed. This indicates that the company is not strives to use the existing senior staff's knowledge and skill in order to improve its services and process and the result also supported by a mean value of 2.1.

As understood from the literatures it is believed as performance is the related with respect to products, manufacturing and it was seen as company's ability to adopt new ideas,

methods, techniques in its producing, training, community service and research activities. Therefore, the cumulative mean scores of 2.6 and standard deviation 0.9 reveled as the company has not practiced enough since the company is not initiated to improve its services and process with the help of available ICT infrastructure and its staff‘s skills and knowledge.

Additionally, the researcher directed question as the company encourages collaborative and cooperative organizational culture and the responses revealed that majority (81.6%) responded disagree,7(5.6%) ―Neutral‖, and the reaming 16(13%) of them agreed and this showed as the company has not striven to build a collaborative and cooperative organizational culture and this was supported by 2.23 mean. also most (94.4%) of the respondents replied disagree, about 3(2.4%) responded ―neutral‖ and the rest 4(3.2%) were agree concerning different units and functions within the company well understand to each other. This implies that, the company has not different units and functions within it internally, understand each other as the mean result was 1.93 which failed under disagree.

Moreover, the researcher was interested to understand whether the existing documents and solutions are easily accessible in the company, and 111 (88.8%) of participants were disagreed, about 11(8.8%) of them replied ―neutral‖ and the rest 3(2.4%) were agreed. This showed that the existing documents are not easily accessible to all of its staffs and this was also supported with a mean result of 1.90. Therefore, there is a limitation in practices of intellectual capital in the company as evidenced with the aggregate mean (2.2) and 1.33 standard deviation.

CHAPTER 5

5. SUMMARY OF FINDINGS, CONCLUSIOS AND RECOMMENDATIONS

5.1 Introduction

The main objective of this study was to assess the practices of KM and examine its effect on organizational performance in CARE ETHIOPIA. Based on reviewed literatures and conceptual framework objectives and basic research questions stated under chapter one of the study were developed and appropriate research methods and procedures were designed for purpose of data collection and data analysis.

To this end from total 153 staffs, 110 were selected through systematic random sampling technique of probability sampling so as to respond to questionnaires which encompasses mainly closed ended and some open-ended questions, and some higher officials of the company were selected purposively. Therefore, in this chapter the researcher had tried to discuss summary of findings, conclusions and recommendations in relation to the objectives of the study and previously stated research questions.

5.2 Summary of Findings

Under this particular section the researcher had summarized the major findings of the study under each variable which were analyzed and discussed in analysis part of the study.

- Concerning the practices of knowledge management, the study revealed out that:
- Most (97.6%) of the staffs have better understanding on the concepts of KM that help them to appreciate, manage and share knowledge.
- The majority (89.6%) replied as the company is not initiated to acquire knowledge from internal and external sources by establishing different mechanisms.
- There is no any specified policies and procedures of KM that facilitate the knowledge acquisition practices as evidenced by 90.4% of respondents.
- 78.4% of respondents replied as the company is not working on create conducive environment that encourages staffs to convert their tacit knowledge to explicit knowledge.
- 91.2% of the respondents evidenced that the company is not able to encourage its employees by rewarding them based on their contribution in knowledge acquisition or creation

- As supported by the majority (85.6%) respondent ‘s response, there is a huge gap on understanding of the purpose of knowledge sharing among staffs, the importance of different techniques of knowledge sharing like apprenticeship, mentoring and coaching of staffs.
- More than half (56%) of participants were responded as the company has not as such used the available virtual spaces and websites to support the knowledge sharing activities. Mass (87.2%) of the respondents answered as the company as low practices in creating and using open communication system to facilitate KM activities.
- Most (93.6%) of participants replied as the company couldn‘t established well standardized knowledge sharing processes.
- More than half (63.2%) of respondents replied as the company has not initiated to use new ideas and knowledge created by its employees for different interventions.
- About 72.8% of participants responded as there is a limitation in designing different formal mechanism that facilitate the application of existing knowledge especially tacit knowledge which exists in minds of the staffs.
- The company has no any mechanism to retain and used knowledge from staffs who leave the organization as supported by the interview responses.

❖ Regarding Practices of performance the study showed that there is a gap on performance since: -

- Majority (76%) of the respondents replied as there is no frequent utilization of senior ‘s experience to improve the process and service of the company.
- The company is not continually using new teaching and learning technologies that accelerate performance as evidenced with the responses of 85.6% respondents.
- Even if the company is revised its curriculum periodically, there is no participation of learners in curriculum development and assessment as supported by most (92%) of respondent ‘s response.
- Even though the company has well organized ICT infrastructure that can promotes performance the company is not used appropriately for facilitating performance as evidenced by the majority (72%) respondent ‘s response.
- The mass (87.2%) of the responses showed that the existing structure of the company is not flexible that enhance the implementation of new administrative systems 82.4% responses also exhibited as the company is not used the research

results as input in solving its problems and enhancing its administrative processes.

- Majority (86.8%) of the respondents where the company is not look for new administrative systems that facilitates performance.
- 84.8.8% of the respondents were replied that, company has more administrative procedures that are not supported with new administrative systems.
- The model found out that Collinearity is not problematic issue for estimation of path model as the VIF values of all constructs in inner mode were ranges from 2.033 to 3.911 which is less than the maximum threshold (5).

➢ Regarding the path coefficient of constructs, the result of the model indicates that:

- As far as the determination of coefficient the model found that:
- R-squared for endogenous variable (organizational performance) was 0.51 which indicates that, about 51% of variance in organizational performance was explained by independent variables (knowledge acquisition, and knowledge sharing and knowledge application) and also with the mediating variable (intellectual capital).

5.3 Conclusions

Knowledge based view/ theory considered knowledge as assets and its elements such as knowledge acquisition, transfer and application as main resources that can be used in strategic development of products, processes and markets within knowledge intensive and innovative organizations. In this study the researcher investigated the practices of KM and its effects on organizational performance with the mediating role of intellectual capital and based on the findings the researcher inferred some main conclusions. In order to achieve the research objectives, the researcher obtained data from 93 respondents and undertaken all required data quality test's reliability, validity and collinearity through SPPS for descriptive analysis.

In relation to the first research question, even if most staffs have better understanding on concepts of KM, there is a great gap in KM practices (knowledge acquisition, knowledge sharing and application) and also in both technical and administrative performance in CARE ETHIOPIA as seen in descriptive analysis since the company lacks a KM policies and procedures that help to maximize the acquisition, sharing and utilization of knowledge from both internal and external sources, and there is a weakness in creating conducive environment and open communication system that promotes the flow of information and sharing of knowledge and also a deficiency in using the available resources like senior‘s tacit knowledge and experiences. Additionally, the existing virtual spaces and websites are

not used for the purpose of knowledge acquisition, sharing and application. As well as the researcher concluded as the company couldn‘t establishes the mechanisms and administrative systems that promote collaborative and cooperative organizational culture which enhance the creativity and performance of staffs and the use of available knowledge and newly created knowledge and research results in order to ensure sustainable competitive advantages through technical and administrative performance.

Besides in research question 2, 3, 4, the study examined the effects of each element of KM practices on organizational performance, and the researcher had concluded as knowledge acquisition has statistically significant indirect effect on company's performance while knowledge sharing and knowledge application has statistically significant direct effects on performance.

Moreover, in research question 5, the study sought to establish the mediating effect of intellectual capital on the relationship between KM and organizational performance and the researcher concluded that, intellectual capital significantly mediates the relationship between KM and performance in CARE ETHIOPIA.

Generally, even if the company has well established ICT infrastructures and highly skilled staffs there is a weakness to use the available resources for effective KM processes and for maximizing the utilization of available knowledge to promote its performance that help to achieve the overall objective in more scientific basis. The study concluded that, KM practices have a positive effect on the performance of the company

5.4 Recommendations

The findings of the study have important implications for the policies and practices which can be drawn to improve the KM practices of the CARE ETHIOPIA.

To appreciate and manage knowledge, the company requires a well-established KM policies and procedures, so, it is better for the company to create a policy framework and procedures throughout the company that encouraged and promotes the staffs to create, acquire, share and apply knowledge in improving the existing services and administrative processes.

As seen from the finding, knowledge sharing has a positive significant effect on the performance of the company, thus it is recommended to the management of the company to use open communication system to aware all staffs on the benefits of knowledge sharing and methods used in knowledge sharing like: mentoring and coaching, R&D, regular meetings, communities of practices, knowledge sharing boards, E-learning, internal

newsletter, circulars, technical conferences and seminars, etc. which help to enhance knowledge sharing processes among its staffs by using the existing infrastructures.

Additionally, knowledge application was found with a positive significant relationship with performance, thus the company should take initiatives to pioneer and drive KM adoption and utilization by committing more financial resources for training programs that improves the capacity of its staffs to use new knowledge, methods and technologies. As well as it is advisable for the company to create a flexible and less procedural organizational structure that accelerate enhance the development of intellectual capital of the organization.

Last but not least, even if the company has better ICT infrastructures and senior staffs the company is not able to use these resources for KM practices, so it is suggested to the management of the company to create awareness and capacitate all staffs in using ICT for KM processes, and assign more skilled ICT workers to facilitate the utilization of ICT, as well as motivate the staffs to share and contribute to the company in KM practices by rewarding more innovative staffs.

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Annexes

Appendix I - Questionnaire

Questionnaire for M&E and Project Management Team

Questionnaire on 'The Effect of Monitoring and Evaluation Practice on Project Performance'

Dear Sir/Madam

My name is , and I am currently studying for a Master of Arts in Project Management at saint Mary's university. I have completed my courses and am currently working on my thesis entitled: EFFECT OF KNOWLEDGE MANAGEMENT ON ORGANIZATIONAL MANAGEMENT: THE CASE OF CONSTRUUCTION COMPANIES IN ETHIOPIA.

My research is aimed purely for academic purposes only. Your invaluable contribution will be of great assistance in achieving this objective. Your participation in this research is voluntary.

Therefore, with great respect, I ask you to fill this questionnaire with the utmost HONESTY & SINCERITY. I guarantee that your identity will be kept confidential and the information you provide will be used for academic purposes only.

I would like to thank you in advance for taking your precious time from your day to fill this questionnaire. Please try to answer all the questions openly, as your answers will have an influence on the outcome of the research.

If you are interested, I will be happy to share the findings of this research when it's completed.

If you have any questions or comments, please don't hesitate to reach me by;

- Mobile : +
- E-mail :

Part I: Personal Information of Respondents Instruction:

Please indicate your answer by putting („√") tick mark on the appropriate box of your choice as provided below for each question. If you have answer out of the alternatives provided, please specify in the space blank given.

Q.1	**items**	**options/dimensions**	**(Put (√)**
1.1	**Gender:**	male	

		female	
1.2	**Age:**	20-30 years	
		31-40 years	
		41-50 years	
		51 years and above	
1.3	**Educational Qualification:**	PhD masters	
		First degree	
		diploma	
1.4	**Work Experience (related to project management):**	<5 years	
		5-10 years	
		10-15 years	
		>15 years	
1.5	**Current Position:**	Project manager	
		Site engineers	
		Team leaders	
		others	

Part II: Questions related with Actual practices of Knowledge Management (KM)
Instruction: items in the table asks your level of agreement regarding „how knowledge management is practiced under each of the major elements of KM (Knowledge Acquisition, Conversion, Utilization and protection); accordingly, for each item put _‘ √ mark under the value ranged from 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree.

	KM Practices of the organization	**Level of agreements**				
I	**Knowledge Acquisition**	1	2	3	4	5
1	The organization use its external knowledge in knowledge acquisition process (KAQ1)					
2	The organization encourages the exchange of ideas and					

	knowledge among its members (KAQ2)					
3	The organization establishes mechanisms for acquiring of knowledge from d/t sources of knowledge (KAQ3)					
4	it has a KM policy that promote KM practices (KAQ4)					
5	The organization create a conducive environment for conversion of tacit knowledge to explicit knowledge (KAQ5)					
6	it has an appropriate mechanism for conversion of tacit knowledge to explicit knowledge (KAQ6)					
7	The organization has an open communication system that facilitate knowledge acquisition (KAQ7)					
8	The organization has a cooperative culture that support knowledge acquisition (KAQ8)					
9	The organization benchmarks other organizations in its knowledge acquisition activity (KAQ9)					
10	The organization rewards its employees who contribute in knowledge creation /acquisition (KAQ10)					

Please tick "✓" in the appropriate columns to indicate the extent to which you agree or disagree with the following listed M&E staff training undertaken in your organization affecting organizational management: the case of construction companies in Ethiopia.

	KM Practices of the organization	**Level of agreement**				
II	**Knowledge Sharing**	1	2	3	4	5
1	The organization use internet technologies, office automation, teamwork and joint conferences to share among its staffs (KS1)					
2	The organization make knowledge easily accessible to all levels of employees (KS2)					
3	The organization has various publications to display the captured knowledge (KS3)					
4	The organization has a regular meeting for the purpose of knowledge sharing among its academic staffs (KS4)					

5	The organization used techniques like apprenticeship, mentoring and coaching in knowledge sharing process (KS5)					
6	The organization publicized the works of innovative staffs via internet, electronic magazines, etc (KS6)					
7	The organization has knowledge sharing policy and procedures that promote knowledge sharing activities (KS7)					
8	The organization has virtual space like website, intranet, e-mail, etc. for exchanging of ideas and knowledge among its employees (KS8)					
9	The organization sent reports to its staffs timely (KS9)					
10	The organization has standardized process in knowledge sharing (KS10)					

Please tick "✓" in the appropriate columns to indicate the extent to which you agree or disagree with the following listed KM Practices in your organization affecting organizational management: the case of construction companies in Ethiopia.

	KM Practices of the organization	**Level of agreement**				
III	**Knowledge Application**	1	2	3	4	5
1	The organization used its employee 's knowledge, skills, abilities in doing things like curriculum development (KAP1)					
2	The organization apply the existing knowledge to ensure critical competitive needs (KAP2)					
3	The organization used new created ideas in organizational process (KAP3)					
4	The organization has different methods for its further development of knowledge and its application to new situations (KAP4)					
5	The organization has a mechanism for filtering, cross-listing and integrating of different sources and types of knowledge (KAP5)					

6	The organization apply lessons learnt for application of knowledge (KAP6)					
7	The organization actually used the created and captured knowledge for different interventions (KAP7)					
8	Staffs has an awareness on organization ‘s database (repositories) (KAP8)					
9	digital repository is accessible and easy to use (KAP9)					
10	The organization used different techniques like of knowledge application (KAP10)					

THANK YOU AGAIN!!!!!