Addis Ababa University
College of Natural Sciences
School of Information Sciences

The Impact of Knowledge Management on Organizational Performance: The Case of Ethiopian Insurance Corporation

By:
IBRAHIM ABDELA

Advisor:
GETACHEW MENGESHA (Phd)

OCTOBER 2016

Addis Ababa University
College of Natural Sciences
School of Information Sciences

THE IMPACT OF KNOWLEDGE MANAGEMENT ON ORGANIZATIONAL PERFORMANCE: THE CASE OF ETHIOPIAN INSURANCE CORPORATION

BY: IBRAHIM ABDELA

GETACHEW MENGESHA (Phd)

A Thesis Submitted to the School of Graduate Studies of the Addis Ababa University in Partial Fulfillment for the Degree of Master of Science in Information Science

OCTOBER 2016

Addis Ababa University
College of Natural Sciences
School of Information Science

THE IMPACT OF KNOWLEDGE MANAGEMENT ON ORGANIZATIONAL PERFORMANCE: THE CASE OF ETHIOPIAN INSURANCE CORPORATION

BY: IBRAHIM ABDELA

Name and Signature of the members of examining board

Name	Title	Signature	Date
Dr. Getachew Mengesha	Advisor		
Dr. Lemma Lessa	Examiner		
Dr. Temtim Assefa	Examiner		

DECLARATION

I, Ibrahim Abdela declare that the research study on **"The Impact of Knowledge Management on Organizational Performance: the case of Ethiopian Insurance Corporation "** is my original work and that all the sources used or quoted have been indicated and acknowledged as complete references, and that the work has not been submitted before for degree purposes.

Student Name: Ibrahim Abdela Signature: _____Date: _____
Advisor Name: Getachew Mengesha (Dr.) Signature: _____ Date: _____

ACKNOWLEDGEMENTS

Acknowledgement is due to Almighty Allah (SWA), the most compassionate and the most merciful for the help, health and protection given to me to accomplish this thesis. May peace and blessings be upon our noble prophet Muhammad (SAW), his family, his companions and those they follow their right path.

I wish to express my deepest thank to my advisor Dr. Getachew Mengesha for his constructive advice starting from the proposal writing up to the completion of the thesis work. I thank him since without his encouragement, suggestions, insights, guidance, and comments to improve the content and form of the study and professional experts, the completion of this work would not have been possible. He provided me invaluable insights into all aspects of knowledge management and organizational performance

Special thanks to my caring wife, Semira Ayta and loving sons Jureij Ibrahim and Mohammed Ibrahim for being my supporter throughout my life including this thesis and for the many sacrifices they made so that I finish this thesis.

My grateful appreciation goes to my mother Munaja Hassen and my Father Abdela Awel for their prayer and valuable advice. I also wish to extend my profound gratitude to my brother Emamu Abdela and his wife for standing with me through this thesis work. I also thank all of my sisters in supporting me starting from conception to the completion of this thesis work. May the Almighty guide you through all your endeavors.

Finally I want to extend my sincere thanks to all Ethiopian Insurance corporation staff in general and W/r Mirchaye Mulugeta, Rahel Tsegaye, Amanual Wondimu, Asrat Debebe, and Temesgen Tamirat in particular. Your help on this thesis was duly appreciated.

Ibrahim Abdela

Contents

List of Figures

List of Tables

List of Graph

Glossary of Abbreviations

ACCA:	Actuarial science and Charted Accountant
AIO :	Africa Insurance Organization
AVE:	Average Variance Extracted
COMESA :	Common Market For Eastern and Southern Africa
EIC :	Ethiopian Insurance Corporation
FAAIR :	Federation of Afro-Asian Insurance & Reinsurers
HRD :	Human Resources Directorate
ICT:	Information and Communication technology
INSIS:	INSurance Information System
IT:	Information Technology
KC:	Knowledge Creation
KQ:	Knowledge Acquisition
KM :	Knowledge Management
KMC:	Knowledge Management Capabilities
KEC:	Knowledge Enabler Capability
KPC:	Knowledge Process Capability
KS:	Knowledge Sharing
LOMA:	Life Office Management Association
OP :	Organizational Performance
OESAI :	Organization of Eastern and Southern Africa Insurers
PF:	Perceived Performance

Abstract

To cope with today's rapidly changing and competitive business environment knowledge management is viewed as key strategic tool by business organization. Effective management of both individual and organizational knowledge with in the work place has become important to business organization for their success.

The main purpose of this study was to identify the impact of knowledge management on organization performance in insurance organization, specifically in Ethiopian Insurance Corporation (EIC).

A survey questionnaire was used to collect data. A total of 186 questionnaires were distributed and 172 were returned. From the returned questionnaires three were discarded during screening phase, SMARTPLS version 3 and SPSS version 20 were used for data analysis and reporting. The measurement model satisfied the required level of reliability and validity matrices. The assessment made on the structural model reveals the R-squared (R^2) value of 0.652 .This value considered to be substantial. On the other hand Q-squared (Q^2) were 0.364 indicate that the structural model has good predicative relevance for organizational performance.

The result of the study shows that elements of knowledge enabler capability and knowledge process capability have positive impact on knowledge management capability. Knowledge process capability strongly related to KMP than knowledge enabler capability in this study .Organizational structure has strong positive relationship to knowledge enabler capability than the other elements. Knowledge application strongly influences knowledge process capability when compared to the four observable construct. The hypotheses test result shows that all the proposed hypotheses were statistically significant and supported on this research.

CHAPTER ONE

1.0 Introduction

This chapter describes the background of the study followed by short discussion about insurance industry in general and about insurance industry in Ethiopia. Then the section describes the objective of the study, research question, and statement of the problem, scope and limitation, significance of the study. Finally it discuss about ethical consideration.

1.1Back ground

In today's competitive business environment, knowledge management gets serious attention in business organization like insurance company. Insurance companies mainly deal with risk and uncertainty. Insurance company operates in more dynamic and unstable business environment. This sector holds risk like natural catastrophic (earth quake, flood, drought, etc), manmade like car accident, fire, project failure, business bankrupt, dishonesty (Medin Magazine, 2016).To assess these risks before underwriting (accepting the risk) insurance organization uses their prior knowledge and experience. Thus maximizing and utilizing of its corporate knowledge and individual knowledge for insurance company must support with knowledge management for better organizational performance.

For every insurance organization their ability to assess risk before accepting it and claim handling procedure takes serious attention. It is also one of the areas for competitive advantage over competitor. Supporting these core insurance company processes that means underwriting and claim handling with knowledge management has multi dimensional impact on organizational performance. Knowledge management in insurance company increase underwriting efficiency of the company. Insurance company benefited from KM by increasing claim handling efficiency of the company. It is obvious that to increase organizational performance for insurance company, risk management and claim management must support with knowledge management.

Business organization follows different strategies to meet better organizational performance. To gain advantage over competitors for business organization like insurance firms must improve customer and employee satisfaction, efficient utilization of resources, minimizing cost, improve innovativeness, and improve investment area and increasing market share. Knowledge management can be considered as one of business optimization strategies by business organization. KM enables

insurance firm to identify, create, acquire and share knowledge within the organization. As mention in statement of the problem one of the problems in this sector is employee turnover. Thus knowledge management taps knowledge and retains knowledge within the organization before key employee leaving the firm.

The ultimate goal of knowledge management in insurance business organization is to understand its individual and corporate knowledge so that benefit out of it by improving use of knowledge in organization. Knowledge management in insurance industry aims to predict risk intelligently as much as possible rather than accepting it blindly.

The foundation of this study is that to identify the impact of knowledge management on organizational performance. Literature review indicates that, when business organization engages both in KM enablers and KM process, it achieves better in its organizational performance. In other words, if an organization builds capacity to support and facilitate knowledge creation, acquisition, application and sharing its employee and stake holders will have access to more useful and applicable knowledge that will assist better and faster decision making, increase innovation, reduce cost of production, increase employee satisfaction, increase investment, produce better customer services, improve market share and gain competitive advantage.

1.1.1 Profile of Insurance Industry Worldwide

Insurance industry recorded long history. The history of insurance traces back to the ancient time Babylonian and Chinese (Buckham et al., 2010). During this time traders from different part divide their goods due to fear of risk. By its very nature human being fears risk and want to share it (Elizabeth Njeri Mararo, 2013). The earliest form of insurance occurred when wealthy Chinese merchants along the Yangtze River decided that it was too risky to place all their merchandise on a single vessel and sail it down the river (Pietro Masci, 2011). To reduce their risks, they split the shipment into smaller portions and placed them on several boats. By doing so they reduce the probability of loss which may happen if a single vessel sinks since it was unlikely all the vessels would sink or suffer damage and that if one did sink. Thus the majority of the cargo would reach its destination safely (Pietro Masci, 2011).

Modern insurance can be traced back to the city's Great Fire of London, which occurred in 1666 (Buckham et al., 2010). After it destroyed more than 30,000 homes, a man named Nicholas Barbon

started a building insurance business (Elizabeth Njeri Mararo, 2013, Pietro Masci, 2011). He later introduced the city's first fire insurance company. Accident insurance was made available in the late 19th century, and it was very similar to modern disability coverage (Buckham et al., 2010; Gunilla Widen-Wulff and Reima Suomi, 2003).

The U.S. insurance industry owes a great deal of its current structure to Benjamin Franklin, who is less known for instituting U.S. insurance practices than for inventing things (Pietro Masci, 2011). In the late 1700s, as cities grew, citizens were highly concerned about fire damage to homes and other buildings. As that time Franklin persuaded people to contribute to a fund that would pay for a fire brigade to extinguish fires if fire break out. Each contributor received a fire mark to be placed on the front of his or her house. In the event of a fire, brigades came by looking for the fire mark which was already placed. When they saw one, they stopped and put out the fire. If, however, a home didn't have one or it named another brigade, they kept going. Such concept played a greater role for the establishment of modern insurance organization which operates today (Pietro Masci, 2011).

1.1.2 Insurance Industry in Ethiopia

Traditional Insurance institutions are there for log period of time even till now with the name of "Edir". The emergence of modern insurance business traced back early 1920's.In this time, Most companies where foreign company mainly from Great Britain and Italy (Hailu, 2007). These foreign insurance companies provide specific insurance type like life, marine, fire and general accident insurance.

The first domestic insurance company in Ethiopia was Imperial Insurance Company (Hailu, 2007). It was established in 1951. According to Hailu (2007) share holder of this insurance company were seven. The share holders include the Empeperior Haile Selassie, the state bank of Ethiopia, Ato Akale Work Hapte Wolde and others with different number of share.

After 1960 many domestic insurance company were established to give different insurance service even if most of these insurance company owned by Ethiopian citizen their management is hold by foreign employee. More over foreign insurance and Reinsurance Company provide technical assistances and expertise to these companies.

During the ‘derg’ regime all private insurance company which is found prior to 1974 was nationalized due to the command economy law of that time. In 1976 an insurance company called Ethiopian Insurance Corporation (EIC) comes to existence by nationalizing thirteen private insurance companies which have paid up capital of 11 million (Medin Magazine, 2016). It established with proclamation no 68/1975. Until 1994 it is the only insurance company in Ethiopia (Hailu, 2007).

After the change of the government in 1994 there also change in market policy. The policy of the market changed from "command economy" to “free market economy" policy (Hailu, 2007). This market change end monopoly of Ethiopian Insurance Corporation. Now the market is open for other domestic insurance company. According to national bank of Ethiopia currently 16 insurance companies are operating in insurance business in Ethiopia. Still the market is not saturated. New companies are under formation to enter in to this business.

1.1.3 Knowledge management in insurance industry

Globally, Insurance industries are working inside dynamic environment with tough competition (Mararo, 2013; Epetimehin**,** 2011). Most insurance company provides similar product and service. But they try to differentiate their product and service using innovation and their human intellectual capital. Insurance industry going forward and distinguished from their competitor in terms of knowledge, capability to innovate, performance in operations and capability to draw and preserve high-quality talent employee (Kasturi, 2006).

Almost all big insurance company has standardized their business and they are at high level of efficiency (Epetimehin**,** 2011). Therefore they are enjoying their profit and almost controlling the market. They have efficient way of underwriting policy and handling claims. This is not just happened over night. It is the product of long journey (Kasturi, 2006).

To achieve this they have sent both their capital and time. The fact is that those exceedingly standardized, repeatable, transactions oriented, and automated strategies represent a fragment of what in reality occurs in business (Epetimehin**,** 2011). In fact the techniques which are used so far need improvement and adaptability to insurance company. However a good way to meet the demanding situations and acquire similarly efficiencies, insurers wants to leverage the blended knowledge of its intellectual capital effectively and turn it into competitive benefit. Insurance

enterprise demanding situations with latest economic meltdown at the back of them, insurance company is looking ahead to producing worthwhile growth. Many but locate it tough in face of hard working environment, tight margins, mounting policies, and availability and satisfactory of information for decision making (Kasturi, 2006).

The objective of insurance company is to safe guard the society. Insurance company accepts huge risk from their client and compensates the client if any disaster happens. They are not only limited to providing cove for properties but also provide and compensate for human being also .If death or disability happens insurance company will cover based on their agreement.

Scholars and writers have given various definition of insurance from different perspectives such as economic, social and legal (Hailu, 2007).On his book he cited the following definition:-

“Insurance is a device for the reduction of the uncertainty of one party called the insured, through the transfer of particular risks to another party , called insurer, who offers a restoration, at least in part, of economic losses suffered by the insured”.

Another definition is give by (Epetimehin**,**2011) as “Insurance is a social device, in which a group of individuals (called “Insured”) transfer risk to another party (called “Insurer”) in order to combine losses and provides for payment of losses from fund contributed (premiums) by all members who transferred risk”.

Articles 654(2) of the commercial code of Ethiopia define it as:- “An insurance policy is a contract whereby a person called the insurer undertakes against payment of one or more premiums to pay to a person, called the beneficiary, a sum of money where a specified risk materializes”.

The insurance industry plays an important role in the nation's economy. Most research papers indicate that; it is second only to the commercial banking industry as a source of investment funds because insurance companies invest the billions of the premium dollars they receive annually in a wide range of investments beside risk cover. Insurance companies use premiums collected from policyholders to pay for claims, pay for cost of doing business; and build cash reserves for future loss payments.

Cash reserves are invested in federal and municipal bonds that are used to build roads, schools and utilities for example EIC bought bond that worth 100 million Ethiopian Birr for Grate Ethiopian

Renaissance Damp. Reserves are also invested in commercial developments and housing project. These investments promote economic growth in communities and support the insurance company's requirement of maintaining sufficient capital reserves to pay future losses and earn a profit.

Insurance also benefits society by encouraging activities and devices that reduce the amount of losses and their economic impact. Banks and credit institutions rely on insurance to make sure they can recover loans if disaster occurs. Insurance allows borrowers to guarantee creditors that their investment is protected against disasters.

Both public and private sector organizations are struggling with knowledge loss resulting from employee turnover. Moreover, costs of recruiting, of lost productivity and training to replace employees can reach huge values. Capturing knowledge inside an organization seems to be one of the main purposes of a knowledge management professional. In the insurance industry, trade secrets, confidential information and valuable ideas are part of the workforce knowledge. Recruiting, selecting, training and managing insurance agents constitute a real challenge for insurance companies all over the world, and a sensitive ethics-related issue is the case of insurance agents leaving their employer, in order to transfer to a competitor insurance company, while trying to take along as many clients as possible from the old employer.

Insurance companies are leveraging knowledge management to drive measurable operational benefits, such as improved time to resolution and first time resolutions while keeping employee/resource costs optimal (Epetimehin**,** 2011; Elica and Hosseini, 2015). As the Insurance company’s business grew rapidly spreading across various geographic locations, its stakeholders realized that they need to help their workforce become more productive and efficient in order to improve organizational performance and achieve organizational growth plans. Additionally, Insurance business being extremely competitive, people-intensive and constantly adapting its processes to cater to changing consumer demands, it’s imperative that the workforce be enabled with right platform and tools to store, manage, search and share knowledge quickly and efficiently.

The stakeholders were looking to empower their employees to:

- ✓ Reduce wasting precious time and cost in searching for content and information.
- ✓ Easily search for competent person in the organization to deal with specific issues.

- ✓ Reduce time in re-doing / duplicating the activities or works already done
- ✓ Collaborate with team-members in almost real time
- ✓ Capture the tacit knowledge and improve sharing of knowledge
- ✓ Adhere to business processes and audit compliance

There for KM (Elica and Hosseini, 2015; Widen-Wulff and Suomi ,2003)

- ✓ Dynamic knowledge repository within the insurance company's environment where all the employees could participate actively, contribute and locate wide range of information about company's best practices
- ✓ The knowledge management provides collaborative tools.
- ✓ Worked with the insurance company's team to create rich metadata sets which helped manage, execute and integrate the asset with the business process(Widen-Wulff and Reima Suomi,2003; Plescan and Marius Gavriletea,2009). These rich metadata enhanced the content's context turning it into Smart Content which in turn automatically initiates the right workflows and tasks.
- ✓ Increase in employee productivity.
- ✓ Improved team collaboration, employee connectedness and motivation.
- ✓ Facilitated cross-learning opportunities among multiple teams leading to new knowledge creation.
- ✓ Prevented loss of organizational knowledge when people leave and encouraged transfer of knowledge.
- ✓ Initiated an environment of transparency and information sharing leading to capture of 'tacit knowledge'.

1.1.4 The context of the study

Ethiopian Insurance Corporation as stated above established in 1976. Right now the company celebrating its 40's of formation. EIC is the Ethiopian's leading insurance company. Committed to deliver reliable service to it's' clients by accepting their material risk. Even the slogan of the company is "Your reliable partner". It also evolves for the normal business process by providing a huge insurance cove for mega project like the "Great Ethiopian Renaissance Dam".

The vision of the company is "To Be World Class Insurer In 2025". Its mission is to provide its customers efficient and reliable insurance services which cover life, property and liability risks. EIC provides its service by giving a paramount importance to its customer's safety and satisfaction; by

making use of the right mix of expertise, the most up to dated ICT and cost effective strategies (www.eic.com).

The company is serving its client with deep industry expertise, strong financial capital, and proven experience. Currently the total asset of the company reached 3.2B Ethiopian Birr and its total market share is around 45.5%. (Medin Megazin 2016). EIC mobilizes the right people, skills, alliances, and technologies to satisfy its steamed customer. It uses insurance software called INSIS (INSurance Information System) and accounting system called AGRESSO. On top of this all its branches are networked.

Currently more than 1,308 employees are working in this company. Around 61% or 798 are male and 39% or 510 are female. Educational back ground of the employee is diversified it reach starting from certificate to second degree. The company gives special attention to its human capital. It sponsors international insurance certification and business certification trainings like Charted Insurance Institute (CII), Life Office Management Association (LOMA), Actuarial science and Charted Accountant (ACCA) to its employee (Medin Magazine, 2016).

Its head quarter is located around Legehar in Addis Ababa. The company has over 70 branches through the country. It classifies its branch as District A, District B, Branch I and Branch II.EIC provides more than 45 types of insurance cove both in Non-life (property insurance), life insurance and liability insurance (www.eic.com).

1.2 Statement of the Problem

Many KM literatures conducted in different country and different organization (Daifallah Olaima et al., 2015; Eleni Karidou, 2008; Elizabeth Njeri, 2013; Festus M Epetimehin**,** 2011; Fattahiyan et al., 2013; Gold et al., 2001; Ho, 2009; JM Mbuvi, 2014; Kenneth Chukwujioke et al., 2013; Mills and Smith,2011; Mohammed Tubigi and Sarmad, 2012; Riungu Aggrey 2015; Choi and Lee, 2003; Joel Chigada, 2014) show the impact and the relationship of knowledge management on organizational performance. However, such research works are rarely conducted in Ethiopians. Also, despite the identified benefits of knowledge management, limited research has been conducted in insurance industry in Ethiopia. Similarly local earlier research works revolve around single element of knowledge management rather than holistic or integrative view of impact of knowledge management on organizational performance.

Beside high business competition in insurance industry in Ethiopia, this industry characterized by high cost of operation (like high claim cost), less productivity and innovation, weak technology support, high employee turnover, low investment in the economy. In addition to local competition EIC facing strong competition from international market since it is struggling to be 'world class Insurer in 2025'.

One of the objectives of insurance company is saving hard currency by increasing their risk accepting efficiency and claim handling procedure. Sometimes due to weak and inappropriate underwriting methods local insurance business may move to foreign insurer companies which are located in Kenya, South Africa, and other European country like Germany. This costs the country huge amount of hard currency.

Like any other business organization EIC, struggling from knowledge loss resulting from employee depart the organization. Experienced employees leave the company due to turnover, retirement, and death/disability. The cost of these losses could be enormous for EIC. Critical knowledge is going out of the company as experienced employee leave the company. Sometimes, the departure of a single experienced employee could cost EIC a lot due to loss of critical operational, marketing or financial knowledge. Most employees which leave EIC join the private competitor company. Therefore they take the business process of the company and implement it in their private company. More over the departing employee takes the client with him/her. There are a lot of experiences in EIC when key employee leave the company and join other competitors insurance companies take EIC's client with them. This is huge problem for business organization in general and insurance industry in particular like EIC.

Currently, insurance firm like EIC is weak business organization in acquiring knowledge from external source. Most employees who are hired in the company are fresh graduate and therefore they have less knowledge about the insurance market. The company incur additional training cost, administrative cost (like screening the trainee officer, giving exam etc) advertisement cost, cost until to the newly hired trainee officer have experience about the business process like client handling, underwriting insurance business, claim handling, risk forecasting etc, lost productivity costs (the new employee will go through a few stages before becoming fully productive, his/her supervisor will spend time guiding him/her and correcting his potential mistakes).

Thus one of the issues in insurance industry like EIC is how to acquire business knowledge from external sources that help in decreasing cost and maximizing organizational profit. Otherwise EIC is considered as training institution by the private insurance industry rather than their competitor if this issue is not address properly.

One of the criteria for client satisfaction is frequent new product development. Most products in insurance industry including EIC are “reinventing the wheel again and again”. The products are those products which are available starting from the establishment of the company. The company faces less creativity about new product. Document evidence from the company shows that on average EIC produce single product every 3-4 years which is not sufficient to satisfy its customers need. Thus knowledge creation should be addressed to enhance organizational performance.

Even though EIC supports its insurance system with the help of technology, it is far from the required level to satisfy its clients and employee. In today business world technologies are the backbone of the organization. Proper utilization and implementation of technology enhance organizational performance and it is plus for business organization like EIC over the competitor. The issue of technology is not properly addressed in EIC for the better organizational performance.

In general the impact of knowledge management elements i.e organizational structure, organizational culture, human factor, technology, knowledge creation, knowledge application, knowledge acquisition, and knowledge sharing on organizational performance are not properly handled and addressed in EIC. More over no research work is done in this line.

Thus considering knowledge management and addressing the issue related to KM critical for business organization like EIC to stay in the market. Recent data from EIC shows that its market share is declining from year to year. Therefore one of the remedy for the above problems in EIC is to deal with knowledge management to evaluate the impact on its organizational performance and maximize its resources specifically knowledge for better organizational performance.

Thus this study seeks to identify and to have holistic view of impact of knowledge management on organizational performance in Ethiopian Insurance industry in general and In Ethiopian Insurance Corporation in particular.

1.3 Objective of the study

1.3.1 General objective

The main objective of this study is to identify the impact of knowledge management on organizational performance.

1.3.2 Specific Objective

Under the umbrella of the general objective this research work tries to address the following specific objectives

- To find out the impact of organizational culture on EIC's knowledge enabler capability
- To find out the impact of organizational structure on EIC's knowledge enabler capability
- To find out the impact of technology on EIC's knowledge enabler capability
- To find out the impact of human factor on EIC's knowledge enabler capability
- To find out the impact of knowledge creation on EIC's knowledge process capability
- To find out the impact of knowledge application on EIC's knowledge process capability
- To find out the impact of knowledge acquisition on EIC's knowledge process capability
- To find out the impact of knowledge sharing on EIC's knowledge process capability.

1.4 Research questions

The research question of this study is:

1) What impact does knowledge enabler capability has on knowledge management capability in the EIC?
2) What impact does knowledge process capability has on knowledge management capability in the EIC?
3) What impact does knowledge management capability has on organizational performance in EIC?

1.5 Scope and Limitation of the study

The scope and limitations of the study are discussed below. The first section discusses the scope, followed by limitations in the second section.

1.5.1 Scope

This study aimed at investigating the impact of knowledge management on organizational performance. The research was conducted in government insurance company. The company classify its office as District A, District B, Branch I and Branch II.EIC has 6 Districts A's. All of these districts A located inside Addis Ababa. There are 8 Districts B's. Only one of the districts B found in Addis Ababa. The remaining located to other part of the country. The company has 12 Branch I of which only 4 located in Addis Ababa. Still the company has 27 branches II; All but 3 found outside Addis Ababa. In general the company has 53 offices. Out of these 14 located in Addis Ababa and the other 39 located outside Addis Ababa. The scope of this research was Head office, District A and District B.

1.5.2 Limitation

There are many aspects within this research area and due to time and budget limitation the researcher only focus on some of them. Due to the above listed constraints the study had been limited to government insurance company i.e. the researcher excluded private insurance companies. Moreover the study was focused on only clerical staff of EIC which might possibly understand the research question of this thesis since they are degree holder and perform operational activity of the company. Furthermore the researcher excluded some of the elements of knowledge management like knowledge storage, trust, incentive which might also impact organizational performance since such aspects have already been widely researched in other studies.

1.6 Significance of the study

The study results provide managers with new insights that can use knowledge management as strategic positions for better organizational performance and competitive advantage. Since business organizations invest a lot on their knowledge management enables (organizational culture, organizational structure, employee and technology) as well as on their knowledge process capability (knowledge creation, knowledge acquisition, knowledge application and knowledge sharing) for a better and effective organizational performance.

A better understanding of elements of knowledge management enablers and knowledge management process on organizational performance may increase their (managers /the company) ability to make wise choices regarding how these resources are used and managed. These decisions are not only important for better organizational performance locally but also from global perspective. As the

global economy moves to more knowledge–based one with the advance of technology and telecommunication networks, business organization like EIC (which have vision to be world class insurer in 2025) should give due attention for knowledge management.

Institutional knowledge is lost when key people leave the company. New or existing employees may not benefit from their experience and knowledge, and may find it difficult to perform at the same level of effectiveness and efficiency. Capturing, sharing and creating knowledge inside an organization seems to be one of the main purposes of a knowledge management. Thus using the outcome of this research mangers and business organization opt for way to retain knowledge within the organization. In other words give attention when employee leave, the knowledge doesn't leave with them.

This work tries to address the impact of KM in general and knowledge acquisition, knowledge application, knowledge creation, knowledge sharing, organizational culture, organizational structure, human factor and technology in specific on organizational performance in Ethiopian Insurance Corporation (EIC). Hence for the company managers this thesis used as supportive resource for achieving organizational objective and taking competitive advantage in using knowledge management as key weapon. Even if this research work is on government insurance company, the outcome could be used for other private insurance company to evaluating and gain from knowledge management.

Beside these, this research could be used as reference and starting point for researcher to take research in relation to knowledge management in financial industry specifically in insurance industry. The outcomes should also address gaps in the literature regarding lack of large scale empirical evidence in local research work linking knowledge management to organizational performance in business organization.

1.7 Ethical considerations

In every research the ethical implications of the study for both the researcher and the respondents must be considered. According to Sekaran (2003), ethical issues are related to how respondents are treated, and to how confidential information is safeguarded during the research process. The current researcher collected data in two ways. The first way involved a survey, in which respondents were required to complete questionnaires, whereas the second way is document analysis and observation

is involved. Therefore ethical consideration was applied in both stages. In both stages permission was obtained from HRD (Human Resources Directorate) to collect data from employees as we as from departments. To ensure the anonymity of the respondents, the questionnaire doesn't have informative indicators like name of the respondent. During the qualitative phase, a number of possible key informants were approached, of whom some refused to participate for various reasons, including the desire not to disclose certain information about their organizations. Those who accepted were informed that their responses would be kept as anonymous as possible, and that their names would not be revealed in the final report. In the presentation of the results of the study, the responses have been kept anonymous, in order to uphold the ethical position which had been agreed on with the respondents. In addition, the reporting was objective, based on the findings obtained.

1.8 Thesis Structure

This section outlines the structure of the present thesis. This thesis is organized into seven chapters. The following are brief explanations of each chapter.

Chapter 1: This introductory chapter describes the background, history of insurance worldwide and in Ethiopia, about EIC, the objectives of the study, about statement of the problem, about significance of the study as well as the scope, limitations of the research and ethical consideration. It also outlines the way that the research is organized and divided into chapters.

Chapter 2: This chapter consists of the review of the literature that discusses about definition and types of knowledge, overview of knowledge managements like definition of KM, drivers of KM, about KM process (knowledge creation, knowledge acquisition, knowledge application and knowledge sharing), about KM enablers (organizational culture, organizational structure, human factor, technology), about organizational performance, the impact of KM enablers and KM process on organizational performance according to various studies. Furthermore, it gives discussion on Hypothesis which are developed for this research to be tested. Finally it presents chapter summary.

Chapter 3: This chapter presents about the research model and hypothesis development. The chapter also presents hypothesis of the thesis with literature support.

Chapter 4: This chapter explains research design and methodology. Describe the research philosophy and research design employed in this study. The chapter also discuss about population

and sampling techniques that is implemented in this theses. Discussion about questionnaire development, data collection method and data analysis procedure also presented in this chapter. Finally, summary of the chapter presented.

Chapter 5: This chapter discusses the data analysis and findings. It includes preliminary evaluation like data screening and demographic data of the respondent. The chapter also presents evaluation of measurement and structural model that means the reliability and validity tests presented, significance test, R^2 , Q^2 and F^2. Finally, hypotheses testing and summary of the chapter presented.

Chapter 6: discusses the findings from Chapter 5. The research questions are answered and the eight hypotheses tested are discussed by comparing and contrasting results with the existing literature. Finally chapter summary presented.

Chapter 7: This chapter provides the conclusion and contributions from the research findings. Following this, recommendations of the thesis will be presented. Finally, limitations of the study are outlined and directions for future research are proposed.

CHAPTER TWO

Literature Review

2. 1 Introduction

The literature which is reviewed in the present chapter is about the impact or relationship of knowledge management on organizational performance. More specifically both knowledge management process such as knowledge creation, knowledge acquisition, knowledge sharing ,knowledge application and knowledge management enablers like organizational structure, organizational culture, human or people factor and technology with organizational performance.

Firstly, an overview of the literature which pertains to the conceptual understanding of knowledge management, in terms of its definition, characteristics and types is presented. Such a presentation provides a basis for understanding of knowledge itself. Secondly, an overview of the literature which pertains to the conceptual understanding of knowledge management, in terms of its definition, drivers, process and enabler is presented. Again this section provides comprehensive understanding about knowledge management.

Thirdly, the discussion about organizational performance will be presented. It provides conceptual understanding about organizational performance. Fourthly, the literature which covers the linkages between knowledge management (both process and enablers) with organizational performance will be addressed. More discussion will be presented in this section including empirical review.

2.2. Knowledge Management

Twenty one century highlighted by the shift of economy from natural resource (tangible asset) to knowledge base economy (intangible asset). The economy is moved from industrial to information technology (Watson ,2003; Murray Jennex, 2008).Hence most business organization give more attention for knowledge management to utilize their resources (human capita) and optimize their organizational performance (Halimah, 2012)**.**

In fact Knowledge management is not a new concept it were there in human history (Brelade and Harman, 2006). The old human civilities and scholars from these civilizations like Roma, Greece, Great Britain and Egypt contribute for the growth and development of knowledge management

(Watson, 2003). It is through time that we reached to the so called "knowledge- economy" (Maier, 2007). For instance according to Jay Liebowitz (2011) states that in the United States Of America Up to 60% of the gross national product (GNP) created from information innovation company not at all like physical products and service organizations. He advance express that this percentage will increasing drastically in the future.

The Forbes Magazine (the magazine which list the world wealthiest/richest people) list Bill Get As number one richest man in the world at the time of this research. His source of wealth is knowledge i.e Microsoft Company. Most company which are listed as top ten on this magazine are knowledge intensive company like Amazon, Oracle, Cisco, Google, Face book and Telecom company (Watson ,2003). Therefore knowledge is a key economic resource unlike other resources like labor, raw material, land etc that need serious attention and management. And also knowledge companies take over the economy than the other companies.

One of the recognizing highlight of this day business sector is; exceptional rivalry among business organizations, turbulent and vibrant business environment (Antonie Botha et al., 2008). Most literature depict that knowledge is one of competitive advantage (Watson, 2003; Habtamu, 2011; Jay Liebowitz, 2011; Joel Chigada, 2014). Organization expected to know "what they know "about the market and the business activity around the globe (Bajracharya, 2013). In addition knowing what they have; it is also expected to know how to utilize it to maximize their objective. From this we can easily understand that an organization which gives more attention to its asset i.e "human capital and associated intellectual capitals" are more innovative and eventually can get competitive advantage (Jay Liebowitz, 2011)**.**

Hence today most organization definitely changed their working culture, process and resources utilization by realizing that skills and experience of their employee is a key factor their success (Watson ,2003).The new way of looking economy; ''Knowledge–base economy" forced most organization to change their view toward knowledge. They consider it as a key asset for the success of the organization .This day any organization which is out of knowledge management spectrum will not successful for long period of time .It will collapse with in short period.

Knowledge represents the key concept to give an explanation for the fast growing speed of the transformation of social lifestyles and currently business organization how they operate (Maier,

2007). In this knowledge era our world becomes narrow. Physical boundaries are not reasons for the follow of culture from one country to other. We can see our world on our hand using different technologies. The transformation of society into a knowledge society has changed valuation of knowledge work dramatically (Maier, 2007).

Employee in this knowledge era characterized by: well-educated or knowledgeable, innovative, strong business knowledge, high critical thinking, self-inspired and called "Knowledge worker" (Watson, 2003). According to Brelade and Harman (2006) "Knowledge workers" are people whose basic 'tools of the trade' are their knowledge and experience. The relationship with their organization also transformed. Today "Carrot and stick approach" is not working in most transformed business organization. Consequently, businesses ought to not be seen from an industrial, however from an expertise attitude (Ronald, 2007).

Maier (2007) name this day employee as "Knowledge worker". He discussed these employee and their characteristics as "Knowledge work can be characterized by a high degree of variety and exceptions and requires a high level of skill and expertise. Knowledge work requires that knowledge is continuously revised, and considered permanently improvable, not as "truth", but as a resource. Knowledge workers gain more and more influence in organizations because businesses focus knowledge and their holders as key competitive factors. The fluidity of skilled and experienced employee from organization to organization increased i.e "Company man" Watson (2003) becomes an end. Knowledge workers are increasingly supported by advanced information and communication technology (ICT) systems" (Maier, 2007).

Knowledge intensive organizations like telecommunications, automotives, banks, insurances, pharmaceutical or bio-technology firms and software organization are leading world economy (Ronald Maier, 2007). These business organizations as they depend intensely on the ability of their (individual) intellectual asset and organizational knowledge. These business organizations standardize their business process and they have organized working systems. Almost all their core business areas are supported by knowledge management tools and techniques which brings high customer satisfaction which is the main goal of any business organization (Maier, 2007).

From this notion of knowledge economy (Watson, 2003) eventually emerged the idea of managing knowledge and intellectual capital. The modern world characterized by rapid change (Antonie Botha

et al., 2008). This change force the business organization transform them salve to survive in this turbulent change (Botha et al., 2008). Business organization transform in different ways. For example the way business is conducted, the way employees contribute to the organization, the way organization communicates internally as well as external. More over organization lookup to ward intellectual capital is changed.

These organizational transformations give more emphasis to knowledge management. Unlike other management area knowledge management is complex field of study. This is because; Managing knowledge is a difficult task. We are trying to manage what can't be managed. This make knowledge management is more complex and need further study.

There has been as little consensus about how to define knowledge management (KM) as there is about defining knowledge itself (Brelade and Harman, 2006). There is no single definition which all scholar follow (Turyasingura, 2011).It depends on the view of the scholar (Watson, 2003). In general; however, the phrase refers to strategies and structures for maximizing the return on intellectual and information resources. I have mentioned some of the definition as follow:-

De Jarnett define KM is "knowledge creation followed by interpretation, knowledge dissemination and use, and knowledge retention and refinement''. He included in his definition the element in knowledge management. KM should have a fertile ground for knowledge creation. On the other hand knowledge management involves the acquisition, storage, retrieval, application, generation, and review of the knowledge assets of an organization in a controlled way (Watson, 2003).

More comprehensive definition given by Maier (2007) as "Knowledge management is defined as the management function responsible for the regular selection, implementation and evaluation of goal-oriented knowledge strategies that aim at improving an organization's way of handling knowledge internal and external to the organization in order to improve organizational performance. The implementation of knowledge strategies comprises all person-oriented, organizational and technological instruments suitable to dynamically optimize the organization-wide level of competencies, education and ability to learn of the members of the organization as well as to develop collective intelligence".

More over Milton cited by Maier (2007) define it as" Knowledge Management is about systematically making use of the knowledge in the organization, and applying it to your business

problem; tapping into 'What your company knows' to help you deliver your business results. It consists of never making the same mistake once (let along twice), and making every decision in the light of the full knowledge base of the company. The management of knowledge needs to be part of your business practices, just like the management of finance and the management of safety."

2.3 Definition of Knowledge

"The power of thinking, is knowing what not to think about" (Antonie Bothaet al (2008)

Knowledge is the most valuable and critical resources for an organization (Nonaka & Takeuchi, 1995). In the old day Plato define knowledge with combination of three terms as "Justified True belief". For Plato knowledge contains three vital terms .i.e. "Justified"," True" and "Belief" (Wilberforce,2011). He views these three terms separately. For him everything which is true or genuine is not knowledge. To consider something as knowledge it needs justification or further explanation. From Plato's view we can understand that knowledge need to be based on evidence or explanation to proof that's working or not. On the other hand, even those we justified it clear again its' " truthfulness" is also important to consider it as knowledge. Moreover; the knowledge holder needs to "belief" or convince on the truthfulness for him/her self. Therefore for Plato to consider something as knowledge it fulfill the above important terms.

However due to its nature defining knowledge is not as such an easy challenge. Different scholar defines knowledge in different ways and from different point of view. As a result, there is no universally agreed definition. For this thesis the following operation definition for knowledge is used. Knowledge is the content of understandings and action patterns that govern sense making, decision making, execution, and monitoring. Knowledge consists of facts, perspectives and concepts, mental reference models, truths and beliefs, judgments and expectations, methodologies and know-how which can be represented in many types and forms.

More comprehensive definition of knowledge is given by Davenport and Prusak (1998: 5) as "a fluid mix of framed experience, values, contextual information, and expert in- sight that provides a frame work for evaluating and incorporations new experiences and information. It originates and is applied in the minds of knower. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, process, practices, and norms". These definitions include both explicit and tacit side of knowledge.

From the above definition Davenport and Prusak (1998) consider organization as “Knowledge Market” i.e place where knowledge exchange takes place. From this knowledge market people in search of knowledge to clear up a problem or individuals looking for knowledge to solve an issue the authors consider them as “knowledge buyers”. On the other hand “Knowledge sellers” are peoples having tremendous knowledge about a system or subject, and “Knowledge Brokers “ are agents who make connections between those who want knowledge and those who have it or individuals who make associations between individuals who need knowledge and the individuals who have it. Knowledge is being appeared as a valuable commodity this is embedded in items especially hi-tech products and in human mind (Dalkir, 2005).

2.4 Types /categories of knowledge

Knowledge exists in different form (Watson, 2003; Habtamu, 2011; Joel Chigada, 2014). It can be exists in tacit, explicit or implicit form (Chris Kimble, 2013). In addition to this the holder or the owner of these knowledge could be individual, groups/teams, companies, or in general the society itself. Therefore understanding the form and thereby the ability to distinguish among them is a vital step for expertise in knowledge management (KM).

Depending on different criteria and/or scholars view literature classified knowledge in to various types (Chen, 2007). The classification mainly depends on “the purpose of investigation” (Habtamu, 2011). That means where does the knowledge reside or found. On the other hand still who own the knowledge like organization or individual can be used as reference to classify knowledge. In any ways most literature classifies it as tacit knowledge and explicit knowledge (Nonaka, 1994).

2.4.1 Explicit Knowledge

It is a knowledge that was already expressed, codified, articulated and recorded in different forms like texts, diagrams, tables, material specifications, product specifications, and so on (Bajracharya ,2013).It can be easily transmitted and stored to others. Cambridge dictionaries define it as “knowledge that can be expressed in words, numbers, and symbols and stored in books, computers, etc. Explicit knowledge can be articulated and easily communicated between individuals and organizations”.

Brelade and Harman (2006) define explicit knowledge as “a codified information (knowledge) that can be shared, communicated and transferred from one place to another in systematic or structured ways (for example in a written document). The explicit knowledge in an organization includes the contents of databases, operating procedures, documented processes etc”.

Explicit knowledge is a type of knowledge that is articulated in natural language and can be share (Shimels, 2013). According to Habtamu (2011) this kind of knowledge is codified and that can be transmitted in to formal language (Kimble, 2013). This kind of knowledge is caught in textual content, tables, outline, diagram, etc (Halimah, 2012).There for explicit knowledge is know-how that may be defined virtually with the aid of character, companies or business enterprise in association in distinctive structure. It exists outside the human mind in file or recorded digital or non-digital material.

Botha et al. (2008) highlighted that explicit knowledge is characterized as documented in the form of books white papers, database and easy to share and communicate which are already separated from both individuals and social values. Knowledge from the explicit perspective he added “is regarded as a discrete entity— something we possess and can be made explicit”. It is further described explicit knowledge by saying that “it is formal knowledge that is easy to transmit between individuals and groups and it is usually in the form of mathematical formulas, rules, and specification…” (Nonaka and Takeuchi, 1995).

Explicit knowledge mostly they are technical academic data or information that is described in formal language, like “manuals, mathematical expressions, copyright and patents” (Nonaka and Takeuchi, 1995). This coded knowledge or “know how ” shared among groups/team, individuals , organization or any person via different methods like printed document, electronic method or can be stored anyplace like library for further/re- use.

Explicit knowledge can be obtained through formal education process or in any structured way of academic process in our life. Therefore it can be stored or codified so that we can move it from place to place and can be used other time as reference to solve similar problem or shared for new staff to use it.

2.4.2Tacit Knowledge

"We know more than we can tell" Polanyi, 1966

One of the most discussed areas in knowledge management is tacit knowledge (Brelade and Harman, 2006). Different scholars have different view about it. Fundamentally tacit knowledge is different from explicit knowledge due to its nature (Nonaka and Takeuchi, 1995; Polanyi, 1966/1997; Joel Chigada ,2014). Cambridge dictionary define tacit knowledge as "knowledge that you do not get from being taught, or from books, etc. but get from personal experience, for example when working in a particular organization". Tacit knowledge is contrasted with explicit knowledge. Very loosely, tacit knowledge collects all those things that we know how to do but perhaps do not know how to explain (at least symbolically) (Habtamu , 2011).

The more comprehensive definition given by Business dictionary as "Unwritten, unspoken, and hidden vast storehouse of knowledge held by practically every normal human being, based on his or her emotions, experiences, insights, intuition, observations and internalized information. Tacit knowledge is integral to the entirety of a person's consciousness, is acquired largely through association with other people, and requires joint or shared activities to be imparted from on to another. Like the submerged part of an iceberg it constitutes the bulk of what one knows, and forms the underlying framework that makes explicit knowledge possible".

The term is also described by Brelade and Harman (2006) as tacit knowledge is a type of knowledge that is not explicitly codified or recorded and it is personal knowledge .More over it is embedded to peoples experience and their "own beliefs and perspective". Tacit knowledge it is related to our experience whether it is social or physical. Polanyi, (1966/1997), It is knowledge that "the knowledge that we have without knowing we know it", Polanyi says "We don't know what we know". From this tacit knowledge is installed inside the mankind's mind starting from birth (Chris Kimble, 2013). More over; we don't be aware that we've such know-how in our mined. However while we face a problem or get a threat all at once we use our hidden or tacit know-how to solve that problem. It is a form of knowledge that is "silent" until we use it.

Still scholars argue that about tacit knowledge "once we know we know it, it becomes harder to know how we know what we know" (Polanyi, 1966/1997). The argument right here suggests that how much complex the tacit knowledge is. Tacit knowledge is "rooted" inside our action, procedures, routines, commitment, ideas, values, and emotion (Nonaka ,1994; Nonaka and

Takeuchi,1995).Tacit knowledge embedded inside individual mind thoughts consequently its accessibility is in some way hard not like explicit knowledge.

2.4.3Implicit Knowledge

This kind of knowledge can be expressed like explicit knowledge but not recorded in the form of document. It is understood by observing a behavior or a performance of the individual, organization or the society at whole (Bajracharya, 2013). This knowledge can be extracted by a skilled individual who knows how to identify a knowledge that is not articulated or expressed. Moreover we obtain it informally way like conversation.

The following table summarizes some of the key point about Explicit, Tacit and Implicit knowledge.

Table 2.1 Types of Knowledge Source: Steve Barth

Table 2.1 Types of Knowledge Source: Steve Barth

Knowledge Types and Properties			
Key info and intellectual assets	What is their value?	How to leverage?	Who owns the asset?
Explicit • Transaction data •Work products (docs) • Research notes, etc. •E-mail and correspondence •Patents and intellectual property	Valuable	Collect	Organization
Tacit • Experience • Expertise • Relationships • Reputation	Invaluable	Connect	Individual
Implicit • Conversations • Trust • Values	Intangible	Cultivate	Community

2.4.4 Individual Vs Organizational Knowledge

Individual knowledge is a type of knowledge that is help by employee of the organization as tacit or explicit knowledge (Arjan ten Cate, 2006). This knowledge adds value to the product and service which is provide by the organization. Individual knowledge paired with that of other individuals in an organization. For an organization to maximize the benefit of its knowledge asset it is reliant on knowledge being shared between employees. Without the involvement of employees sharing their individual knowledge the ability of the organization to maximize its key knowledge asset is greatly reduced (Arjan ten Cate, 2006).

Hareya (2011) highlighted that Individual knowledge defines as "that part of an organization's knowledge which resides in the brains and bodily skill of the individual". The success of business organization mainly depends on the collective knowledge of its employee. For each innovation the contribution of individual is very high. So Individuals are the bases just like our human teeth or bricks in the house .Each and every single tooth are the building block of the big one. So their collective sum brings the big picture i.e organizational knowledge.

On the other hand individuals share their knowledge with other individual and or groups to make up organizational expertise (Shimels, 2013). Organization knowledge consists of its current and past employee's tacit and explicit knowledge (Arjan ten Cate, 2006). This day organization is not a dormant entity rather it is active. An organization in the Knowledge age is one that learns, remembers, and acts based on the best available information, knowledge, and know-how. The above trends bring planned and systematic technique to cultivate and share company's knowledge. Similarly business organization need to use individual knowledge to be successful in today's tough organizational environment, and need to learn from their past errors and not reinvent the wheel over and over.

Organizational knowledge is not meant to replace individual knowledge but to supplement it (Akinniyi A. Adeleke, 2012). Organizational knowledge makes individual knowledge more potent, stronger, more coherent, and more comprehensively useful. In general "Knowledge management represents a deliberate and systematic approach to ensure the full utilization of the organization's knowledge base, coupled with the potential of individual skills, competencies, thoughts, innovations, and ideas to create a more efficient and effective organization" (Akinniyi A. Adeleke, 2012).

2.5 Driver behind Knowledge management

The important factors that are driving the need for KM are organizational survival, competitive differentiation, globalization effects and aging workforce, complex organizational interlacing, advancement in technology etc. Business organization wants to raise their managerial capabilities regarding to knowledge and, more generally, to improve the way the organization handles both tacit and explicit knowledge (Hareya, 2011). It has been argued by Jennex (2008) that we need KM to assist organizations to identify, capture, store, and retrieve their intellectual and critical knowledge and help organizations deal with changing business dynamicity. Likewise we need KM to deal with the "transience" of knowledge workers. We need KM more over to leverage their intellectual asset and meet their competitive advantage and increase innovation (Brelade and Harman, 2006; Liebowitz, 2011). Therefore, KM has recently received a lot of attention.

The major drivers behind today's increased interest in and application of KM lie in the following key areas: (Dalkir, 2005; Maier, 2007; Brelade and Harman, 2006).

Globalization of businesses: Globalization forced business organization to find effective tools and methods for acquiring, storing, and sharing knowledge over many business process. This global effect changes the world wide business activity and the way business organization performs (Dalkir, 2005; Maier, 2007; Brelade and Harman, 2006). The activity of business organization not limited within single country. They work beyond country or continent. They compete globally not only locally (Botha et al., 2008). Therefore to think globally and work locally is an important idea for this dynamic and competitive global and local market. To be successful and achieve their goal business organizations expect to manage their knowledge without any doubt. Therefore, globalization has created an urgent need for organizations to be able to manage knowledge across countries and continents.

Fragmentation of knowledge: Unfortunately knowledge is not found only in singe individual or organization. Knowledge is spread over numerous experts, among organizational units, across organizations and throughout businesses and does no longer stop at national borders. Researchers have to cooperate worldwide in order to stay competitive, especially in dynamic fields including bio-technology, computer science or telecommunications.

For business organization they need ways to encourage sharing of knowledge with in the organizational unit or outside this unite to have flow of knowledge among the expertise of the organization. Therefore to promote more conducive environment for employee of the organization or expertise outside the organization KM is important (Botha et al., 2008; Akinniyi A. Adeleke, 2012).

Complex organizational interlacing: Business Organization makes different kinds of cooperation. The aim of this co-operation is to maximize profit and to get new market for their product and service. The cooperation is based on mutual benefit and understanding. But the connection is not simple connection and occur with is a single day. It is based on knowledge and very detailed assessment. For example Ethiopian insurance corporation (EIC) is members of COMESA (Common Market For Eastern and Southern Africa),AIO (Africa Insurance Organization), FAAIR (Federation of Afro-Asian Insurance & Reinsurers),OESAI (Organization of Eastern and Southern Africa Insurers) (Medin Magazine ,2016).The member country provide similar insurance cover under the umbrella of this association on selected insurance cover without any boarder limitation. Client who purchases insurance cover for his/her vehicle can move free in members' country without purchasing another cover. Therefore to create such association KM is very important and organization forced to have it (Maier, 2007).

Loss of intellectual work force: For any business organization its employees are the back bone. This day no organization can't be successful or achieve its objective without proper handling of its employee. In globalization employees are highly mobile. Employees no longer expect to spend entire work life with the same organization like old days (Dalkir, 2005). Employees are the source of tacit and explicit knowledge. Employee may leave the organization due to many reasons like retirement, aging, death, disability. In addition to these they may leave the organization for better salary, job satisfaction, recognition, working environment etc. Due to the above reasons knowledge is going out from business organization. This intellectual capital needs to be captured so that future generations in these work environments do not have to repeat mistakes and reinvent knowledge**.** Epetimehin and Ekundayo (2011) cited by Bajracharya (2013) reveal that KM efforts help organizations to share valuable organizational insights, to reduce redundant work, to avoid reinventing the wheel, to reduce training time for employees, to retain intellectual capital as employees' turnover in an organization and to adapt to changing environments and

markets. KM organizations that are competitively conscious therefore need to effectively implement KM systems.

Technological advances /communication technologies Advancement:

The world that we live in today becomes narrow due to the advancement of technology (Rao, 2005; Tuomi, 1999; Dalkir, 2005). Thanks to these technologies with in a fraction of second we can know what is happening globally if it were before two or three decades it may take several days. We are more connected and easy movement of employee. According to Maier (2007) "Advances in information technology not only have made connectivity ubiquitous but have radically changed expectations. We are expected to be "on" at all times, and the turnaround time in responding is now measured in minutes, not weeks". Currently Companies support their business activity by sophisticated and more advanced ICT tools and system (Rao, 2005; Maier, 2007). This advancement increasing innovation in products processes and services (Brelade and Harman, 2006). Therefore this advancement in technology forced business organization into KM era. To cop up with this advancement they need to manage their knowledge.

2.6 Knowledge Process Capability

According to Taejun Cho (2011) knowledge process capability is crucial to leverage knowledge within the organization, obtain and maintain knowledge and support employee for effective use of knowledge. Generally, there are a lot of approaches that view KM as a life cycle of knowledge tasks or a complex organizational "function" that designs, implements and evaluates a set of knowledge management tasks. The purpose of knowledge management is to enhance these tasks in the sense of organizational effectiveness and performance. There are many knowledge related tasks or processes are listed in different literature according to Maier, (2007), Brelade and Harman (2006) the major process discussed below.

2.6.1 Knowledge creation

To full fill organization knowledge gap knowledge acquisition is not the only solution. Rather side by side business organization undergo knowledge creation .In this stage business organization create new knowledge, improved already existing system for better production (Habtamu , 2011). They facilitate the environment for their employee to use internal intellectual asset as input. In addition to this they use organizational experience and knowledge to have new way of production which help to maximize their goal (Maier, 2007; Nonaka, 1994).

2.6.2Knowledge acquisition

As highlighted by Chen(2007) knowledge acquisition seeking and acquiring knowledge from external sources and creating new knowledge by combining it with internal know-how for better product and service. Business organization structure and organize knowledge which are gained from different source capability to identify, acquire and accumulate knowledge whether internal or external that is essential to its business process. (Habtamu, 2011; Fattahiyan et al., 2013). And also the source could be human like expertise from outside. More over it could be non-human like document, knowledge database, manuals etc. Knowledge is acquired from outside the organization though hiring experts, by participating in knowledge related event like conferences, workshops, meetings, fairs, exhibitions etc (Maier, 2007). Knowledge acquisition extends organizational knowledge and insures knowledge continuity in business organization by passing knowledge with employee (Chen, 2007; Dalkir, 2005).

2.6.3Knowledge Sharing

Knowledge sharing or knowledge dissemination refers to the act of distributing both newly created or acquired knowledge with different level or group of the organization (Dalkir, 2005). In the similar argument of Maier (2007) knowledge sharing involve publishing knowledge that can then be distributed to knowledge seekers. Knowledge publication involves the codification of knowledge, i.e., in a general sense, putting knowledge in various forms that can be stored and thus retained, leveraged and transferred**.** In Nonaka's terms knowledge publication is a form of articulation or externalization (Nonaka, 1994**;** Nonaka, and Takeuchi, 1995) this can be documentation and formalization of knowledge using AI or more traditional technologies, but also structuring and organizing it (Maier,2007).

2.6.4 Knowledge application

Knowledge application refers to the utilization of both tacit and explicit knowledge for better organizational performance. Bhatt (2001) cited by Fattahiyan et al. (2013) stated that: ''knowledge application means making knowledge more active and relevant for the organization in creating value''. The ultimate goal of any KM process is to apply and utilized knowledge created and acquired from different source (Nonaka and Takeuchi, 1995). For organizations to create value they need to apply knowledge to their products and services by various means such as repackaging

available knowledge, training and motivating its people to think creatively, and utilizing people's understanding of the company's processes, products and services (Fattahiyan et al.,2013).

2.7 Knowledge Enabler Capability

KME are an important factor that increases the efficiency and effectiveness of the organization in using its knowledge management process for better organizational performance (Taejun Cho, 2011). According to many research (Gold, Malhotra and Segars, 2001; Taejun Cho, 2011) works the major KME includes organizational culture, organizational structure, people and IT infrastructure.

2.7.1Organizational Culture

Organizational culture relates to organizational norms that promote to access intellectual asset of the organization. It has been argued by Cho (2011) and Akinniyi A. Adeleke (2012) that any business organization has its own organizational culture that influences the way its employee work. In general organizational knowledge enabling factors facilitate willingness between employee to share their idea, experience to create new product and service, acquire and modify existing knowledge (Gold, and Segars, 2001). Organizational culture is a collection of written or unwritten rules, principles that guide organizational behavior (Chen, 2007). It encourage KM process like creation, acquisition, sharing, utilization, storage of knowledge support learning from mistakes "Not to invent the wheel again and again", allowing time for reflection, and recognition for new knowledge created (Davenport and Prusak, 1998).

Organizational culture defined as "a shared, common frame of reference, i.e. it is largely taken for granted and is shared by some significant portion of members; acquired and governs, i.e. it is socially learned and transmitted by members and provides them with rules for their organizational behavior; a common psychology, i.e. it denotes the organization's uniqueness and contributes to its identity; enduring over time, i.e. it can be found in any fairly stable social unit of any size, as long as it has a reasonable history; symbolic, i.e. it is manifested in observables such as language, behavior and things to which are attributed meanings; at its core, typically invisible and determinant, i.e. it is ultimately comprised of a configuration of deeply buried values and assumptions; is modifiable, but not easily so" (Lundberg, 1990, p.19 cited by El-Sawalhi and Nazmi , 2015).

In the argument of Mills and Smith (2011) organizational culture influences organizational performance by affecting the KM process. It facilitates the retention and creation new knowledge

which help to create new product and service. Moreover it creates fertile ground for individual and/or team/group knowledge sharing. In addition it creates conducive frame work how knowledge is acquired and distributed within the organization.

It also highlighted by Chong et al., (2000)cited by Cho (2011) that organizational cultural factors include corporate visions, mission statements, rewards, and information services, and they should be effectively aligned to facilitate a sharing culture. As indicated Fattahiyan et al. (2013) organizational culture incorporate trust and collaboration with employee and between employee and the organization itself and tolerance for mistakes and learning.

2.7.2Organizational structure

Organizational structure, defined as "an enduring configuration of tasks and activities" (Nabil El Sawalhi and Ahmad Nazmi Matar, 2015). Fattahiyan et al. (2013) explains that organizational structure comprises the organizational hierarchy, rules and regulations, and reporting relationships and is considered a means of co-ordination and control whereby organizational actors can be directed towards organizational effectiveness. Organizational structure establishes connection between individual's performance and business goals.

Organizational structure consists of both formal and informal dimension. For Nabil El Sawalhi and Ahmad Nazmi Matar(2015) the formal dimension includes rules, division of labor, prescriptions and the hierarchy of authority, whereas the informal one comprise the informal interaction processes among organizational members. Knowledge management theorists largely conclude that changes in an organization's structure, such as moving from hierarchical to flatter networked forms, are essential for the effective transfer and creation of knowledge in the organization (Nonaka and Takeuchi, 1995).

2.7.3Human resources/Employee enabler

Employees are the main source and receiver of knowledge within the organization. As Davenport and Prusak (1998) put it illustratively: knowledge resides in the minds of individuals. Thus employee enabling factors influence knowledge management process hence organizational performance. The element of employee enabler includes training and development and the

formulation of appropriate communication, reward and recognition schemes (Nabil El Sawalhi and Ahmad Nazmi Matar, 2015).

2.7.4 Information and communication technology infrastructure

Knowledge management is highly influenced by ICT products. Degree of information technology (IT) support is defined as "the degree to which IT supports for collative work, communication, searching, accessing, simulation and prediction, and systematic storing use" (Sarra Berraies et al., 2014). Many researchers highlighted the importance technology promotes efficient capturing, creating, sharing and application of knowledge on business process. The effectiveness of KM depends on the degree of implementation, usage and advancement of IT. ICT facilitates rapid collection, storage and exchange of explicit organizational knowledge (Nabil El Sawalhi and Ahmad Nazmi Matar, 2015), while fostering knowledge sharing and creation, by eliminating communication barriers and promoting social connection (Nabil El Sawalhi and Ahmad Nazmi Matar, 2015). In general IT makes knowledge accessible in the entire organizational business unit.

Knowledge management supported by different ICT products like decision support systems, groupware, document repositories, knowledge maps, shared databases, video conferencing, electronic whiteboards, yellow pages, and discussion forums are some of the information and communication tools that are used to facilitate knowledge management (Nabil El Sawalhi and Ahmad Nazmi Matar, 2015).

2.8 Organizational Performance

In general Performance is related to productivity, efficiency and effectiveness in optimal utilization of resources (Mata and Aliyu ,2014). It includes the following key elements profitability, management performance, liquidity, leverage market share, innovation, quality of goods and services, human resource management, investment, customer acquisition, customer retention, customer satisfaction, achieves operational excellence, employee competency, technology usage (Mata and Aliyu ,2014; Chen 2007; Akinniyi A. Adeleke ,2012 ;Mahmoud Mohammad Migdadi ,2005). Organizational performance measured in terms of financial and non financial aspect. Financial aspect of organizational performance includes profitability, reduction of organizational cost, sales volume etc (Akinniyi A. Adeleke (2012). Non financial aspect of the

organizational performance include market share, innovativeness, customer satisfaction, employee productivity (Rajneesh and Kaur,2014; Akinniyi A. Adeleke ,2012).

Organization performance measured its efforts to improve processes, motivate and educate employees, and enhance information systems in organization (Adel Hasan Al Ali, 2013). According Dalkir (2005) the major performance indicators like financial dimension (operating income i.e cost, return on capital employed i.e profit, and economic value added) and the non-financial dimension including, customer satisfaction, internal business processes, learning and growth, organizational flexibility, resource utilization, and technology.

Antonio Mihi et al. (2011) point outs the elements of organizational performance as effectiveness, efficiency and adaptation. According to them effectiveness is calculated as the ratio of output to input resource as a rate of investment to performance. Moreover efficiency is the product or service provided by the rate of sales growth or the rate of market share. Finally, adaptation is the responsive ability when firms face an environmental threat or opportunity and is measured as sales number or sales rate during the first period in which the product enters the market successfully (Mahmoud Mohammad Migdadi, 2005).

Scholars define organizational performance in different ways. Antonio Mihi et al. (2011) define it as “a vital sign of the organization, showing how well activities within a process or the outputs of a process achieve a specific goal”. Also, it is defined as “a process of assessing progress towards achieving pre-determined goals, including information on the efficiency by which resources are transformed into goods and services, the quality of these outputs and outcomes, and the effectiveness of organizational objectives” Antonio Mihi et al. (2011). Organizational performance is made up of the actual output and result of an organization measured against its input. In the similar argument of Mata and Aliyu (2014) organizational performance measurement enables organizations to focus on units that need improvement by evaluating the level of work progress in terms of cost, quality and time as well as consolidating in areas with higher output. The purpose of this study is identifying the impact of KM enablers (organizational culture, organizational structure, human factor and technology) and KM process (creation, acquisition, sharing and application) on organizational performance.

2.9 KM Enabler capability and Organizational Performance

Knowledge management enablers consist of four factors of culture, structure, human and technology (Gold et al., 2001)**.**Such infrastructural capabilities maximize organizational performance in the companies (Antonio Mihi et al., 2011; Mahmoud Mohammad Migdadi, 2005). According to the conducted studies, four key capabilities were recognized in relation to knowledge management and organizational efficiency. In this section, infrastructural capabilities i.e. culture, structure, human and technology are taken into consideration.

2.9.1Organizational Performance and Organizational culture

As an element organizational culture consist of set of values, beliefs, norms, definitions and approaches shared by individuals in the organization (Antonio Mihi et al., 2011; Mahmoud Mohammad Migdadi, 2005). Organizational culture has regarded the useable perspective, supplying impressive evidence of the role of organizational culture in enhancing performance (Tsai, 2011). Fard et al., (2009) study the relationship between organizational cultures and learning organization. The findings suggest that learning organizations improve organizational learning culture, team working, learning and creativity, system thinking, and participation level in their organizations (Hsu, 2014). The result showed that there is a significant correlation between organizational cultures and learning organizations (Fard et al., 2009). The study of Gold et al., (2001) suggests that most researchers consider company's view as one of the significant components of organizational culture which is related to organizational performance.

2.9.2 Organizational Performance and Organizational Structure

Organizational structure influences employee performance hence organizational performance. It can inhibit or promote organizational performance, depending how effectively adapted appropriate and suitable structure based of the nature of business organization (Mahmoud Mohammad Migdadi, 2005). Organizational structure refers to the reporting hierarchy and the workflow within the organization. Both of these element influence productivity. Without defined policies and procedures that are consistently enforced throughout the organization, performance management strategies can fail to achieve their desired goal of improving product and service quality for end-user customers (Mahmoud Mohammad Migdadi, 2005). Organizational structure encourages and increases the

participation of individual's creation and innovation of new product and service. In addition it facilitate in solving customer related problem by increasing communicational and exchange of knowledge. The ultimate goal of any business organization is satisfying its customer and maximizing profit and assure organizational performance (Gold et al., 2001). They also state that the structural infrastructural capabilities enable the company to strengthen the structure of its technology and performance.

2.9.3Organizational Performance and Human enabler

Employees are a key asset of an organization. Without employee business organization doesn't perform their task and achieved their objective. Nonaka and Takeuchi (1995), 80% of knowledge lies in the brains of people who possess know-how, secrets and personal skills that will never be shared if no one works on it. Since people are the exclusive creators of knowledge. Zaied (2012) proper utilization of employee is a major element for competitive advantage and for better organizational performance.

2.9.4Organizational Performance and Technology

Business organization invests much on technology to gain out of it and satisfy their customers. The advancement of technology opens new opportunities and market for business organization like banks and insurances. Technology is one of the main tools for business organization to utilize, acquire, share, apply and retain knowledge within the organization. This day business organizations serve their clients day and night throughout the week and without geographical barriers using technology. According to (Gold et al., 2001) technological capability eliminates the communicational problems of business through a great communication network. Gold et al., 2001 added that technology add opportunity making allows the company to fallow the knowledge related to customers, sections, staff or suppliers.

2.10 KM process capability and Organizational Performance

Knowledge management which is the process by which "organization generates wealth from its intellectual or knowledge-based assets" has far reaching effects on performance (Mohammed Tubigi and Sarmad Alshawi, 2012). An effective KM application will enhance over all organizational performance. Mohammed Tubigi and Sarmad Alshawi (2012) argue that KM is a vehicle for

organizations' effectiveness and competitiveness. More over KM enables business organization by making the more innovative, utilization of their work force and responsive to market change (Gold et al., 2001; Adel Hasan Al Ali 2013). KM is positively related with organizational performance by enhancing the quality and speed of product and service development, by understanding and satisfying customers and by bringing operational excellence (Zack and Singh, 2009).

Mohammed Tubigi and Sarmad N. Alshawi (2012) stats that a successful implementation of knowledge management process in to organizational elements like to into all processes, routines, activities, employees will enhance organizational memory and ability to collect, analyze, disseminate and apply the knowledge to company's advantage. As a result, knowledge competencies and assets affect company's present and future performance. Knowledge management (KM) is a means that improve employee performance and corporate competitiveness (Mohammed Tubigi and Sarmad N. Alshawi, 2012). KM influences both employee's work performance and managerial decision making of the organization (Zack and Singh, 2009).

Business organization benefited from KM in which it increases the innovative potential of the company toward new product and service. Innovation is one of the key elements to evaluate organizational performance and organizational growth. In addition to innovation organization benefit from knowledge management initiation like organizational responsiveness to the dynamic business environmental change, more efficiency in supply network, better organizational internal quality, better decision-making competencies, improved responsiveness to customers, better product and service offerings, as well as enhanced effectiveness of employees on operations and processes are the major (Zack and Singh ,2009).

Insurance companies operate in a dynamic business environment. Their product is intangible unlike other sector. They sell a piece of paper which is called Insurance policy which hold conditions and terms that both parties (Insurer, Insured) strictly follow if claim is happen. Insurance business builds on honesty and trust (At most good faith).Without trust Insurance companies doesn't perform well (Melinda Plescan and Gavriletea, 2009). Hence knowledge management address both internal (Employee-Employee, Employee-Management, Employee - Organization) and external trust (Employee-customer, Organization-Customer, Product/service-Customer) issue of the organization.

2.10.1Organizational Performance and Knowledge Creation/Generation

It involves the development of new knowledge from tacit knowledge, explicit knowledge or the combination of two. This new knowledge is used by business organization as competitive advantage over their competitor. They use it to develop new product and service. Hence it increases their innovativeness and the productivity of their work force. Thus knowledge creation or generation increases organizational performance.

2.10.2 Organizational Performance and Knowledge Acquisition

Knowledge can be acquired internally within the organization or externally outside the organization. Knowledge acquisition facilitate innovativeness in the organization hence positively affect organization performance Taejun Cho (2011)**.** According to Taejun Cho (2011) knowledge acquisition positively influence innovation in three ways. The first one it increase the availability of knowledge for the organization that increase the potential of the organization to produce new product. Second it decreased innovative cycle which save organization time and finally it increase employee interest to produce new product. Hence all the above positively affect organizational performance. The finding from research that is taken in one of the Kenyan university (Kisii University) expressed that 76% of the respondent answers that knowledge acquisition positively affects organizational performance (Aming'a, 2015).

2.10.3Organizational Performance and Knowledge Sharing

One of the key KM process is sharing of knowledge. Knowledge sharing increase competitive advantage in business organization since it motivate employee of the organization for better performance (Adel Hasan Al Ali, 2013). Business organization benefited from experience sharing of their employee business idea. Positive relationship was revealed from the study of Rhodes et al. (2008) between knowledge management processes like knowledge sharing with organizational performance. 86% of the respondent which participates in questionnaires in Aming'a (2015) they think that there is positive relationship between knowledge sharing and organizational performance.

2.10.4Organizational Performance and Knowledge Application

Knowledge application is also referred to as knowledge utilization (Davenport and Prusak, 1998), knowledge use (Demarest, 1997), and knowledge reuse. According to the knowledge management cycle model (Chung and Haney, 2008), knowledge application is accomplished in various different ways, including by means of elaboration, thoroughness (facilitation), innovativeness and collaborative problem-solving. Knowledge can also be applied in the development of new products, research and development, and in the improvement of processes and procedures. According to Nonaka (1994), internalization processes are those which convert explicit knowledge into tacit knowledge. In terms of such a process, explicit knowledge may be embodied in actions and practices, so that individuals acquiring such knowledge can re-experience what others do (Sabherwal and Becerra-Fernandez, 2003).

2.15 Chapter Summary

This chapter looked at theoretical foundation of the study. These include resource based theory, dynamic capabilities theory, knowledge based theory and institutional theory focusing on their proposition, relevance to the study and critic of the theory. Literature was reviewed looking at the relationships between the study variables. Literature was reviewed in line with the study objectives.

A summary of knowledge gaps comprising of selected empirical and conceptual studies was provided. The studies reviewed provided insights on knowledge, knowledge management, organizational culture, organizational structure, human enablers, knowledge creation, knowledge acquisition, knowledge sharing, knowledge application and organizational performance.

CHAPTER THREE
Research Model and Hypothesis Development

3.1 Research model

This study adopts an integrative perspective of different variables. It integrates knowledge creation, knowledge acquisition, knowledge sharing, organizational culture, organizational structure, human factor, technology and organizational performance into a single model. The conceptual framework is based on reviewed theoretical models and discussions presented in the literature review. It presents the researcher's schematization of the study variables and depicts how the study has been thought out.

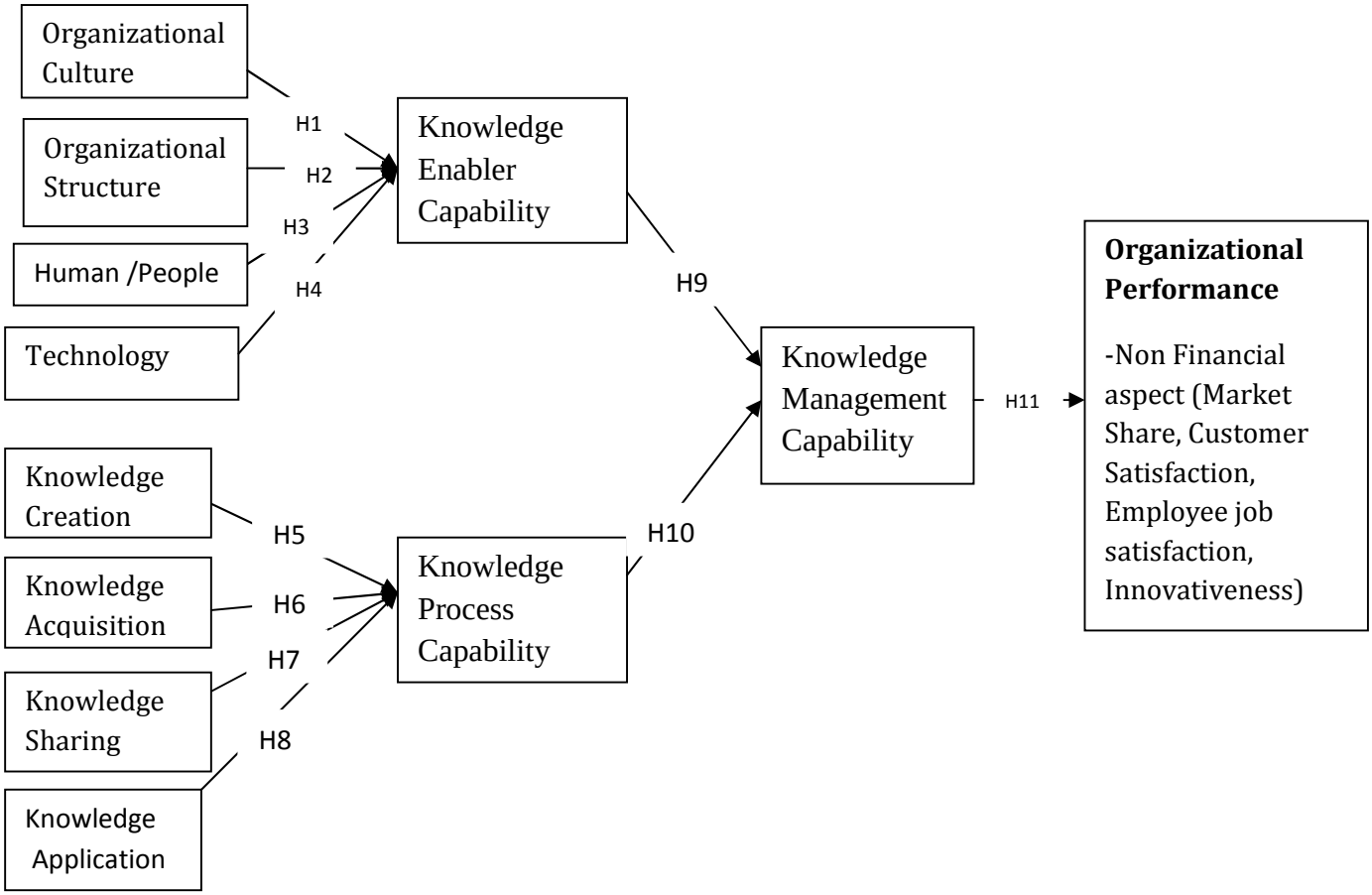


Fig 3.1 Research Model of the study

The conceptual model diagrammatically depicts the expected relationships among variables. The independent variables are knowledge creation, knowledge acquisition, knowledge sharing, organizational culture, organizational structure, human factor, technology. Organizational performance is the dependent variable comprising of financial and non financial aspect.

3.2 Hypothesis Development

Ali (2015) carried out research in Somalia under the title of "knowledge management and organizational performance: Study from telecommunication companies in Somalia". On this research knowledge creation, knowledge sharing, knowledge utilization, knowledge storing from knowledge management process and organizational culture and information technology. The finding of this research shows that organizational culture and the knowledge management process positively impact on the performance of telecommunication companies in Somalia specifically in Mogadishu.

Kenneth et al. (2013) conducted in Makurdi Nigeria under the title of "the impact of knowledge management capabilities on organizational performance: A Survey of the Service Sector". In this research a total of 328 respondents which comprise directors/managers, employees, suppliers and customers/clients of firms such as law chambers hotels, restaurants, laundry and dry cleaning schools, automobile/electronics mechanics beauty/barbing saloons and ICT. The result of this research revealed that organizational culture which is called cultural KM resources on their research, positively and significantly related to organizational performance.

Research work conducted by Esmail Khodai Matin and Parisa Sabagh (2015) in Iran under the title of "effects of knowledge management capabilities on organizational performance in Iranian export companies" discovered that organizational culture positively influence the organizational performance.

Similarly Eleni Karidou (2008) carried out research under the title of "knowledge management enabler factors and firm performance". The research was conducted in 109 Greek companies. This research includes knowledge management enablers like, leadership, organizational culture, technology and people. The result of this research revealed that organizational culture positively affects organizational performance.

The purpose of study conducted by Shu-Hung Hsu, (2014) under the title of "effects of organization culture, organizational learning and IT strategy on knowledge management and performance" was exploring the relationship between information technology, organizational culture and organizational learning with organizational performance. His research was conducted in life insurance companies which are located in Taiwan. The finding of this research indicates that organizational culture affect organizational performance significantly.

Daifallah Olaima et al. (2015) conducted research work in 422 service organizations in Jordan under the research topic “the influence of knowledge management on organizational performance in service organizations in Jordan”. The researchers used three dimensions of knowledge management namely technical KM resource, cultural KM resource and human KM resource. The finding of their research shows that organizational culture positively influences on knowledge enabler capability.

Based on the literatures reviewed above the following hypothesis is developed.

H1. Organizational culture has a positive impact on knowledge enabler capability

Huda Hussein et al. (2014) undergo research in private university in Malaysia under the title of “the influence of knowledge management capabilities on organizational performance”. The purpose of this research was to find the influence of the KMCs’ elements on the organizational performance of a Malaysian private university. KMC elements that are included in this research knowledge acquisition, knowledge application, technology infrastructure, organizational culture, and organizational structure. The finding reveals that the five proposed hypotheses are supported. Organizational structure has the strongest influence on knowledge enabler capability.

Another research conducted by Esmail Khodai Matin and Parisa Sabagh (2015) under the title of “effects of knowledge management capabilities on organizational performance in Iranian export companies” and Sima Fattahiyan et al. (2012) with the topic of “study of relationship between knowledge management enablers and processes with organizational performance” revealed similar result i.e organizational structure have a positive and significant impact on knowledge enabler capability.

The purpose of research conducted by Fattahiyan et al. (2013) was to evaluate the impact of knowledge management resources on organizational performance in universities of the Isfahan province in Iran. The KM in their research includes knowledge management enablers like organizational structure, organizational culture and technology and the knowledge management process include knowledge application, knowledge acquisition, knowledge conversion and knowledge protection. One of the finding on their research was organizational structure has significant and positive relationship with knowledge enabler capability.

Based on the literatures reviewed above the following hypothesis is developed.

H2. Organizational structure has positive impact on knowledge enabler capability

Olaima et al. (2015) carried out research in Jordan. The purpose of this research was to examine the influence of knowledge management on organizational performance. The research carried out in 260

service organization in Jordan. Questionnaire is the main technique for this research to collect data from the respondent. The finding from this research work reveals that human factors of knowledge management positively related to organizational performance. According to the researcher the practical implication of the results is that managers need to actively manage their firm's human capital to stimulate its capability in managing knowledge technical, human, and cultural.

Babazadeh and Farahani (2015) carried out a study on the "effect of knowledge management capability and dynamic capability in organizational performance of Razi insurance company" using descriptive survey method. Totally 74 representatives of the company participated on this research. This research revealed that there is a strong and positive relationship between knowledge management and organizational performance. On this study most respondent suggest that knowledge is the major asset of the company for competitive advantage of the company. Hence KM is an important tool and has significant relationship with organization performance by increasing the dynamic capability of the organization.

Research conducted in Jordanian service organizations by Daifallah Olaima et al.(2015) under the research topic "the influence of knowledge management on organizational performance in service organizations in Jordan" revealed that statistically significant relationship exist between human KM resource and knowledge enabler capability.

Based on the literatures reviewed above the following hypothesis is developed.

H3.Human factors has appositive impact on knowledge enabler capability

Shu-Hung Hsu (2014) carried out research with the title of "effects of organization culture, organizational learning and IT strategy on knowledge management and performance". The purpose of this study to explore that the current business firms with the IT strategy, organizational learning and organizational culture that provide organizational performance, using knowledge management as an intermediate construct. This research reveals that IT is directly related to organizational performance and positively affects as knowledge enabler capability.

Mbuvi (2014) did research in 5 star hotels in Kenya with the title of "effects of knowledge management factors on organizational performance in the hospitality industry: a study of selected 5 star hotels in Nairobi, Kenya". The researcher list four principal factors involves in organizations performance, namely: KM enablers, KM drivers, KM facilitators and KM mechanisms. According to

the researcher KM enablers “provide a means to establish the proper course, content, and quality of actions” for the organizational performance. The general objective of the study was to investigate the knowledge management factors that affect organizational performance in selected hotels in Nairobi. The population for the study was 756 employees from three selected hotels and a sample of 254 was drawn for the study. Purposive, proportionate, stratified and systematic random sampling methods were used for the study to realize the objective of the study. The result of this study indicates that IT has a positive impact on organizational performance as knowledge enabler capability.

Based on the literatures reviewed above the following hypothesis is developed.

H4. Technology has a positive impact on knowledge enabler capability

Research conducted by Riera and Senoo (2006) in Japanese enterprises from the manufacturing sector to explore the relationship between knowledge creation and organizational performance as knowledge process capability. Main aim of this research was the financial performance of the organization. The finding of this research links positively knowledge creating capabilities with financial performance as the element of knowledge process capability.

A study on managing knowledge in insurance company was conducted by (Plescan and Gavriletea, 2009). This study mainly focuses on knowledge creation and knowledge retention component of KM. This research work explains that insurance companies are straggling knowledge loss from employee turnover and the cost associated for replacing them. Like cost of recruiting and training cost and in generally lost of corporate memory. The sum up effect of the above factor decreases the overall performance of the organization. Hence this research work concludes that KM is an important means to increase organizational performance by decreasing “brain drainage” from insurance company.

The aim of the research which was carried out by Yong-Hui in et al. (2008) in Taiwan was to explore the impact of knowledge creation on organizational performance. Data was collected from 165 firms in Taiwan’s new ventures. The finding of this research shows that knowledge creation positively affects firm performance by increasing entrepreneurial nature of the organization as one of the sub set of knowledge process capability of the organization.

Similar study was conducted by Riungu (2015) in Kenya under the title of “effect of knowledge management practices on performance of mobile telephone companies in Kenya”. The study concluded that knowledge management practices in general influences organization performance in

various ways including, knowledgeable employees, better decision making in the organization, improved service offering to clients, reduced operational costs and improved organizational competitiveness. On this research out of the other knowledge process capability knowledge creation mainly influence organizational performance.

More recently research study conducted by Ibrahim et al. (2015) under the title of "impact of creativity to organizational competitiveness". This review unveils organizational performance for stronger and more inclusive growth based on key priorities that complementarily provide the basis for a comprehensive and action-oriented approach to innovation from knowledge creation to problem solving. Creativity leading to innovation was found to be an integral part of organizational process. The finding from this research shows that knowledge creation positively influences organizational performance through innovation and strengthen of organization's competitive advantage.

Based on the literatures reviewed above the following hypothesis is developed

H5.Knowledge creation has a positive impact on knowledge process capability

The study conducted by Fattahiyan et al. (2013) in selected universities of the Isfahan Province to identify the impact of specific knowledge management process and knowledge enablers on organizational performance. The researchers found that three infrastructural capabilities, only organizational structure had a significant impact on organizational performance; neither technology nor organizational culture had a significant impact on organizational performance. For knowledge process capability, knowledge acquisition, knowledge application and knowledge protection also impacted organizational performance.

Another research work by El-Sawalhi and Matar (2015) with the title of "an investigation on knowledge management and its impact on performance within infrastructure and camp development program at UNRWA" point out that most respondent agrees that KM process has a positive relationship with organizational performance. The result also shows that KM enabler or KM infrastructure less contribution for organizational performance. The researcher also got huge difference among the respondents, regarding to KM enabler/infrastructure due to age difference between the participants.

Based on the literatures reviewed above the following hypothesis is developed

H6. Knowledge acquisition has a positive impact on knowledge process capability

Widen-Wulff and Suomi (2003) carried out research on building a knowledge sharing company evidence from the Finnish insurance industry. The researchers used 15 Finnish insurance companies which have different size and product portfolios. This study mainly focuses on one of the KM process i.e knowledge sharing. The result of this study shows that knowledge sharing significantly strength the core competencies of the organization and support the management of the organization. The final conclusion of this research work depict that KM process especially knowledge sharing enhance overall corporate success.

Omogeafe and Friday (2014) carried out research on Nigerian universities to assess the relationship between knowledge management practices and effectiveness on performance. The researchers include six universities and distributed about 389 questionnaires. Interesting result was found i.e the variation in implementation of knowledge practice leads to variation to organizational performance. Based on the result the researcher concluded that knowledge management significantly influences organizational performance of, innovation, growth and competitive advantage. More over they suggest both government and private organization should consider and emphasis on KM for their competitive advantage and organizational performance.

Rim and Affes (2005) carried out research under the title of "The relationship between the sources of knowledge management and organizational performance". A total of 200 Tunisian companies operating in different sectors were included in this research work. The aim of the study was to examine the importance of internal sources of knowledge and its relationship with organizational innovation and organizational performance. Again this study revealed that both internal and external sources of knowledge especially knowledge sharing facilitate organizational innovation hence organizational performance as element of knowledge process capability of the organization.

Based on the literatures reviewed above the following hypothesis is developed

H7.Knowlegne sharing has a positive impact on knowledge process capability

Godfrey et al., (2015) carried out research on the influence of knowledge transfer and knowledge application on performance of commercial banks in Kenya. The researchers include all 43 commercial banks which are found in Kenya and the study adopted explanatory and cross-sectional survey design. The result of this study reviled that both knowledge transfer and knowledge application positively affect organizational performance.

Shakeel Ahmed et al.,(2015) undergo research work in Pakistan banking sector under the title of "impact of knowledge management practices on organizational performance: an empirical study of banking sector in Pakistan". Results have shown that knowledge management activities or processes i.e. knowledge acquisition, knowledge conversion, knowledge application and knowledge protection results in provision of quality services to customers, high customer satisfaction, efficiency in resource utilization, more profits and overall improved organizational performance. Thus the researchers concluded that the application of knowledge management activities or processes for better organizational performance.

Ameh and Joseph (2014) undergo similar study to importance of knowledge management for organizational performance. Similarly this qualitative study revealed that knowledge management is a major determinant of organizational performance and for the improvement of organizational performance. It is an important means for appropriate articulation and utilization of the knowledge assets which leads to competitive advantage. Therefore the participants on this research consider knowledge management as key element for their corporate success.

Based on the literatures reviewed above the following hypothesis is developed

H8. Knowledge application has a positive impact on knowledge process capability

According to Chong Hai Sin et.al (2009) "KM enabler refers to the key factors that determine the effectiveness of executing knowledge management within the organization, which are the driving force that solidifies knowledge management". They conducted research work on a semiconductor manufacturing firm in Malaysia under the title of "knowledge management enablers toward successful new product development: a case study in a semiconductor manufacturing firm". In this research KM enablers include leadership, corporate culture, people and information technology. The result indicates that KM enablers have a positive impact for successful implementation and use of knowledge management for better organizational performance. The respondent of this research work indicate that KM enabler help them to retain talented employee so that succession management was effective.

Young-Chan Lee and Sun-Kyu Lee(2007) conducted similar study in South Korea examine structural relationships among the knowledge enabler capabilities, knowledge processes capabilities , and performance of knowledge management, and suggest strategic directions for the successful implementation of knowledge management. The research was conducted in 68 knowledge management-adopting Korean firms in diverse industries and collected 215 questionnaires. The

output of this research indicates that there exist statistically significant relationships among knowledge management capabilities, processes, and performance.

Based on the literatures reviewed above the following hypothesis is developed

H9. Knowledge enabler capability has a positive impact on knowledge management capability

The aim of recent research conducted by Sangeeta Shah Bharadwaj, Sumedha Chauhan, and Aparna Raman (2015) under the title of "impact of knowledge management capabilities on knowledge management effectiveness in Indian organizations" was to explore the knowledge management (KM) i.e knowledge enabler and knowledge processes capabilities in large Indian organizations and their impact on knowledge effectiveness. In this research knowledge management capabilities are explored with respect to infrastructure, structure, and culture. Knowledge management processes comprise knowledge creation, knowledge acquisition, knowledge storage, knowledge dissemination, and knowledge application. The finding of this study indicates that both knowledge enabler capabilities and knowledge process capabilities play an important role in improving KM effectiveness.

Jandia Kam-ling Poon (2009) conducted in Hong Kong to evaluate the effects of KM enabler and KM processes on the organization's KM effectiveness. In this research KM enabler include organizational culture, organizational structure and technology. Similarly KM processes include knowledge acquisition, knowledge conversion, knowledge application, and knowledge protection. The result of this research work indicates that both KM enabler capability and KM process capability lead to higher level of KM effectiveness.

Based on the literatures reviewed above the following hypothesis is developed

H10. Knowledge process capability has a positive impact on knowledge management capability

Jelena Rasul ,Vesna Bosilj and Indihar Stemb (2012) conducted research work in Slovenia and Croatia to explore the impact of knowledge management on organizational performance. A total of 329 companies participated in this research work. The result revealed that knowledge management has a positive and strong impact on organizational performance.

Result of another research conducted by Shakeel Ahmed ,Mohammad Fiaz and Mohammad Shoaib (2015) in Pakistan under the title of " impact of knowledge management practices on organizational performance: an empirical study of banking sector in Pakistan" shows that knowledge management activities i.e. knowledge acquisition, knowledge conversion, knowledge application and knowledge

protection results in provision of quality services to customers, high customer satisfaction, efficiency in resource utilization, more profits and overall improved organizational performance.

Similar recent research conducted by Shiaw-Tong Haa May-Chiun Lob and Yin-Chai Wangc (2015) in Malaysian small and middle scale enterprises. The finding of this research indicates that knowledge management has a positive relationship with both financial and non financial performance of the organization .Thus knowledge management is important for overall performance of the organization.

Based on the literatures reviewed above the following hypothesis is developed

H11. Knowledge management capability has a positive impact on organizational performance.

3.3 Research Hypotheses

This study aimed at identifying the impact of knowledge management on organizational performance. To attain this research objectives and research questions were formulated as shown in section 1.2 and 1.4 of chapter one respectively. The objectives were supported by the following eleven hypotheses. And also these eleven hypotheses well supported by literature in 3.2 section of chapter three.

H1. Organizational culture has a positive impact on knowledge enabler capability

H2. Organizational structure has a positive impact on knowledge enabler capability

H3.Human factors has a positive impact on knowledge enabler capability

H4. Technology has a positive impact on knowledge enabler capability

H5.Knowledge creation has a positive impact on knowledge process capability

H6. Knowledge acquisition has a positive impact on knowledge process capability

H7.Knowlegne sharing has a positive impact on knowledge process capability

H8. Knowledge application has a positive impact on knowledge process capability

H9. Knowledge process capability has positive impact on knowledge management capability

H10. Knowledge enabler capability has positive impact on knowledge management capability

H11. Knowledge management capability has positive impact on organizational performance

CHAPTER FOUR
RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This chapter provides details of the methodology that was employed in the study. It discusses research philosophy, research design, and population of the study, sampling and sampling procedures, data collection, data analysis and reporting. Finally, this chapter concludes with a summary highlighting the key points.

4.2 Research Philosophy

Research philosophy is associated with clarification of assumption about the nature and the source of knowledge (Creswell, 2014). All studies are based on some kind of assumptions about the world and the ways of understanding the world. There is no consensus among philosophers about the most appropriate ways of understanding the world; therefore, the researchers are expected to clarify the philosophy he/she has chosen to understand the research problem (Kothari, 2004). Researchers have different views of the world, and the processes that operate within it, are part of what is known as philosophy. Philosophy is concerned with views about how the world works and, as an academic subject, focuses, primarily, on reality, knowledge and existence. Two major philosophical assumptions dominate and influences in the research (Cohen, 1988; Creswell, 2014; Kothari, 004).These are interpretivism and positivism philosophy.

4.2.1Interpretivism

The position of interpretivism in relation to ontology and epistemology is that interpretivists believe the reality is multiple and relative **(**Hudson and Ozanne, 1988). Explain that these multiple realities also depend on other systems for meanings, which make it even more difficult to interpret in terms of fixed realities. Interpretivism view knowledge as subjective entity rather than objective. Scholars from Interpretivism argue that knowledge cannot convert from one form to other. Intrepretivism approach assumes that knowledge is socially constructed thought language, consciousness and shared meanings. This approach treats knowledge (tacit knowledge) as subjective rather than objective. For them tacit knowledge impossible to articulate, shared, convert and stored (Polanyi, 1966/1997). For Interpritis it is impossible to separate knowledge from the knower and view it as object.

4.2.2Positivism

Positivism is an objective approach which relies on facts and quantitative data. The positivism approach focuses on the objective and measurable nature of knowledge and considers knowledge as an object in-dependent of knower. This approach explains knowledge as object can be acquired, created, stored, converted and utilized for better performance, problem solving and decision making. According to Creswell (2014), the knowledge that develops through a positivist lens is based on careful observation and measurement of the objective reality that exists "out there" in the world. According to positivist views tacit knowledge as discrete object can be possessed by individuals, groups, teams or organization as a whole and converted to explicit knowledge and shared it with in the organization (Nonaka and Takeuchi, 1995).

In this thesis the researcher follows the positivism philosophy. This implies that the researcher stands along the researcher side (Nonaka and Takeuchi, 1995) that knowledge (especially tacit knowledge) can be shared, coded, acquired and utilized for the better organizational performance. The degree of knowledge enabling factors can be expressed using quantitative data collection methods.

4.4 Research Design

The main argument of the study is to understand the impact of knowledge management on organizational performance in insurance industry. In order to achieve this research objective, the Correlational research was adopted. Correlational research is a quantitative method requiring standardized information from and/or about the subject being studied (Creswell, 2014; Kothari, 2004). The need for quantitative descriptions of the knowledge management process and knowledge management enablers as linked to organizational performance of insurance industry informed the acceptance of the research design.

4.5 Population of the Study

In research, two terms namely population and sample are involved to each other. Population refers to the total collection of elements and sample as a part of such population that is selected according to some rules and statistics (Kothari, 2004; Creswell, 2014)

Currently at the time of the study 1,308 employees are working in this company (Medin Magazine, 2016).Around 61% or 798 are male and 39% or 510 are female. Out of 1,308 employees 250 are contract employee and the rest are permanent employee. Educational back ground of the employee is diversified it reach starting from certificate to second degree. The company gives special attention to its human capital. It sponsors international insurance certification and business certification trainings like Charted Insurance Institute (CII), Life Office Management Association (LOMA), Actuarial science and Charted Accountant (ACCA) to its employee (Medin Magazine, 2016).

Its head quarter is located around Legehar in Addis Ababa. The company has over 70 branches through the country. It classifies its branch as District A, District B, Branch I and Branch II.EIC provides more than 45 types of insurance cove both in Non-life (property insurance), life insurance and liability insurance (www.eic.com).

Currently, EIC offers both life and non-life (Motor, Fire, Marine etc) insurance cover through the country.EIC has the following departments:- General Insurance, Long Term Insurance, Finance and Investment, Resource Management, Business Development and Risk Management, Internal Audit Directorate, Legal Service Directorate and Information Technology Service Management Directorate.

EIC classify its employee as clerical and Non-clerical employee. The clerical employee includes drivers, guard, cleaner, cashier, guardian, waiter, messenger, typist, etc and has the largest number around 958 where as the non clerical staff includes operation officer/senior, marketing officer/senior, system/network administrator, finance officer /senior, principal customer care/ principal operation officer, Team leader, director. This study only collects information only from non-clerical staff and has a total number of 350. Most non clerical staffs EIC are degree holder and work on the main operation activity of the company. The respondents were expected to provide relevant information for the current research, due to them being work at the core business organization, as well as due to their concern with knowledge and knowledge-related activities at the organization concerned. More over the researcher believes non- clerical staff of EIC can understand the questionnaire which is developed for this research work.

4.6 Sample and Sampling Procedures

In every research work the data through two approaches namely census (in where all units of a population are studied) and sample (in where a part of a population are studied) could be collected (Creswell 2014). Generally the most desirable way to collect data is sampling approach that it is addressed with, the type of universe, sampling unit, sampling frame, size of sample and sampling techniques. The type of universe might be finite (in where the number of item is certain like Insurance Company in Ethiopia) or infinite (the number of item is infinite like the number of stars in the sky). The size of sample depends to some factors like size of population, the nature of population, kind of study.

The sampling technique is divided into two techniques namely probability and non-probability. The probability sampling techniques is the techniques that every units of universe has the equal chance to be as a member of sample. According to Kothari (2004) the non probability sampling technique "also known by different name such as deliberate sampling, purposive sampling and judgment sampling", In this type of sampling, items for the sample are selected deliberately by researcher; his choice concerning the items remains for supreme. In other words, under non-probability sampling the organizers of the enquiry purposively choose the particular units of the universe for constituting a sample on the basis that the small mass that they so select out of huge one will be typical or representative of the whole".

Therefore for this study the non probability techniques including convenience sampling and purposive sampling was as sampling techniques used. This is mainly as a result of it not being possible for the researcher to reach all employees who are working outside Addis Ababa. The primary data through questionnaire would be collected from some IT staff, management, auditors, inspectors and experts in some selected district and branches who are available and satisfy to share and issue their information, opinions, views and attitudes.

The following technique were applied in determining the sample size for the current study: To compute the sample size the researcher used the following formula provided by Yamane (1967), which is depicted as follows:-

$$n = \frac{N}{1 + Ne^2}$$

Where:

n = the sample size

N = the population of the study (350)

e= the level of significance (set at 0.05 for this study)

To arrive at the sample size, the above formula was used by substituting with known size.

$$n = \frac{350}{1 + 350 * 0.05^2}$$

n (Sample size)= 186

The researcher distributes to 186 respondent and 172 (92.5%) of the respondent returns the questionnaire and only 14 (7.5%) are not.

4.7 Data Collection

The methods of data collection depend upon the sources of data collection including primary source of data and secondary source of data. (Kothari, 2004; Creswell, 2014).For this study to collect primary data, questionnaire were utilized. The primary data for this research was collected through self-administer survey questionnaire and the same questionnaire sent via outlook to districts and branches. This method has the advantage of obtaining data more efficiently in terms of finances and availability of respondents. The questionnaire was divided into two parts. Part 'A' contains information about background of the respondent like gender, age, experience in EIC and educational back ground and Part 'B' contains main question for the research. Part 'B' comprises a total of 93 questions designed to ascertain the view of employee about knowledge management process and knowledge management enablers. More over part 'B' request employees view the organization

performance based on customer aspect, learning and growth and perceptual financial view. A total of 186 research questionnaire were distributed and 172 respondents returned.

4.8 Questionnaire Development

The present study employs a questionnaire survey approach in order to collect data for testing the model's validity and research hypothesis. The questionnaire were adopted from Taejun Cho(2011);Gold et al.(2001); Heeseok Lee and Byounggu Choi (2003) as indicated in table 3.1 and with modifications aimed at addressing the current study objectives.

Multi item scales were used for measuring the research variables using a five-point Likert-style responses ranging from "strongly disagree" to "strongly agree" (1 = strongly disagree, 2 = Disagree, 3 = Neither Agree Nor Disagree, 4 = Agree, 5 = Strongly agree).

A sample questionnaire is attached as **(Appendix 1).** This method has the advantage of obtaining data more efficiently in terms of finances and availability of respondents. Questionnaires were administered through drop and pick method and sent via outlook.

Concept	**Original author**	**Subscales**	**Number of items**
KM process	Gold et al. (2001) and Taejun Cho(2011)	Knowledge creation	9
		Knowledge acquisition	8
		Knowledge application	8
	Heeseok Lee and Byounggu Choi (2003)	Knowledge Sharing	8
KM enablers	Gold et al. (2001), Taejun Cho(2011), Heeseok Lee and Byounggu Choi (2003)	Organizational Culture	11
		Organizational Structure	5
		Human/people	6
		Technology	9
	Taejun Cho(2011),	customer-related	10

Organizational Performance	Gold et al. (2001); Heeseok Lee and Byounggu Choi (2003)	aspect	
		Learning & Growth Aspect	11
		perceptual financial aspect	8
Total number of items used			**93**

Table 3.1: Summary of the instruments used in the questionnaire

4.9 Data Analysis and Reporting

4.9.1 Reliability and Validity Tests

In order to ensure research reliability and validity, this research utilizes several criteria of PLS path modeling analysis on both measurement and structural models. At measurement model assessment reliability is tested using Cronbach's alpha. Cutoff value of 0.7 used in this research as most researcher recommended (Joseph et al., 2014; Chin, 2010; Ken Kwong-Kay Wong, 2013).

To test validity, both validity i.e convergent validity and discriminatory validity was conducted. Convergent validity tested using Average Variance Extracted (AVE) and cutoff value 0.5 used. Whereas discriminator validity was tested using Fornell-Larcker Criterion and Cross loading.

Structural model assessed using Path coefficient, Determination coefficient (R^2), Effect size (f^2), and Predictive relevance (q2) (Joseph F. Hair et al., 2014).

4.10 Data Analysis

The collected data analyzed using descriptive and inferential statistics. For part one of the questionnaire descriptive statistics such as frequency and percentage used. For the second section of the questionnaire inferential statistics used including testing the hypothesis. Thus the data was cleaned from missed item and outliers feed in to SMARTPLS version 3 and SPSS version 20 for further analysis. The result of the finding presented in chapter next chapter.

4.11 Summary

Chapter four described the research methodology applied in the study; it explained the underlying research philosophy and the justification for the choice of a mixed methodology approach. The chapter further highlighted the study design, the population, and sample, determination, sampling procedures and sample size, and data collection procedures, procedures for determining the reliability and validity of the data. Finally the chapter explained the data analysis techniques used in the study.

CHAPTER FIVE

Data Analysis, Result and Findings

5.1 Introduction

This chapter begins by describing data screening procedures. Then it present demographic data analysis of the respondent. Both assessment of measurement model (reliability and validity test) and structural model (significance test, path analysis, R-squared and Q-squared) presented respectively. Finally, this chapter presents the hypotheses tests.

5.2 Preliminary Evaluation

Preliminary evaluation was conducted to prepare the data for the assessment of measurement and structural models. Data screening processes were undertaken, including visual inspection of the data for identifying and correcting errors in the data set, identification of missing data and tests for violations of statistical assumptions such as normality and outliers (Hair et al., 2014).

5.1.1 Data Screening

When checking for errors, values that fell outside the range of possible values due to error in data entry were identified. Descriptive statistics including frequencies, minimum and maximum values are used to determine the errors. The errors were then corrected by checking against the questionnaire set of the particular cases involved. Fortunately no missing data were found in the data set. But three questionnaires were discarded from further analysis due to less concerned respondent i.e the respondent fill the same value for almost all questions in the questionnaire. Therefore a total of 169 respondent questionnaires were used for further analysis.

5. 2 Demographic Data For the respondent

Table 5.1 shows that the gender of the majority respondent is male, comprises 66.3% (112) with the remaining 33.7 %(57) being female. The highest percentage of 40.8% (69) of the respondent is age group 25-30 followed by age group 31-40 comprise 33.1 % (56).Respondent with age < 25 account 12.4 % (21) and age group 41-50 comprise 10.7 % (18)and finally age group >50 are the least which comprise only 3% (5)of the total respondent.

Regarding to educational background most of the respondent, i. e 79.3 % (134) are first degree holder and 14.8 % (25) have masters degree and only 5.9 % (10)of the respondents have college diploma. The respondent who have work experience 2-5 and 6-10 comprises equal percent i.e 36.7 % (62) for each .The most experienced respondent of the study (> 15 years of experience) accounts

14.2 % (24) of the study .The least experienced employee of the respondent comprises 6.5 % (11) of the respondent .The rest 5.9 % (10) of the study is comprised by the respondent who have work experience between 11-15.

Demographic Object		Frequency	Percent
Gender	Female	57	33.7
	Male	112	66.3
	Total	169	100.0
Age	<25	21	12.4
	25-30	69	40.8
	31-40	56	33.1
	41-50	18	10.7
	>50	5	3.0
	Total	169	100.0
Education	College Diploma	10	5.9
	Degree	134	79.3
	Mater's	25	14.8
	Total	169	100.0
Work Experience	<1	11	6.5
	2-5	62	36.7
	6-10	62	36.7
	11-15	10	5.9
	>15	24	14.2
	Total	169	100.0

Table 5.1 Demographic Data for the respondent

5.3 Evaluation of Measurement Model

To assess measurement model reliability and validity test were conducted. The reliability and validity tests were implemented through responses to this research question. For testing reliability, the researcher uses composite reliability value of the SMARTLS. This value is similar with Cronbach's α reliability coefficient which was used to check the internal consistency reliability of the instrument. For testing validity, convergent validity average variance extracted (AVE) and discriminatory validity were implemented.

5.3.1Reliability

Reliability is a measure of the extent to which a research instrument yields consistent results after repeated trials. Reliability refers to the degree to which a measurement scale or a test is dependable, consistent, predictable and stable. Reliability tests checked inner consistency of the questions against the test items bringing on board the idea of replicability (Chin and Newsted1999; Joseph F. Hair et al., 2014). Conceptualize reliability as a measure of desired consistency in test scores.

The data collection instrument for this study was tested for reliability through computation of Cronbach's Alpha coefficient for all variables in the model. The coefficient ranges from 0 meaning no consistency, to 1 meaning complete consistency; the higher the coefficient the more reliable is the scale. Some authors consider items whose Alpha coefficient is 0.7 as reliable; (Joseph F. Hair et al., 2014; Nils Urbac and Frederik Ahlemann, 2010; Chin, 2010). Chin (2001) considers a cutoff point of 0.6 and higher as adequate. For this study a cutoff point of 0.7 and above was considered adequate. Thus Items that full fill this criterion are used in this research and those which doesn't excluded from further analysis as indicated in table 5.2.

Tables 5.2 shows those of items deleted and retained items based on the above criteria for further analysis. And also table 5.3 indicates the number of item remained in each construct after deleting low Alpha value and the composite reliability of each construct.

Based on outer loading value those who have less than 0.7 are deleted. As indicated in Table 5.2 7 items from technology(TI) construct, 8 items from organizational culture(CI) construct, 3 items from human factor(HI) construct, 4 items from knowledge creation (KC) construct, 4 items from knowledge acquisition (KQ) construct, 4 items from knowledge sharing (KS) construct , 5 items

from customer related (CP) construct , 6 items from perceived performance(PF) construct and all items of employee learning and growth (LG)constructs are removed further analysis.

Construct	Indicator	Loading	Status	Construct	Indicator	Loading	Status
Items for Technology	TI1	0.594	Deleted	Items For Knowledge Acquisition	KQ1	0.791	Retained
	TI2	0.618	Deleted		KQ2	0.775	Retained
	TI3	0.642	Deleted		KQ3	0.687	Deleted
	TI4	0.597	Deleted		KQ4	0.645	Deleted
	TI5	0.697	Deleted		KQ5	0.764	Retained
	TI6	0.742	Retained		KQ6	0.727	Retained
	TI7	0.765	Retained		KQ7	0.644	Deleted
	TI8	0.477	Deleted		KQ8	0.666	Deleted
	TI9	0.668	Deleted	Items For Knowledge Sharing	KS1	0.688	Deleted
Items For Organizational Culture	CI1	0.609	Deleted		KS2	0.533	Deleted
	CI2	0.763	Retained		KS3	0.703	Retained
	CI3	0.743	Retained		KS4	0.676	Deleted
	CI4	0.523	Deleted		KS5	0.739	Retained
	CI5	0.659	Deleted		KS6	0.678	Deleted
	CI6	0.492	Deleted		KS7	0.753	Retained
	CI7	0.604	Deleted		KS8	0.741	Retained
	CI8	0.451	Deleted	Items For Customer Aspect	CP1	0.517	Deleted
	CI9	0.476	Deleted		CP2	-0.340	Deleted
	CI10	0.712	Retained		CP3	0.579	Deleted
	CI11	0.665	Deleted		CP4	0.720	Retained
Items For Organizational Structure	SI1	0.785	Retained		CP5	0.704	Retained
	SI2	0.777	Retained		CP6	0.751	Retained
	SI3	0.792	Retained		CP7	0.644	Deleted
	SI4	0.774	Retained		CP8	0.733	Retained
	SI5	0.722	Retained		CP9	0.794	Retained
Items For Human Factor	HI1	0.540	Deleted		CP10	0.715	Retained
	HI2	0.760	Retained		LG1	0.134	Deleted

	HI3	0.808	Retained		LG2	0.433	Deleted
	HI4	0.667	Deleted	Items For Employee Learning and growth	LG3	0.499	Deleted
	HI5	0.770	Retained		LG4	0.274	Deleted
	HI6	0.611	Deleted		LG5	0.440	Deleted
Items For Knowledge Application	KA1	0.706	Retained		LG6	0.520	Deleted
	KA2	0.776	Retained		LG7	0.243	Deleted
	KA3	0.774	Retained		LG8	0.269	Deleted
	KA4	0.838	Retained		LG9	0.345	Deleted
	KA5	0.874	Retained		LG10	0.443	Deleted
	KA6	0.866	Retained		LG11	0.349	Deleted
	KA7	0.824	Retained		PF1	0.648	Deleted
	KA8	0.768	Retained		PF2	0.567	Deleted
	KC1	0.623	Deleted	Items For Perceived organizational performance	PF3	0.555	Deleted
	KC2	0.545	Deleted		PF4	0.584	Deleted
	KC3	0.761	Retained		PF5	0.574	Deleted
	KC4	0.712	Retained		PF6	0.723	Retained
	KC5	0.529	Deleted		PF7	0.734	Retained
	KC6	0.740	Retained		PF8	0.631	Deleted
Items For Knowledge Creation	KC7	0.766	Retained				
	KC8	0.644	Deleted				
	KC9	0.733	Retained				

Table 5.2 First Iteration outer loading value

After removing the indicator below the thresh hold value (< 0.7) above in table 5.2 item the outer loading is recalculated using SMARTPLS and the result of all individual items outer loading values are above 0.7 as indicated in table 5.4.The composite reliability value of each of the construct also indicated in table 5.3.

Construct	Number of Items Before Reliability Test	Number of Items After Reliability Test (α >0.7)	Composite Reliability
Organizational Culture	11	3	0.873
Organizational Structure	5	5	0.879
Human Enablers	6	3	0.863
Technology	9	2	0.880
Knowledge Enabler Capability	31	13	0.893
Knowledge Application	8	8	0.936
Knowledge Acquisition	8	4	0.888
Knowledge Creation	9	5	0.880
Knowledge Sharing	8	4	0.852
Knowledge Process Capability	33	21	0.946
Knowledge Management Capability	64	34	0.953
Organizational Performance	29	8	0.926

Table 5.3 Reliability Test

After removing indicators that failed to meet the minimum prescribed threshold (as shown in table 5.2), the data was re-analyzed. The revised model is shown below as fig 5.1**.** As indicated in fig 5.1 and table 5.4 indicators of the technology factors construct ranged from 0.0.876-0.897, indicators of the organizational culture factors construct ranged from 0.772-0.8886, indicators of the organizational structure factors construct ranged from 0.726-0.794, indicators of human factors construct ranged from 0.793-0.866, indicators of the knowledge creation construct ranged from 0.749-0.805, indicators of the knowledge application construct ranged from 0.707-0.874, indicators of the knowledge acquisition construct ranged from 0.765-0.839, indicators of the knowledge sharing construct ranged from 0.712-0.806 and indicators of the organizational performance construct ranged from 0.730-0.830.

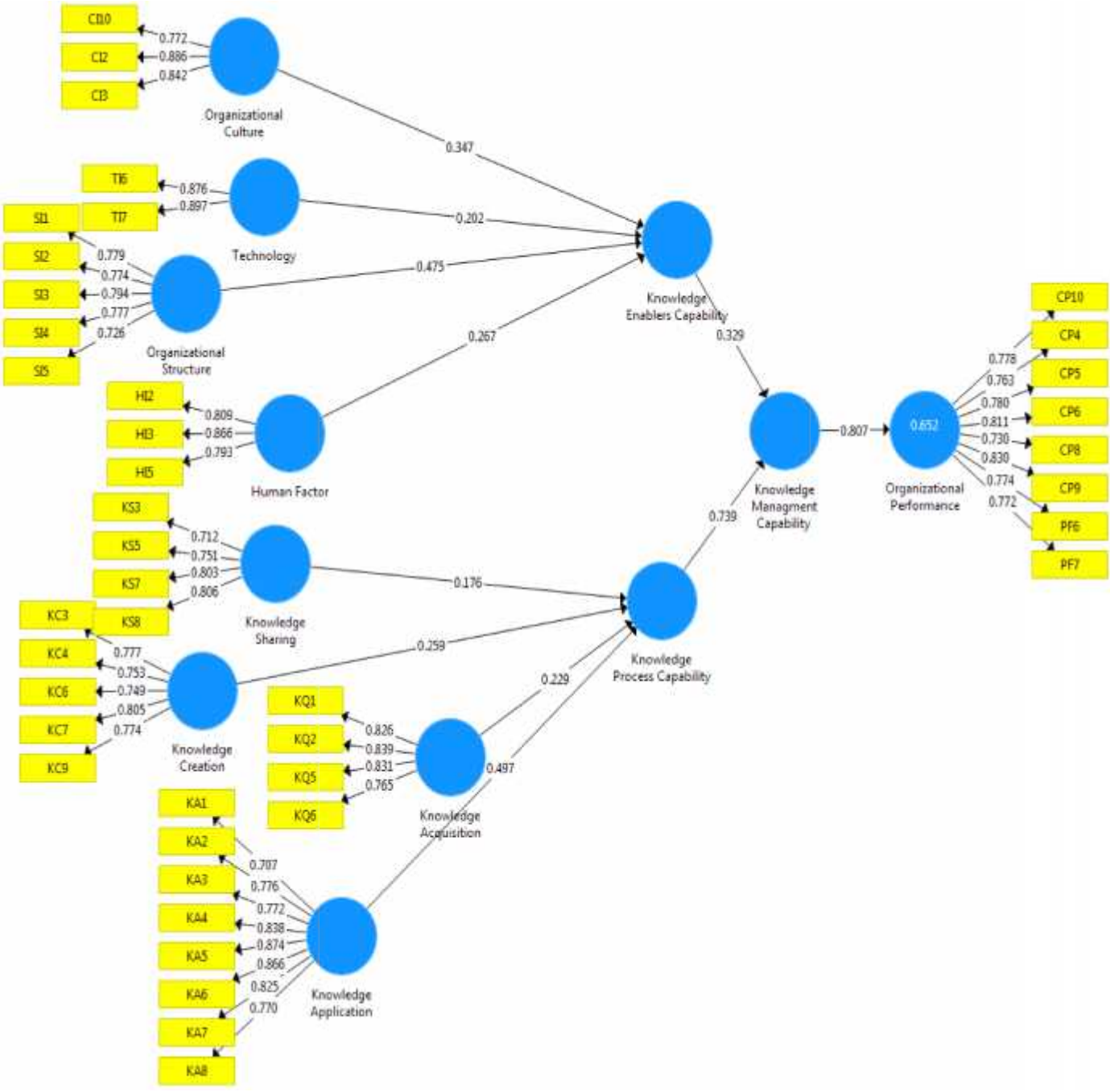


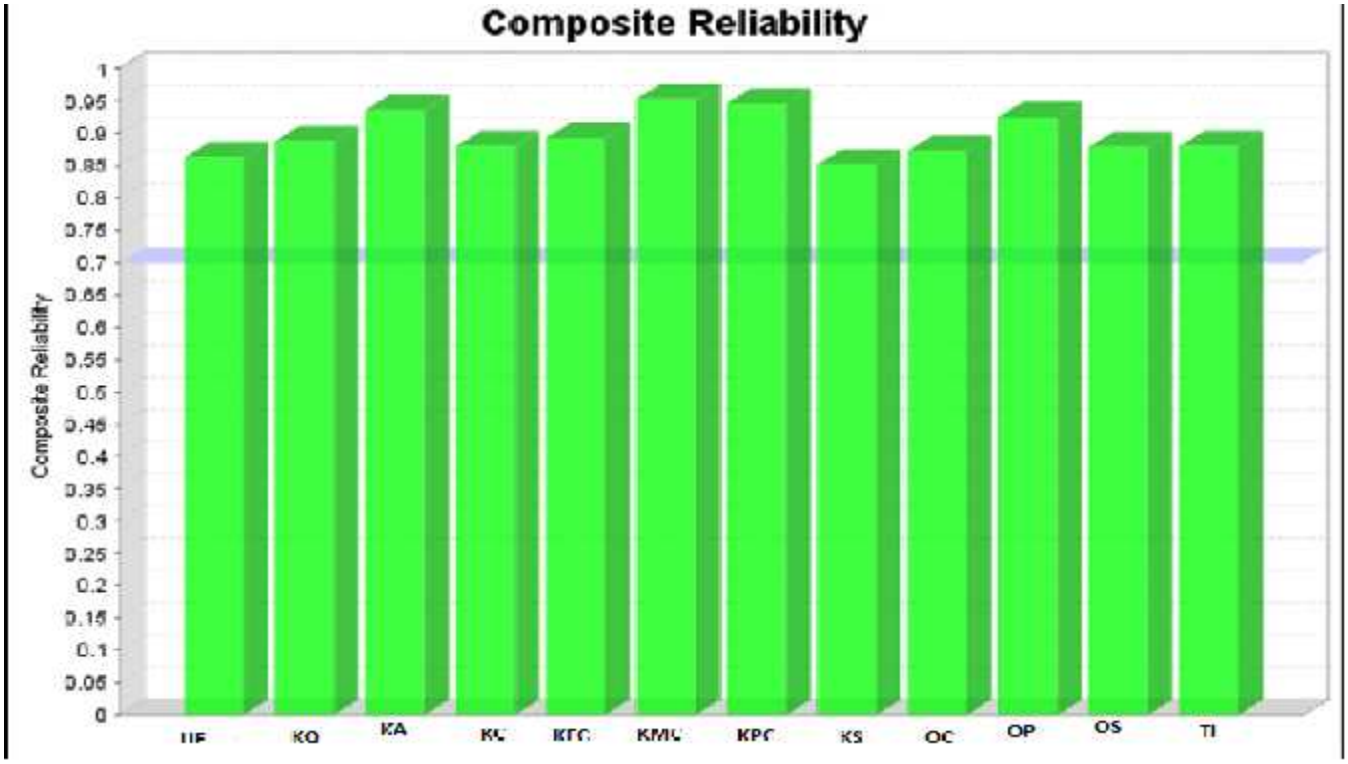
Fig 5.1Revised path Estimation

Indicator	Outer Loading		Indicator	Outer Loading
TI6	0.876		KC4	0.753
TI7	0.897		KC6	0.749
CI2	0.886		KC7	0.805
CI3	0.842		KC9	0.774
CI10	0.772		KQ1	0.826
SI1	0.779		KQ2	0.839
SI2	0.774		KQ5	0.831
SI3	0.794		KQ6	0.765
SI4	0.777		KS3	0.712
SI5	0.726		KS5	0.751
HI2	0.809		KS7	0.803
HI3	0.866		KS8	0.806
HI5	0.793		CP4	0.763
KA1	0.707		CP5	0.780
KA2	0.776		CP6	0.811
KA3	0.772		CP8	0.730
KA4	0.838		CP9	0.830
KA5	0.866		CP10	0.778
KA6	0.875		PF6	0.774
KA7	0.825		PF7	0.772
KA8	0.770			

Table 5.4 Second Iteration Outer Loading value (after deleting low loading Items)

The composite reliability of the construct as Table 5.3 and Graph 5.1 that four knowledge enabler capabilities: technology (0.880), organizational structure (0.879), organizational culture (0.873), human enabler (0.863), four knowledge process capabilities: knowledge creation (0.880) knowledge acquisition (0.888), knowledge sharing (0.852), knowledge application (0.936) and organizational performance (0.926) had relatively high composite reliability, which showed the high internal consistency reliability of the instrument. Tables 5.3 show the reliabilities of all nine constructs,

including four constructs of knowledge enbler capability, four constructs of knowledge process capability, and constructs of organizational performance, seemed to be plausible.



Graph 5.1 Composite Reliability

Note:

CI=Organizational culture SI=Organizational structure OP= Organizational Performance

KEC=Knowledge Enabler Capability HF= Human factor KA= Knowledge Application

KPC=Knowledge Process Capability KQ= Knowledge Acquisition KS= Knowledge Sharing

KMC=Knowledge Management Capability KC=Knowledge Creation TI= Technology

5.3.2Validity

Validity of an instrument relates to the ability of the instrument to measure the construct as supposed Ken Kwong-Kay Wong (2013).Validity refers to "the extent to which the empirical measure adequately reflects the real meaning of the concept under consideration" Nils Urbac, Frederik Ahlemann (2010) it concerns the accuracy of inferences. Construct validity was ensured since the questionnaire was developed based on tools used in prior studies with modifications so as to address

the current study objectives. Content validity was ensured through the guidance of the expert opinion (Chin, 1998).In this research to insure content validity; in addition to frequent discussion with advisor and researcher friends' convergent as well as discriminate validity implemented.

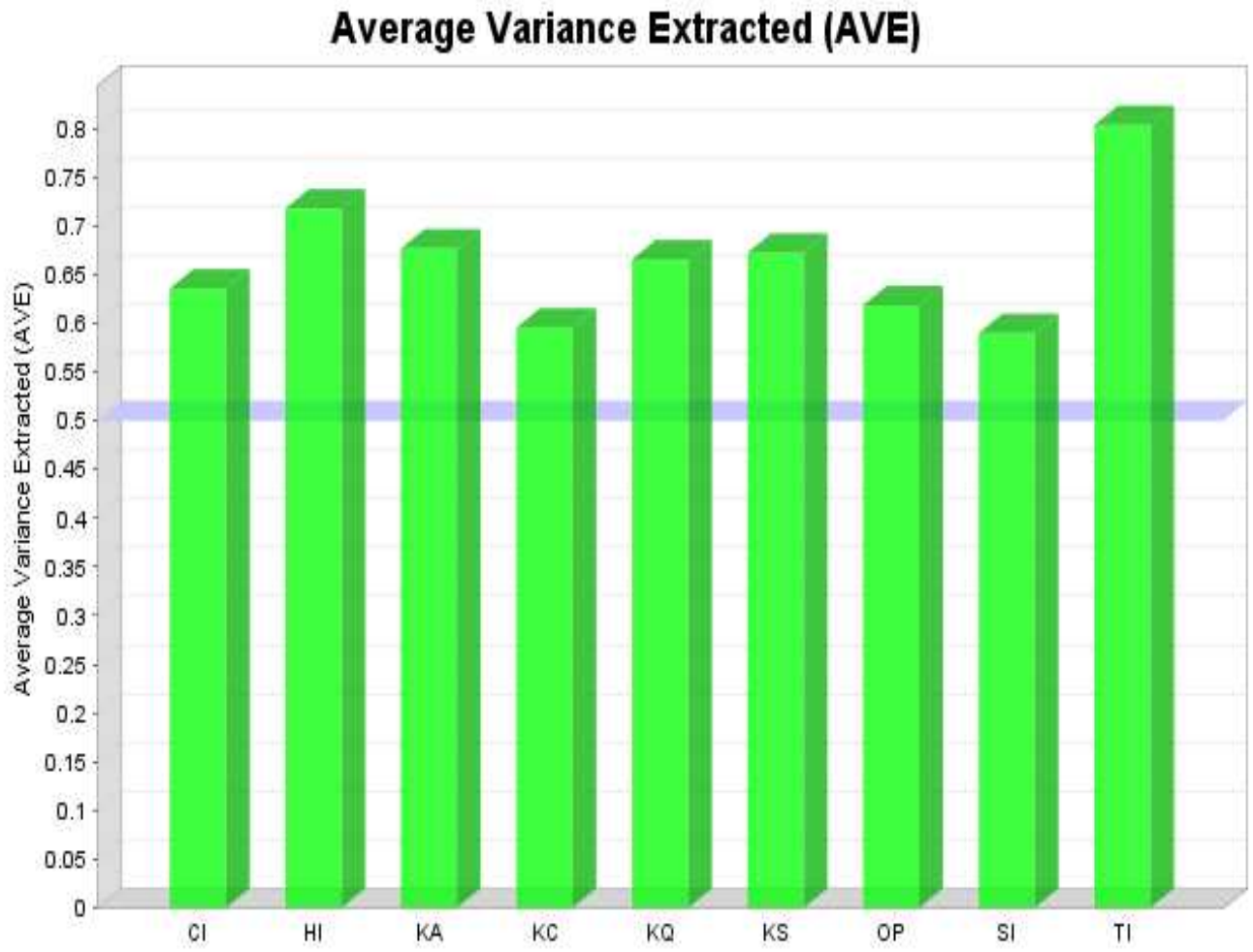
5.3.2.1 Convergent validity

Convergent validity is the extent to which a measure correlates positively with alternative measures of the same construct. To establish convergent validity the researcher considers the Average Variance Extracted (AVE).According to Joseph et al. (2014) AVE defined as the grand mean value of the squared loadings of the indicators associated with the construct (i.e the sum of the squared loading divided by the number of indicators).An AVE value of greater or equal to 0.50 indicates that good convergent validity where as AVE less than 0.50 indicates that lower convergent validity (Wong, 2013).

Table 5.5 and Graph 5.2 show that AVE value of this research. The AVE value of each construct that means human enabler (0.677), organizational culture (0.679), organizational structure (0.593), technology (0.786), knowledge application (0.648), knowledge acquisition (0.666), knowledge creation (0.596), knowledge sharing (0.591), and organizational performance (0.609) are above the threshold value of 0.50. Thus the measures of all construct have high level of convergent validity.

Construct	Average Variance Extracted (AVE)
Organizational Culture	0.679
Organizational Structure	0.593
Human Enabler	0.677
Technology	0.786
Knowledge Creation	0.596
Knowledge Application	0.648
Knowledge Acquisition	0.666
Knowledge Sharing	0.591
Organizational Performance	0.609

Table 5.5 Average Variance Extracted (AVE) Value



Graph 5.2 Average Variance Extracted (AVE)

5.3.2.2Discriminatory Validity

Discriminante validity indicates the extent to which each construct is more highly related to its own measures than with other constructs (Chin, 2010; Wong, 2013). Discriminant validity is achieved when two criteria are fulfilled. First, the measurement items should exhibit high loadings on their theoretically intended constructs and must not load highly on other constructs Nils Urbac, Frederik Ahlemann (2010). Second, the constructs show satisfactory discriminant validity when the square root of the AVE is greater than the inter-construct correlations (Nils Urbac, Frederik Ahlemann, 2010; Joseph et al.,2014). This means that the shared variance between each construct and its indicators is greater than the variance shared among other constructs (Chin, 2010; Wong, 2013).

Discriminant validity was examined through the correlation matrix of the constructs as presented in Table 5.6.

Measures of constructs that theoretically should not be related to each other are, in fact, observed to not be related to each other (that is, we should be able to discriminate between dissimilar constructs).To check discriminatory validity the researcher uses Fornell-Larcker Criterion and cross loading value .

A) Fornell-Larcker Criterion

According to Fornell-Larcker Criterion, the square root of the AVE of each construct should be higher than the construct's highest correlation with any other constructs in the model. Table 5.6 shows that the result of Fornell-Larcker Criterion. Human enabler has a value of 0.907. This value is higher than from any value from the column. Likewise the other construct knowledge application (0.897), knowledge acquisition (0.903), knowledge creation (0.878), knowledge sharing (0.876), organizational performance (0.883), organizational culture (0.913), organizational structure (0.877) and technology (0.941) are all higher than the correlation of these constructs with other latent variable in the path model.

	Human Factor	Knowledge Acquisition	Knowledge Application	Knowledge Creation	Knowledge Sharing	Organizational Culture	Organizational Performance	Organizational Structure	Technology
Human Factor	$\sqrt{AVE=0.82}$ $\sqrt{AVE=\mathbf{0.90}}$								
Knowledge Acquisition	0.363	$\sqrt{AVE=0.81}$ $\sqrt{AVE=\mathbf{0.90}}$							
Knowledge Application	0.428	0.700	$\sqrt{AVE=0.80}$ $\sqrt{AVE=\mathbf{0.89}}$						
Knowledge Creation	0.337	0.616	0.683	$\sqrt{AVE=0.77}$ $\sqrt{AVE=\mathbf{0.87}}$					
Knowledge Sharing	0.427	0.529	0.577	0.548	$\sqrt{AVE=0.76}$ $\sqrt{AVE=\mathbf{0.87}}$				
Organizational Culture	0.558	0.605	0.599	0.517	0.447	$\sqrt{AVE=0.83}$ $\sqrt{AVE=\mathbf{0.91}}$			
Organizational Performance	0.468	0.641	0.742	0.699	0.606	0.577	$\sqrt{AVE=0.78}$ $\sqrt{AVE=\mathbf{0.88}}$		
Organizational Structure	0.381	0.452	0.441	0.537	0.501	0.486	0.503	$\sqrt{AVE=0.77}$ $\sqrt{AVE=\mathbf{0.87}}$	
Technology	0.226	0.388	0.410	0.523	0.343	0.465	0.394	0.481	$\sqrt{AVE=0.88}$ $\sqrt{AVE=\mathbf{0.94}}$

Note: Diagonal terms **(in bold**) are square root of the average variance extracted. Off-diagonal terms are the correlation of latent constructs.

Table 5.6 Fornell-Larcker Criterion

B) Cross loading

Discriminatory validity is established when an indicator's loading on a construct is higher than all of its cross loadings with other constructs. Please refer the detailed result in appendix section Table 5.12. The table shows that individual loading value (value in bold) and all values are higher than all of its cross loading with other constructs. Thus, discriminatory validity established for all constructs.

5.4 Evaluation of Structural Model

Structural model assessed using, significant testing, coefficient of determination (R-square), effect size (F- Squared), and predictive relevance (Q-square) (Nils Urbac, Frederik Ahlemann, 2010; Wong, 2013). A structural model defines the causal relationships between the latent constructs, thus the assessment of the structural model is based on the meaningfulness and prediction of the proposed relationships. The subsequent sections present the result of the above test.

5.4.1 Significance test

Bootstrapping conducted to generate T-statistics for significance testing of the outer model. In this procedure, a large number of subsamples (5000) are taken from the original sample with replacement to give bootstrap standard errors, which in turn gives approximate T-values for significance testing of the structural path.

In this researcher two-tailed t-test with significance level of 5% conducted. Using a two-tailed t-test with a significance level of 5%, the path coefficient will be significant if the T-statistics is larger than 1.96 (Wong, 2013). In this bootstrapping result as indicated in table 5.7 all of the knowledge enabler capability linkages are statistically significant. As indicated in this table the link between organizational culture → knowledge enabler capability (T-Value = 16.293), organizational structure →knowledge enabler capability (T-Value = 14.919), technology→ knowledge enablers capability (T-Value = 10.551), human factor → knowledge enablers capability (T-Value = 9.099). Similarly all of knowledge process capability exhibit statistically significant linkage. As indicated in table 5.7 the link between knowledge acquisition → knowledge process capability (T-Value = 18.159), knowledge application → knowledge process capability (T-Value = 23.854), knowledge creation → knowledge process capability (T-Value = 16.783) and knowledge

sharing → knowledge process capability (T-Value = 11.457). On the other hand T-statistics result of the outer model are larger than 1.96, thus the outer model loadings are highly significance. Please refer the detailed result in Appendix section Table 5.9.

	T Statistics	P Values
Organizational Culture → Knowledge Enablers Capability	16.293	0.000
Organizational Structure →Knowledge Enablers Capability	14.919	0.000
Technology→ Knowledge Enablers Capability	10.551	0.000
Human Factor → Knowledge Enablers Capability	9.099	0.000
Knowledge Acquisition → Knowledge Process Capability	18.159	0.000
Knowledge Application → Knowledge Process Capability	23.854	0.000
Knowledge Creation → Knowledge Process Capability	16.783	0.000
Knowledge Sharing → Knowledge Process Capability	11.457	0.000
Knowledge Process Capability → Knowledge Management Capability	40.437	0.000
Knowledge Enablers Capability → Knowledge Management Capability	19.196	0.000
Knowledge Management Capability →Organizational Performance	32.477	0.000

Table 5.7 T-statistics

5.4.2Path Analysis (Path coefficient)

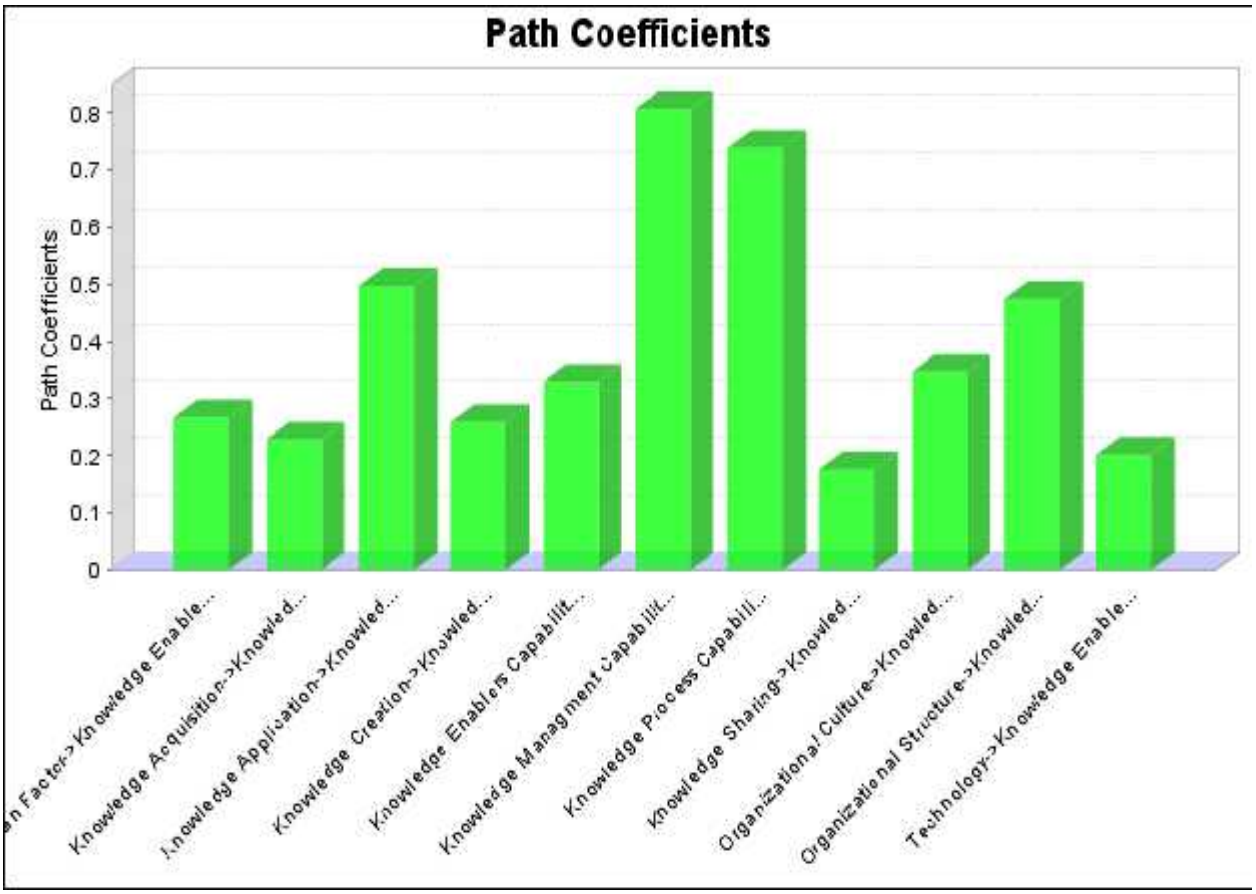
The path coefficient explains the relative importance of exogenous construct (technology, organizational culture, organizational structure, human factor, knowledge application, Knowledge creation, knowledge acquisition, and knowledge sharing) on endogenouse construct (organizational performance). Then value of path cofficient range between -1 to +1. Estimated path cofficient close to +1 represenets strong relations ships and that is statistically important.Conversly, when the value close to -1 representes strong invers relationship between exgnouse and endogenouse constractes.This value also statistically important.On the other hand if the value closer to 0 implies that weak relationship between the constract .

As indicated in Table 5.8, Fig 5.2 and Graph 5.3 that all of the link toward knowledge capability shows positive value . Out of the four construct of knowledge enablers capability organizational structure (0.475)has the strongest link to knowledge enablers capability.Eventhough all four construct of knowledge process capability have positive

pathe cofficient , knowledge application (0.497) has the strongest link to its dependent variable .

	Path Cofficient
Organizational Structure → Knowledge Enablers Capability	0.475
Technology → Knowledge Enablers Capability	0.202
Human Factor → Knowledge Enablers Capability	0.267
Organizational Culture → Knowledge Enablers Capability	0.347
Knowledge Acquisition → Knowledge Process Capability	0.229
Knowledge Application → Knowledge Process Capability	0.497
Knowledge Creation → Knowledge Process Capability	0.259
Knowledge Sharing →Knowledge Process Capability	0.176
Knowledge Enablers Capability →Knowledge Managment Capability	0.329
Knowledge Managment Capability →Organizational Performance	0.807
Knowledge Process Capability → Knowledge Managment Capability	0.739

Table 5.8 Path coefficient



Graph 5.3 path coefficient

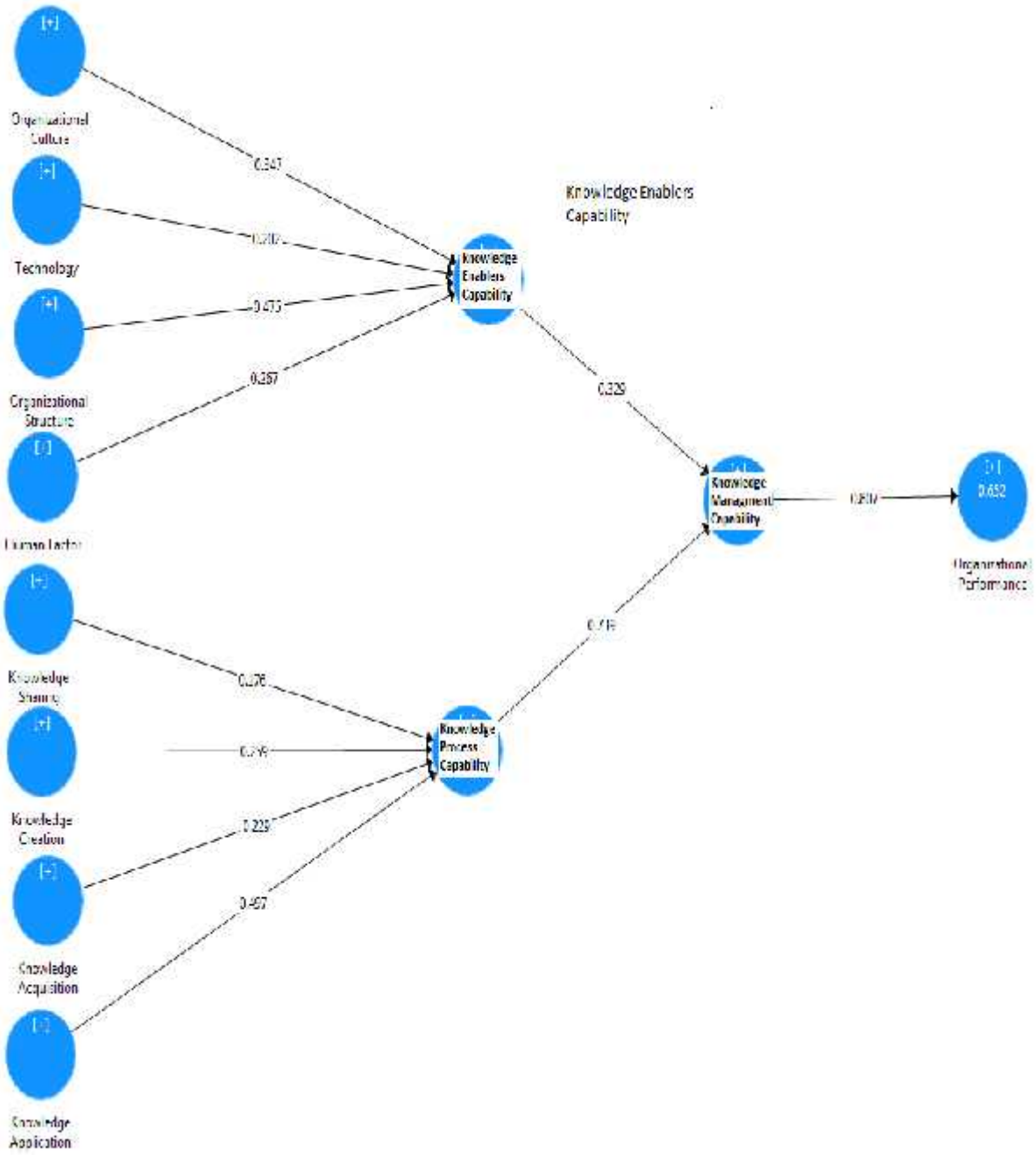
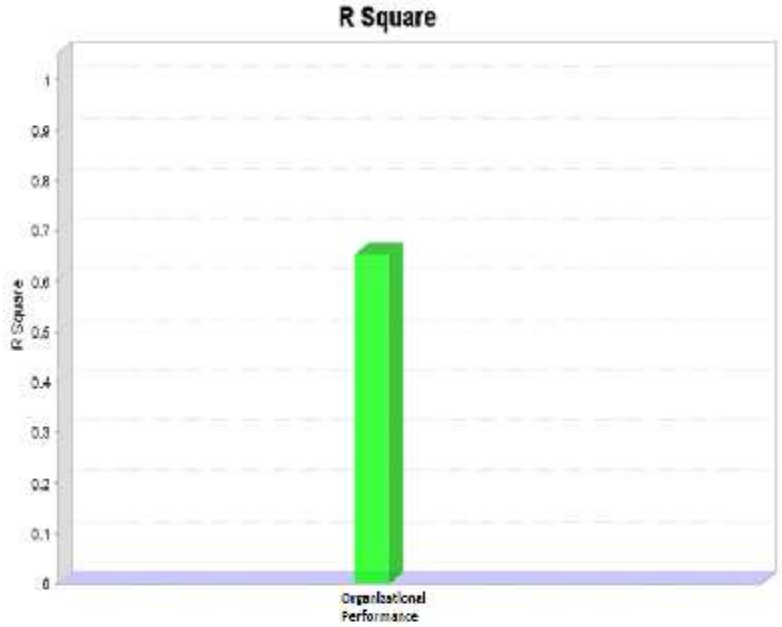


Fig 5.2 Path Model

5.4.3 R- Squared Value

To evaluate the structural models' predictive power, R squares (R^2) were calculated. R squares (R^2) indicates the amount of variance explained by the exogenous variables Chin, (1998). Knowledge management capability explained 0.652 (65.2%) of the variance in organizational performance.

The value of R^2 is between 0 and 1 .If the value is closer to 1 the exogenous variable explain the dependent variable well and it is closer to Zero it is week. R^2 value greater than 0.67 considered to be substantial (Chin, 1998; Nils Urbac, Frederik Ahlemann, 2010), R- Squared value of the predicted construct i.e. organizational performance is 0.652 as shown in figure 5.2. This value means that the total constructs contribute 65.2% for the effect of organizational performance. This R^2 value (0.652) as indicated in Graph 5.4 considered to be substantial (Chin, 1998; Nils Urbac, Frederik Ahlemann, 2010).



Graph 5.4 R Square

5.4.4 Assessment of predictive Relevance (Q^2)

The quality criterion for the structural model is the Stone–Geisser's Q, conducted to determine predictive relevance using the blindfolding procedure in SmartPLS (Urbach and Ahlemann 2010). Q2 measures the extent to which the model's prediction is successful (Urbach and Ahlemann 2010). A value of Q > 0 confirms the presence of predictive relevance (Urbach and Ahlemann 2010). The result from the blindfolding provides Q^2 value of 0.364 for knowledge enabler capability, 0.423, for knowledge process capability, 0.347 for knowledge management capability and 0.364 for organizational performance. All of these values are above zero confirming that the structural model exhibits predictive relevance for organizational performance.

5.5 Hypotheses testing

Using a bootstrapping technique with a re-sampling of 5000, the path estimates and t-statistics were calculated for the hypothesized relationships. Please for detailed refer bootstrapping result in appendix section table 5.8.

The researcher derived eleven hypotheses for this research based on literature review. All eleven hypotheses are supported by the literature. Now it is time to check these hypotheses based on the data collected from EIC's respondent. T- Value is used to test the hypothesis. Parameters whose t-values were greater than 1.96 were considered statistically significant at the 0.05 level.

The coefficient of the relationship of observable variables (CI, SI, HI, TI, KC, KQ, KS, and KA) to dependent variable (OP), along with its significance levels, is reported in Table 5.13. The accepted significance level is t> 1.96 or p < 0.05. The results presented show that all the proposed relationships and hypotheses are found significant; hence all hypotheses are supported by the study.

	Path coefficient (B)	T-Statistics	Decision
H1 Organizational Culture → Knowledge Enabler Capability	0.347	16.293	Supported
H2 Organizational Structure →Knowledge Enablers Capability	0.475	14.919	Supported
H3 Technology→ Knowledge Enablers Capability	0.202	10.551	Supported
H4 Human Factor → Knowledge	0.267	9.099	

Enablers Capability			
H5 Knowledge Acquisition → Knowledge Process Capability	0.229	18.159	Supported
H6 Knowledge Application → Knowledge Process Capability	0.497	23.854	Supported
H7 Knowledge Creation → Knowledge Process Capability	0.259	16.783	Supported
Knowledge Sharing → Knowledge Process Capability	0.176	11.457	Supported
H8 Knowledge Process Capability → Knowledge Management Capability	0.739	40.437	Supported
H9 Knowledge Enablers Capability → Knowledge Management Capability	0.329	19.196	Supported
H10 Knowledge Management Capability →Organizational Performance	0.807	32.477	Supported

Table 5.9 Hypothesis Result

All the proposed eleven hypotheses statistically significant and supported in this study with R-squared value of 0.652 as indicated in table 5.9.

5.6. Summary

The data of this study was successfully tested and is considered reliable and valid based on the results of the reliability test and validity test using SMARTLS trial version 3. The hypotheses of this study were tested. The results show that all the proposed hypotheses are supported. Organizational Structure strongly related (0.475) to knowledge enabler capability. Knowledge application (KA) produces strong relationship (0.497) with knowledge process capability (KPC). Knowledge process capability strongly related (0.739) to organizational performance than knowledge enablers capability (0.329). The results of this study and the hypotheses will be discussed in detail in the discussion section of the next chapter.

CHAPTER SIX

DISCUSSION

6.1 Introduction

Results of the data analyses presented in chapter Five are discussed in this chapter to address the research questions outlined in Chapter 1. A review of the hypotheses is provided at the beginning of each section. This chapter analyses the findings of this study in light of existing literature and reports on the consistency or otherwise of the research findings with previous studies. Lastly a summary is presented to conclude this chapter.

6.2 Impact of Knowledge management enablers on organizational performance

In this section, findings are discussed in accordance with four hypotheses (H1, H2, H3 and H4,H5) tested to examine the impact of organizational culture, organizational structure, human factor and technology on KEC and in turn the impact of KEC on EIC's organizational performance.

6.2.1. The Impact of Organizational Culture on knowledge enablers capability

One of the objectives of this thesis is to understand the impact of organizational culture on knowledge enables capability in case of EIC which leads to the hypothesis that organizational culture has a positive impact on knowledge enable capability. Therefore, the first proposed hypothesis was:

H1. Organizational culture has a positive impact on knowledge enabler capability

H1 states that there is a positive impact between organizational culture and knowledge enablers. This hypothesis was supported in this research and statistically significant. The path coefficient measuring the path from organizational culture to knowledge enabler capability in the model was 0.347 with t-value of 16.293 and p-value 0.000 (Table 5.13). It can be safely concluded that the hypothesized positive impact (0.347(34.70%)) was maintained. Statistically significant relationship occurred between organizational culture and knowledge enabler capability.

This finding was consistence with many literature and research works. Huda Hussein et al., (2014) pointed out that organizational culture has a positive and statistically significant impact on knowledge enabler capability. Further Seleim and Khalil (2011), Mills and Smith (2011) and Ali Yassin Sheikh Ali (2015) show that a positive link between organizational culture and knowledge enabler capability.

Similarly the research work from (Davenportmand Prusak, 1998; Hussein et. al 2014; Ho. 2009; Alavi, and Leidner, 2001; Kenneth Chukwujioke et al., 2013) organizational culture has a positive impact on knowledge enabler capability. Finding from Taejun Cho (2011), Heeseok Lee and Byounggu Choi (2003) and Gold et al.(2001) also indicate that organizational culture has a positive impact on knowledge enabler capability.

Indicators about the organizational culture with are listed in the questionnaire include employee understanding about the importance of knowledge to corporate success, organizational encouragement to share, apply, acquire and create new knowledge, organizational value of on-the-job training, learning and individual expertise. Moreover it includes elements like whether organizational vision and objective is clearly stated or not, and the management support business success using knowledge management.

Even though most (72.8 % Table 6.1 Appendix 5) employee of EIC understands about the importance of knowledge for organizational success, they are not encouraged by the organization to create new knowledge, share knowledge and acquire knowledge from external sources. One of the key for organizational success is creating knowledge which satisfies needs of customer. The organizational culture of EIC does not recognize knowledge as an asset (61.1 % Table 6.1 Appendix 5). The agreement of the respondent toward the support of senior management to the role of knowledge management to business success is only 29 % (Table 6.1 Appendix 5). Therefore this indicates that people which have at management level needs awareness about the importance of knowledge management for better organizational performance.

The finding of this research clearly indicates that the hierarchy organizational culture of EIC that exist at the time of this research was not in the position to contribute the organizational performance. Most respondent indicate that organizational culture of EIC doesn’t value and recognize application, sharing and creation of knowledge.

6.2.2 The Impact of Organizational Structure on Knowledge Enabler Capability

This section explains the results of hypothesis testing with respect to the impact of organizational structure on knowledge enabler capability. It was hypothesized as Organizational structure has a positive impact on knowledge enabler capability. The second hypothesis was:

H2. Organizational structure has a positive impact on knowledge enabler capability

H2 suggests that there is a positive impact between organizational structure and knowledge enabler capability. This suggestion was supported by the statistical results from this study. The path coefficient measuring the path from organizational structure to knowledge enabler capability in the model was 0.475 with t-value of 14.919 and p=value 0.000 (Table 5.13). The suggested relationship between organizational culture and knowledge enabler capability was thus proved to be supported.

This finding consistence with previous research work that shows organizational culture has positive and statistically significant impact on knowledge enabler capability. Research work conducted by (Huda Hussein et. al (2014); Gold et al., (2001); Nonaka, I., & Takeuchi, H. ,1995; Joel Chigada ,2014) which shows that there is a positive and statistically significant impact between the two variables i.e organizational structure and knowledge enabler capability.

Organizational structure has a positive impact (path coefficient = 0.475(47.50%) on KEC and the hypothesis was supported in the case of EIC based on the data collected for this research work since it is statistically significant(t-value of 14.919 and p=value 0.000).

Indicators about the organizational structure which are listed in the questionnaire include, structure of departments and divisions in encouraging toward sharing of knowledge, knowledge creation, knowledge acquisition and knowledge application.

Most respondents (63.9% Table 6.1 appendix 5) agree that the organization structure of EIC not in favor of knowledge sharing. Without good knowledge sharing environment, employees can’t exchange their experience and tacit knowledge. The newly hired employee doesn’t get important knowledge about problem solving, product development and customer handling due

to weak knowledge sharing within the organization. Similarly organizational structure of EIC doesn't facilitate knowledge creation and knowledge acquisition of the organization.

6.2.3 The Impact of Human Factor on Knowledge enabler capability

This section explains the results of hypothesis testing with respect to the impact of human factor on knowledge enabler capability. It was hypothesized that human factor has a positive impact on knowledge enabler capability. The third hypothesis was:

H3.Human factors has a positive impact on knowledge enabler capability

H3 claims that there is a positive and significant relationship between human factor and knowledge enabler capability. This claim was supported by the research. The path coefficient measuring the path from human factor to knowledge enabler capability in the model was 0.267 with t-value of 9.099 and P-value of 0.000 (Table 5.13). The suggested positive relationship between human factor and knowledge enabler capability was proved and it was statistical significant.

This finding consistence with previous research work that shows human factor has positive and statistically significant impact on knowledge enabler capability. Kenneth Chukwujioke et.al (2013) that explain human factor has a positive and significance impact in service sector like banks and insurance. This previous research work asserts that for every business organization human factor have key roles for their success. Similar finding also observed by Heeseok Lee and Byounggu Choi (2003).On this research work human capital has a positive and meaningful impact on organizational knowledge creativity and organizational performance. Similar to the above literature human factor has positive impact and it is statistically significant in the case of EIC's organizational performance.

Human factor indicators in this research includes understanding of employee toward their friend task in addition to their own task, willingness and helpfulness of employee to collaborate across organizational units within EIC, suggestion about others' tasks. The result indicates that EIC managers have a lot to do about these indicators. As indicated in Table 6.1 Appendix 5 half of the respondent agree that no collaboration with in the organization. More over employees have less understanding about the task of others and the suggestion mechanism about their task and others that's within EIC is not clearly stated.

6.2.4 The Impact Technology on Knowledge enabler capability

This section explains the results of hypothesis testing with respect to the impact of technology on knowledge enabler capability. It was hypothesized as Technology has a positive impact on knowledge enabler capability. The fourth hypothesis was:

H4. Technology has positive impact on knowledge enabler capability

H4 states that there is a positive and significant relationship between technology and knowledge enabler capability. More Over, this state was statistically supported from the analysis. The path coefficient measuring the path from technology to organizational performance in the model was 0.202 with t-value of 10.551and p-value 0.000 (Table 5.13). The suggested positive relationship between technology and knowledge enabler capability was confirmed and was statistical significant.

The finding of this research is consistent with (Powell, T. C., & Dent-Micallef, A. ,1997; Ali Yassin Sheikh Ali ,2015; Joel Chigada ,2014) whom found that technology could have significant and a positive impact on knowledge enabler capability. Similarly, the finding of Seleim, A. A., & Khalil, O. E. (2011) shows that technology is in favor toward organizational performance with statistically significant value. Similar result also observed from research work of Gold et al. (2001) and Taejun Cho (2011).The result for this hypothesis in EIC in line with the above previous research works. Thus technology has positive impact on EIC's knowledge enabler capability and statistically significant.

Indicators about the technology which are listed in the questionnaire include the uses of technology that allows employees to collaborate/ cooperate with other persons inside and outside the organization, the uses of technology that allows people in multiple locations to learn as a group from a single/multiple source or at a single/multiple point in time, uses of technology that allows to retrieve and use knowledge about its products and processes, organizational IT support that facilitate new knowledge creation, knowledge acquisition, knowledge sharing and knowledge application.

Half of the respondent (50.9 % Table 6.1 Appendix 5) indicates that EIC uses technology that help employee to collaborate and cooperate with in the organization and outside the organization.64.5 % of the respondent agree that EIC doesn't use technology that allows people in multiple locations learn as a group from single source and point. Similarly,

58%,53.2%,42% and 55.6% (Table 6.1 appendix 5) of the respondent disagree that EIC uses technology that facilitate knowledge creation, knowledge sharing, knowledge acquisition and knowledge application respectively.

6.2.5 Impact of knowledge management enablers on knowledge management capability

This section explains the results of the hypothesis testing with respect to the impact of knowledge enabler capability on knowledge management capability. It was hypothesized as knowledge enabler capability has a positive impact on knowledge management capability. The fifth hypothesis was:

H5. Knowledge enabler capability has positive impact on knowledge management capability.

H5 states that there is a positive and significant relationship between knowledge enabler capability and knowledge management capability. This hypothesis was statistically significant and supported in this study. More Over, the hypothesis was statistically supported from the analysis. The path coefficient measuring the path from knowledge enabler capability to knowledge management capability in the model was 0.329 with t-value of 19.196 and p-value 0.000 (Table 5.13). The suggested positive relationship between knowledge enabler capability and knowledge management capability was confirmed and was statistical significant.

The finding of this research is consistent with (Powell, T. C., and Dent-Micallef, A. ,1997; Ali Yassin Sheikh Ali ,2015; Joel Chigada ,2014) whom found that knowledge enabler capability could have significant and a positive impact on knowledge management capability. Similarly, the finding of Seleim, A. A., and Khalil, O. E. (2011) shows that knowledge enabler capability is in favor toward knowledge management capability with statistically significant value. Similar result also observed from research work of Gold et al. (2001) and Taejun Cho (2011).The result for this hypothesis in EIC in line with the above previous research works. Thus knowledge enabler has positive impact on EIC's knowledge management capability and statistically significant.

6.2.6 Summary of the Impact of knowledge enablers capability on knowledge management capability

This section addresses half of the general research question of "What impact does knowledge enabler capability has on knowledge management capability in the EIC?"

As indicated on the above subsequent section (section 6.2.1-section 6.2.5) all of the elements of knowledge enabler capability have positive and statistically significant impact on EIC's knowledge management capability. Organizational structure has greater positive impact (47.50%) on knowledge enabler capability of EIC than the other knowledge enabler capability. It is followed by organizational culture (34.70%) and then human factor (26.70%). Out of the four knowledge enablers capability technology has the least impact (20.20%) on knowledge management capability.

6.3. The Impact Knowledge Process capability on knowledge management capability

In this section, findings are discussed in accordance with four hypotheses (H6, H7, H8 , H9 and H10) tested to examine the impact of knowledge creation, knowledge acquisition, knowledge application and knowledge sharing on EIC's knowledge management capability.

6.3.1 The Impact Knowledge creation on knowledge process capability

This section explains the results of hypothesis testing with respect to the impact of Knowledge creation on knowledge process capability. It was hypothesized that knowledge creation has a positive impact on knowledge process capability. The sixth hypothesis was:

H6.Knowledge creation has a positive impact on knowledge process capability

H6 states that there is a positive and significant relationship between knowledge creation and knowledge process capability. There was evidence to support the significance of this hypothesis. The path coefficient measuring the path from knowledge creation to organizational performance in the model was 0.259 with t-value of 16.783 and P-value = 000 (Table 5.13). It can be safely concluded that the hypothesized positive and significant relationship between knowledge creation and knowledge process capability was well established in this research.

Knowledge creation was found to exhibit the expected positive and significant effect on knowledge process capability t-value of 16.783, P-value = 000).Thus H6 is supported in this research. This finding in line with the research result by Ali Yassin Sheikh Ali (2015) at Somalia Telecommunication sector. Similarly research finding from Antonio Mihi et.al (2011) explains that knowledge creation has a positive and significance impact on knowledge

process capability. The above hypothesis result also in line with the finding result of Heeseok Lee and Byounggu Choi (2003).

On those previous research found that there is a strong positive and significant impact between knowledge creation and knowledge process capability. This is also the similar in this study. Therefore Knowledge creation has a positive significant impact on EIC's knowledge process capability (path coefficient = 0.259(25.9%), with t-value of 16.783 and P-value = 000).

Data collected about knowledge creation using indicators like organizational supply that help knowledge creation within the organization, the strategic use of knowledge within the organization for new product and service development , about frequency of new business strategy and marketing system implementation within EIC, about frequency of new product and service development, about improvement of existing products and service.

It was pointed out by 68.7% of the respondent EIC didn't provide necessary resource like internet, publication and training that facilitate knowledge creation within the organization. Organization to be effective in knowledge creation should provide the necessary resources to their employee. Otherwise the frequency of new product development within the organization could be low. As indicated in Table 6.1 Appendix 5 63.4% of the respondents agree that product development in EIC was infrequent.

6.3.2 The Impact Knowledge Acquisition on knowledge process capability

This section explains the results of hypothesis testing with respect to the impact of knowledge acquisition on knowledge process capability. It was hypothesized that knowledge acquisition has a positive impact on knowledge process capability. The seventh hypothesis was:

H7. Knowledge acquisition has a positive impact on knowledge process capability

H7 states that there is a positive and significant relationship between knowledge acquisitions and knowledge process capability. This state was statistically supported from the analysis. The path coefficient measuring the path from knowledge acquisitions to knowledge process capability in the model was 0.229 with t-value of 18.159 (Table 5.13).The suggested positive relationship between knowledge acquisitions and organizational performance was confirmed and this relationship was statistical significant.

This finding was similar with (Huda Hussein et. al (2014); Seleim, A. A., and Khalil, O. E. (2011); Mills, A. M., and Smith, T. A. (2011); Gold et al. (2001) and Taejun Cho(2011)) observation in which they found out that knowledge acquisition has a positive and significant impact on knowledge management process. Previous research work explains that knowledge acquisition has a great positive impact on knowledge process capability. Similarly research finding from Bita Shahbakhsh (2013), Knowledge acquisition has a meaningful impact on knowledge process capability. Like the above research works knowledge acquisition has a positive impact on EIC's knowledge process capability (path coefficient = 0.229(22.90%).

Indicators about the technology which are listed in the questionnaire include processes for acquiring knowledge about customers, competitors and product/service, processes for generating new knowledge from existing knowledge, processes for distributing knowledge throughout the organization processes for inter organizational collaboration and about recruitment of experienced employees to bring new knowledge into the organization.

As it can be seen from the results only 19.5% of the respondents agree that experienced employee recruited with in EIC. Employee that agreed for the presence of processes for generating new knowledge from existing knowledge within the organization are 24.9%.Similarly only 28% of the respondent agree about the existence of processes for distributing knowledge throughout the organization. All these finding indicate that the EIC should attract experienced and skilled employee for better and effective organizational performance.

6.3.3 The Impact Knowledge sharing on knowledge process capability

This section explains the results of hypothesis testing with respect to the impact of knowledge sharing on knowledge process capability. It was hypothesized that knowledge sharing has a positive impact on knowledge process capability. The eighth hypothesis was:

H8.Knowlegne sharing has a positive impact on knowledge process capability

H8 asserts that there is a positive and significant relationship between knowledge Sharing and knowledge process capability. This hypothesis was supported by the data as the coefficient measuring the path from knowledge sharing to knowledge process capability in the model was 0.176 with t-value of 11.457 (Table 5.13).The suggested positive relationship between knowledge sharing and knowledge process capability was well established in this research.

Knowledge sharing demonstrated a positive and significant impact on knowledge t=11.457 p=0.000), providing support for H8. This finding is in line with previous research work conducted by (Ali Yassin Sheikh Ali ,2015; Bita Shahbakhsh ,2013; Heeseok Lee and Byounggu Choi ,2003).On those research work knowledge sharing has a positive and significant impact on knowledge process capability. Similar result also observed in this study. Thus knowledge sharing has a positive impact on EIC's knowledge process capability (path coefficient = 0.176(11.457%).

Knowledge sharing indicator in the questionnaire includes elements like the existence of processes for exchanging knowledge between individuals, about supportiveness of members of the organization for knowledge sharing, the engagement of the organization in the process of distributing knowledge among departments, the culture of employee within the organization in sharing business manuals, models proposals ,reports and methodologies success and failure stories, knowledge gained from news, magazines, and journals, know-how from work experiences, expertise obtained from education and training.

The study found that even though half of the respondent agree that members of EIC are supportive toward knowledge sharing, most employees agree that EIC has no process for exchanging knowledge between individual which are gained from experience. The existence of other's success and failure stories sharing with in EIC agreed by only 29% of the respondent.

6.3.4 The Impact Knowledge Application on knowledge process capability

This section explains the results of hypothesis testing with respect to the impact of knowledge application on knowledge process capability it was hypothesized that knowledge application has a positive impact on knowledge process capability. The ninth hypothesis was:

H9. Knowledge application has a positive impact on knowledge process capability

H9 suggests that there is a positive and significant relationship between knowledge application and knowledge process capability. This suggestion was well supported by the statistical results. The path coefficient measuring the path from knowledge application to knowledge process capability in the model was 0.497 with t-value of 23.854 (Table 5.13). The suggested relationship between knowledge application and knowledge process capability was thus proved to be valid

This research revealed that knowledge application has a positive and statistically significant impact on knowledge process capability; H9 is supported (t=23.854 p=0.000). This finding is in agreement with the findings of the previous literature. Researchers who tested the influence of knowledge application on the knowledge process capability found positive link between the two variables (Huda Hussein et. al, 2014; Seleim, and Khalil, 2011; Gold et al., 2001; Taejun Cho, 2011). Thus knowledge application has significant and positive impact on EIC's knowledge process capability (path coefficient = 0.497(49.70%).

Knowledge application indicator in the questionnaire includes elements like the existence of processes for applying knowledge learned from mistakes and experience, the use of knowledge to solve new problems and to improve efficiency within the organization, the applicability of knowledge to changing competitive conditions.

The study ascertained that 42% and 36% of the respondent agree that EIC has no process to apply knowledge gained from mistake and experience respectively. Only 31.4% of the respondents agree the use of knowledge to solve problem with in EIC. Similarly only 32.5% of the respondent agree that use of knowledge to improve within the organization.

6.3.5 The Impact Knowledge process capability on knowledge management capability

This section explains the results of hypothesis testing with respect to the impact of knowledge process capability on knowledge management capability it was hypothesized that knowledge process capability has a positive impact on knowledge management capability. The tenth hypothesis was:

H10. Knowledge process capability has a positive impact on knowledge management capability

H10 suggests that there is a positive and significant relationship between knowledge process capability and knowledge management capability. This suggestion was well supported by the statistical results. The path coefficient measuring the path from knowledge process capability to knowledge management capability in the model was 0.739 with t-value of 32.477 (Table 5.13). The suggested relationship between knowledge application and knowledge process capability was thus proved to be valid

This research revealed that knowledge process capability has a positive and statistically significant impact on knowledge management capability; H10 is supported (t=32.477

p=0.000). This finding is in agreement with the findings of the previous literature. Researchers who tested the influence of knowledge process capability on the knowledge management capability found positive link between the two variables (Huda Hussein et. al, 2014; Seleim, and Khalil, 2011; Gold et al., 2001; Taejun Cho, 2011). Thus knowledge process capability has significant and positive impact on EIC's knowledge management capability (path coefficient = 0.739(73.90%)

6.3.6 Summary of the Impact of knowledge management capability on Organizational Performance.

This section addresses the other half of the general research question of "What impact does knowledge management enablers and knowledge management process have on organizational performance in the EIC?" specifically "What impact does knowledge management process have on organizational performance?"

As indicated on the above subsequent section (section 6.3.1-section 6.3.5) all the elements of knowledge enabler capability have positive impact on organizational performance. Similarly all elements of knowledge process capability have a positive impact. Knowledge process capability (73.90%) has a strong impact on knowledge management capability than knowledge enabler capability (32.90%)

6.4 Addressing Research question

This research set research questions in chapter one as:
What impact does knowledge enabler capability and knowledge process capability has on knowledge management capability in EIC and in turn knowledge management capability on organizational performance in the EIC?"

As discussed in the above subsequent sections, In general knowledge management capability has a positive impact on organizational performance. The R-Squared value of 0.652 indicates that the organizational performance has strong link with knowledge management capability. Both knowledge process capability and knowledge enabler capability have a positive impact on knowledge management capability. However, the impact of knowledge process capability on knowledge management capability is stronger than knowledge enabler capability. Hence knowledge process capability has more impact on organizational performance than knowledge enabler capability.

When we observe the result of this study in accordance with the impact of knowledge management enablers and knowledge management process on organizational performance we can find that the element of knowledge management process has more positive impact on organizational performance than knowledge management enablers.

Thus knowledge management process has a strong positive impact (73.90%)contribution for the organizational performance while knowledge management enablers has less positive contribution (32.90%) for organizational performance when compared to knowledge management process(Table 5.14).

6.5 Summary

This chapter discussed the findings presented in Chapter 5. All eleven hypotheses, the general and the research question which are posed in chapter 1 were discussed in support of previous research. All hypotheses are supported and statistically significant in this research.

All hypotheses that linked to knowledge enabler capability are supported on this study. Similarly all hypotheses toward knowledge process capability are supported in this research. With the same notion hypothesis from knowledge enabler capability and from knowledge process capability toward knowledge management capability strongly supported. Finally hypothesis from knowledge management capability to organizational performance strongly supported in this thesis.

Thus element of knowledge enabler capability; organizational structure (1^{st}), organizational culture (2^{nd}), human factor (3^{rd}) and technology (4^{th}) have positive impact respectively .Similarly element of knowledge process capability; knowledge application (1^{st}), knowledge creation (2^{nd}), knowledge acquisition (3^{rd}) and knowledge sharing (4^{th}) have strong positive impact on knowledge process capability respectively. In general knowledge management has strong positive impact in the case of EIC's organizational performance.

CHAPTER SEVEN

7.1 Conclusion

This thesis has examined the impact of knowledge management capability on organizational performance in EIC. The knowledge management capability consists of two elements namely knowledge enabler capability and knowledge process capability. Knowledge enabler capability contains organizational culture, organizational structure, human factor and technology. On the other hand knowledge process capability includes knowledge creation, knowledge acquisition, knowledge application and knowledge sharing. According to Samer Alhawari and Mufleh Al-Jarrah (2012) the above four listed elements of knowledge enabler capability and knowledge processes capability are the most widely used and acknowledged terms. Thus the researcher used only these elements to analyze the impact of KM on organizational performance. On this research organizational performance measured based on customer satisfaction, employee learning and growth, and perceived performance of the organization.

The result of this research revealed that knowledge management capability has positive impact on organizational performance. Even though both KEC and KPC exhibit positive impact on knowledge management capability KPC strongly impact KMC. Thus knowledge process capability has more positive impact on organizational performance than knowledge enabler capability. Hypothesis testing of this research demonstrate that all the proposed hypotheses was supported.

The impact of the exogenous construct of knowledge enabler capability has statistically significant and positively related with KPC. Organizational structure has more positive impact on knowledge enabler capability than the other three construct. It is followed by organizational culture, human factor and technology respectively. Similarly construct of knowledge process capability exhibit statistically significant and positively related. Knowledge application creates strong relationship with KPC. It is followed by knowledge creation, knowledge acquisition and knowledge sharing respectively.

Since business organization are operating in more dynamic and competitive environment, EIC as the leading Insurance Company in Ethiopia and as its vision “World Class Insurer By

2025" need to support its core business activity with knowledge management. One of the key elements to stay in the market for business organization in general and insurance company in specific is to satisfy customers as well as employee of the company as much as possible. The study ascertained that the impact of knowledge management on EIC's organizational performance was less since most of knowledge management elements including technology are not effectively utilized. Thus the manager of the company as well as the employees of EIC should consider knowledge management and address the issues properly.

Today business organization strives to utilize their human power for better organizational performance. Even though EIC straggling to use its human power efficiently and effectively for better organizational performance still additional effort need to maximize human capital. Therefore creating conducive environment to maximize human capital (intellectual capital) it is not homework of tomorrow but for today. As the market share of EIC decreases from year to year it indicates that less organizational performance. Therefore to tackle such performance decrease knowledge management contributes a lot.

Finally both top and the middle level manager and employees of EIC should look for which element of knowledge management is not address properly and find out the solution to make EIC the leading insurance company in Ethiopia market and met its vision to be world class insurer. Thus, based on the results of the study, it can be concluded that EIC is much far from using knowledge management element to impact its organizational performance.

7.2 Contribution of the study

Research works conducted to alleviate a single problem or/and groups of problems with in the country, institutions, business organization or the society in general. Although research was conducted to fill the gap which are not address in previous research work. More over the research could be new or the extension of the prior research work. Based on the above context the contribution of this research work listed as follow:-

First contribution, this research work gives a holistic view about the impact of knowledge management on organizational performance for business organization as well as managers. Many local research works are concentrated on the single element of knowledge management process i.e knowledge sharing in certain organization like bank, education, manufacturing industry. Most previous studies are not related to organizational performance. Despite the fact

that this organizational performance issue addressed by international research works again most of them doesn't include insurance company in their study. Therefore, the main purpose of this study is investigating the impact knowledge management on organizational performance in insurance industry and to have holistic view rather than separate or fragmented elements of KM. Thus the results of this thesis have implications on the researchers in this area to fill the gap in local research work.

Second contribution, this study addressed the main aspect of knowledge management which are related and have positive and significant impact on organizational performance. Consequently, EIC should enhance its performance through improving these aspects of knowledge management elements and seeking solution for those knowledge management elements which are not supported in this research. Therefore, the findings of this study provide important contributions to insurance organization in general and EIC in particular in relation to their organizational performance.

Third contribution, the evidence provided in this study found that the knowledge application, knowledge creation and knowledge sharing are significantly and positively associated with the EIC's organizational performance. Thus, organization should consider these knowledge management processes as a common standard and practices, employees should be given sufficient resources to generate and develop new Ideas, new product, share their knowledge and experience. It helps EIC to explore and utilize opportunities for a new or developed product, process or service, in general the market. This result has important implications and is considered as a major contribution for the organizations to achieve innovations and enhance their performance.

The fourth contribution, hopefully private insurance companies can use this research as bench mark and go though their knowledge management elements to assess their week and strong point. The finding helps these insurance companies can easily identify their problem and take action for better organizational performance. Therefore, assessing and utilizing their internal knowledge is a valuable resource and the key driving force for developing an organization's performance by increasing the level of innovation and gaining competitive advantages.

The fifth contribution, achieving missions and visions (World class Insurer by 2025) of the organization is a key step for top and middle level managers of EIC. The finding of this

research work can be utilized by managers as resource and reference. Managers should have clear understanding of the organizations' environment and the knowledge management elements in order to assist the organizations to prioritize their production, technology strategies and market. In addition, managers should also encourage employees to develop, learn and innovate, and appreciate employees' achievements toward organizational performance. This finding is an important contribution to the management operations and performance.

At last, In addition filling the gap in local research work in the link between Knowledge management and organizational performance, this research work can be starting point and bench mark for the next researcher.

7.3 Limitations of the study

Although every effort was made to carefully plan, design, and carry out this research, this study is not without limitations. The results of this study offered valuable insights into impact of KM on insurance industry's organizational performance; however these results should be interpreted in context of their limitations. Some of the limitations are discussed below.

First, this study did not investigate an exhaustive list of determinants of knowledge management element (like knowledge storage, knowledge dissemination, knowledge protection, knowledge conversion etc) that could impact organizational performance. This study applied and examined knowledge management constructs based on an extensive review of the literature at a given point in time. It is entirely possible that differing reviews of the current literature could yield differing constructs to describe knowledge management factors that contribute to organizational performance. More over most the literature are in the area of education, bank, telecommunication, hotels, etc in other country than Ethiopia.

The second limitation resulted from the use of individual self-reported questions to capture data for measuring organizational performance. According to Timothy and Levy (2010) bias sometimes results in limited validity because of the dependence on volunteers to willingly and truthfully answer the questions. Timothy and Levy (2010) suggested that bias can never be completely eliminated when using self-reported data. Brutus, Aguinis, and Ulrich (2013) stated that data collected by means of questionnaires contain several sources of possible bias.

According to (Brutus et al., 2013) these sources includes losing to remember some facts, experience at the time of questionnaire, the mode of the respondent, and misjudge or ignoring.

The third limitation was also inherent in the use of self-reported survey questions. Although the research instrument was derived from scales that were previously validated there is no assurance that respondents clearly understood the intended meaning of the questions. Therefore, it can only be assumed that scales responses accurately reflect the respondent's level of agreement with each question. This is of particular concern for those respondents that may not have clearly understood the language of the questions. Because the survey required responses to all questions prior to submission, this limitation could potentially apply to the entire survey or even just portions of it.

The fourth limitation measuring an organizational performance requires different parameters. Broadly it includes financial and non financial dimensions. Even these two categories have many sub elements with them. For example financial aspect contains, revenue, sells volume, cost profit etc. On the other hand, non financial aspect business process, customer satisfaction, perceived performance employee learning and growth, etc. Due to time constraints on this research only none financial aspect of the organizational performance used. Moreover not all elements of non-financial aspect included this research work. Beside this due to low loading all items of employee learning and growth were excluded from this research. Therefore organizational performance on this research measured with two construct, customer related aspect and perceived organizational performance only.

The fifth limitation results from group of respondent on this research. Unlike other business insurance intermediary (insurance agents and insurance brokers) has a greater role on organizational performance. The same is true for EIC organizational performance. This research doesn't include these intermediaries. On the other hand the researcher doesn't get document data about customer satisfaction from the company. Thus, the researcher only uses data from employee. Therefore these can be considered as limitation since it doesn't give full picture to analyze organizational performance.

7.4 Recommendation Organization

After observing the finding of this research, the researcher came up with the following recommendations:

1) Organizational structure as well as organization culture of EIC's should be revised in accordance with knowledge management element to enhance and impact organizational performance.
2) EIC should implement and look for technologies like group ware which enhance its organizational performance.
3) EIC should come up with conducive work environment that enable the employees to learn from each other mistake, share their experience, preserving key employee knowledge before leaving the organization, and maximize its intellectual capital for better organizational performance.
4) EIC should employ knowledgeable personnel in addition to fresh graduate who are able to use their knowhow to work for the organizations independently so as to enhance performance within the organization.
5) The employees should be encouraged to develop and discover new ways of working so as to achieve the goals of the organization.
6) EIC should conduct regular evaluation on its knowledge management so as to take action and find out solution before things reach the worst on its organization performance.

7.5 Recommendation for Future Research

Future research may focus on the impact of both financial and non financial organizational performance. This research only considers half part of the organizational performance due to many constraints .In this sense the future research has a potential to be complete if the future researcher add the financial aspect of organizational performance. Even from none financial aspect it will be good if the future researcher adds another element like business process to measure organizational performance.

Another area for future research could be adding other key knowledge management elements like knowledge storage, knowledge conversion etc and observing their impact on organizational performance. Moreover, adding the impact of incentive in addition to the knowledge management elements which are listed in this research could be another future research area.

Future research also can be conducted by including multiple respondents. In this sense the result also could be better if the future researchers includes insurance intermediary like insurance agent and insurance brokers and customers in addition to employee.

Reference

1.Abdel Nasser H Zaied, Gawaher Soliman Hussein, and Mohamed M Hassan,(2012), *The role of knowledge management in enhancing organizational performance*, Journal International Journal of Information Engineering and Electronic Business,Vol 4,Issue - 5,Pages 27

2.Adel Hasan Al Ali (2013),*The Effect of Knowledge Sharing Practices on Organization Performance*, Master's Thesis

3.Akinniyi A. Adeleke (2012),*Knowledge Management Practices And Organisational Performance In The Manufacturing Industry In Nigeria*, University Of Ibadan, Nigeria, PhD Thesis

4.Alavi, M., & Leidner, D. E. (2001). *Review:Knowledge management and knowledge management systems: Conceptual foundations and research issues*.MIS quarterly, 107-136

5.Ali Yassin Sheikh Ali(Dr.) (2015), *Knowledge Management And Organizational Performance: Study From Telecommunication Companies In Somalia*, Research Journal of Social Sciences

6.Ameh Abu Amodu, Okafor Lawrence C and Inyada Sunday Joseph (2014), *Knowledge management and organizational performance in Kogi State University: issues and challenges* , Standard Global Journal of Business Management Vol 1

7.Aming'a, N. N. (2015), *Knowledge capture and acquisition mechanisms at Kisii Universit,*. Interdisciplinary Journal of Information, Knowledge, and Management, 10, 105-116

8.Antonio Mihi ,Victor Jesus , Rodrigo Martin (2011),*Knowledge Creation, Organizational Learning and Their Effects on Organizational Performance*, Engineering Economics

9.Antonie Botha,Derrick Kourie, And Retha Snyman (2008);*Coping with Continuous Change in the Business Environment: Knowledge management and knowledge management technology*, Chandos Publishing Oxford · England

10. Arjan ten Cate (2006), Knowledge management; *A Theoretical Framework and Implementation at the "big four"*, Wetenschappen Erasmus University Botterdam, Master's Thesis

11. Baumard, P. (1999), *Tacit Knowledge in Organizations*, SAGE, London, UK.

12. Bahman Babazadeh and Tayyebeh Farahani (2015), *The Effect Of Knowledge management capability And Dynamic Capability In Organizational performance of Razi*

Insurance Company, Indian Journal of foundation and applied Life science ,Vol 5, PP 2341-2349.

13. Bita Shahbakhsh (2013), *Knowledge management and its relationship with organizational performance ,* Interdisciplinary Journal Of Contemporary Research In Business, VOL 5, NO 2

14. Brutus, Aguinis, and Ulrich (2013),*Self-Reported Limitations and Future Directions in Scholarly Reports Analysis and Recommendations*,Journal of Management (J MANAGE)

15. Buckham, David, Jason Wahl, and Stuart Rose (2010*), The Evolution of Insurance*

16. Chin, W.W.(2001),*PLS-Graph user's guide, version 3.0*,University of Houston,

17. Chin, W. W. (1998). *The partial least squares approach for structural equation modelling, ,* Modern Methods for Business Research,NJ, USA: Lawrence Erlbaum Associates.

18. Chin, W. W. (2010). *How to write up and report PLS analyses*, in Esposito Vinzi, E.,

19. Chris Kimble (2013), *Knowledge management, codification and tacit knowledge*, Vol 18 .

20. Chin, W. W. and Newsted, P. R. (1999). *Structural equation modelling analysis with small samples using partial least squares*, Statistical Strategies for Small Sample Research, Thousand Oaks, CA: Sage.

21. Chong Hai Sin, Gerald Guan Gan Goh, Uchenna Cyril Eze (2009), *Knowledge Management Enablers Toward Successful New Product Development: A Case Study In A Semiconductor Manufacturing Firm*,Journal of Knowledge Management Practice, Vol. 10, No. 4

22. Christian G. RIERA A. and Dai Senoo (2006) ,*A Study of the Effect of Knowledge Creating Capabilities on Corporate Performance*

23. Cohen, J. (1988). *Statistical Power Analysis for the Behavioural Sciences*. NJ, USA: Lawrence Erlbaum Associates.

24. C.R. Kothari(2004), *Research Methodology Methods & Techniques*, Second Edition, New Delhi: New Age International publisher.

25. Creswell, John W(2014),*Research design : qualitative, quantitative, and mixed methods approaches* ,4th ed., SAGE Publications, Inc.

26. Daifallah Olaima, Mohammad AL-ameryeen and Issam Mohammad Al-Makhadmah (2015),*The Influence of Knowledge Management on Organizational Performance in Service Organizations in Jordan*,Journal of Information and Knowledge Management Vol.5, No.12

27. Davenport, T. H. and Prusak, L. (1998), *Working Knowledge: How organizations manage what they know*, Harvard Business School Press, Boston

28. Demarest, M. (1997), *Understanding knowledge management*, Journal of Long Range Planning 30(3):374-384.

29. Dick Stenmark (2001), *The Relationship between Information and Knowledge*, Volvo Information Technology and Viktoria Institute , Sweden

30. Eleni Karidou (2008), *Knowledge Management Enabler Factors and Firm Performance*,University of Greenwich,Master Thesis

31. Elizabeth Njeri Mararo (2013),*Knowledge Management Practices As A Competitive Tool In Insurance Companies In Kenya*, University Of Nairobi Maters Thesis,

32. Esmail Khodai Matin and Parisa Sabagh (2015*) Effects of Knowledge Management Capabilities on Organizational Performance in Iranian Export Companies* , Mediterranean Journal of Social Sciences , Vol 6 No 2

33. Festus M Epetimehin**,**(2011). *Organizational Knowledge Management: Survival Strategy For Nigeria Insurance Industry*, International Journal of Current Research Vol. 3, pp.260-265.

34. Fattahiyan S. , Hoveida, R. , Siadat, S.A.,and Talebi, H (2013),*The relationship between Knowledge Management Enablers, Processes resources and organizational Performance in Universities (Case Study: selected Universities of the Isfahan Province)* ,International Journal of Education and Research , Vol. 1 No.11

35. Genus Elica & Seied Hosseini(2015), *Evaluation of knowledge management components in Asia Insurance company , semnan province*,International Journal of Research In social sciences, Vol 4.

36. Godfrey M. Kinyua, Stephen M.A. Muathe (PhD) and James M. Kilika (PhD) (2015),*Effect of Knowledge Conversion and Knowledge Application on Performance of Commercial Banks in Kenya* , International Journal of Education and Research ,Vol. 3 No. 10

37. George Stonehouse(Professor)(2008),*Knowledge-Based Strategy – Appraising Knowledge Creation Capability In Organizations*, Napier University, Edinburgh

38. Gold, A. H., Malhotra, A., &Segars, A. H. (2001). *Knowledge management: an organizational capabilities perspective.* Journal of Management Information Systems,18(1), 185-214.

39. Gunilla Widen-Wulff & Reima Suomi(2003), *Building a knowledge sharing company evidence from the Finnish Insurance Industry.*

40. Habtamu Mohammed (2011), *Evaluation of knowledge sharing practice in commercial bank of Ethiopia*, Addis Ababa University, Master thesis.

41. Hailu Zeleke (2007), *Insurance in Ethiopia: Historical Development, Present Status and Future Challenges*. Addis Ababa: Master Printing Press

42. Heeseok Lee and Byounggu Choi (2003)*Knowledge Management Enablers, Process and Organizational Performance* :An Integrative View and Empirical Examination , Journal Of Management and Information systems ,Vol,20 No1 .PP 179-228

43. Ho, C. T. (2009), *The relationship between knowledge management enablers and performance*, Industrial Management & Data Systems, 109(1), 98-117.

44. Huda Hussein Mohammad,Farah Hussein Mohammad, Samera Ali,, Nor'ashikin Binti Ali(2014), *The Influence of Knowledge Management Capabilities on Organizational Performance: A Study Private University in Malaysia* ,International Journal of Science and Research ,Volume 3 Issue 10.

45. Hudson, L., and Ozanne, J. (1988), *Alternative Ways of Seeking Knowledge in Consumer Research*, Journal of Consumer Research, 14(4), 508–521

46. Hamdan Salim Alawamleh and Mohammad Abdalraheem Kloub (2013),*Impact of Organizational Structure on Knowledge Management in the Jordanian Insurance Companies: From the Perspective of the Supervisory Leadership* , International Journal of Business and Social Science , Vol. 4 No. 11

47. Hareya G/slassie(2011),*Knowledge sharing among employees of Mesfin industrial engineering* , Addis Ababa university, Master thesis.

48. Ibrahim Fahad Sulaiman, Che Noraini Hashim, Mohd Burhan Ibrahim, Sharifah Sariah Syed Hassan,and Owolabi Sunday Oluwatosin,(2015),*Impact of Creativity to Organizational Competitiveness* ,International Journal of Humanities and Social Science Vol. 5, No. 8

49. Jandia Kam-ling POON(2009),*KM Capabilities And The Moderating Effect Of Interpersonal Trust On Km Effectiveness: A Study In Hong Kong Post-Secondary Education Sector*, Pacific Asia Conference on Information Systems (PACIS)

50. Jay Liebowitz(2011) ,*Beyond Knowledge Management:What Every Leader Should Know*, CRC Press Taylor & Francis Group

51. Jelena Rasul ,Vesna Bosilj and Indihar Stemb (2012),*The Impact Of Knowledge Management On Organisational Performance*, Economic And Business Review , Vol. 14 - No. 2 ,147–168

52. Joel Chigada (2014),*The Role Of Knowledge Management In Enhancing organizational Performance In Selected Banks Of South Africa* ,University Of South Africa, Pretoria. PhD Thesis

53. Joseph F. Hair, G.Tomas M. Hult, Christian M.Ringle, Marko Sarsted (2014),*A Primer On Partial Least Squares Structural Equation Modeling (PLS-SEM)*,Sage

54. John Omogeafe, and Ohimai Friday (2014), *Knowledge Management Practices And performance In Nigerian Universities* ,European Scientific Journal vol.10, No.16

55. JM MBUVI (2014), *Effects Of Knowledge Management Factors On Organizational Performance In The Hospitality Industry: A Study Of Selected 5 Star Hotels In Nairobi, Kenya*, Master Thesis

56. Kasturi ,(2006), *Performance Management In Insurance Corporation*

57. Ken Kwong-Kay Wong (2013), *Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS*

58. Kenneth Chukwujioke , Godday Orziemgbe , Zechariahs Benapugha (2013) , *The Impact of Knowledge Management Capabilities on Organizational Performance: A Survey of the Service Sector*, Journal of Business Management & Social Sciences Research (JBM&SSR) Volume 2, No.9

59. Kimiz Dalkir(2005) ,*Knowledge management in theory and practice*, Elsevier Inc.

60. King, W., Chung, T. and Haney, M., (2008), *Knowledge Management and Organizational Learning*, The International Journal of Information Science 8(2), 19–35

61. Kogut, B. and Zander, U. (1992), *Knowledge of the Firm. Combinative Capabilities, and the Replication of Technology*, Organization Science, Vol. 3, No. 3, pp. 383-397.

62. Ian Watson (2003) ,*Applying Knowledge Management Techniques for Building Corporate Memories*, Morgan Kaufmann Publishers

63. Madanmohan Rao(2005),*Knowledge Management Tools and Techniques Practitioners and Experts Evaluate KM Solutions*,Elsevier Inc.

64. Mahmoud Mohammad Migdadi (2005),*An Integrative View And Empirical Examination Of The Relationships Among Knowledge Management Enablers, Process And Organizational Performance In Australian Enterprises*, PhD Thesis, University of Wollongong, Australia

65. Mata and Aliyu (2014),*The Relationship between Some Determinants of SME Performance In Nigeria: A Qualitative Approach*, European Journal of Business and Management, 6(2), 107-114.

66. Medin Magazine (2016) 40th Anniversary special edition

67. Melinda Plescan and Marius Gavriletea, (2009),*Managing Knowledge in insurance Companies*, University of Cluj-Napoca

68. Mills, A. M., & Smith, T. A. (2011), *Knowledge management and organizational performance: a decomposed view*,Journal of Knowledge Management, 15(1), 156-171.

69. Minah Japang and Md Hafizi Ahsan (2012), *Knowledge Management In Risk Management: Evidence From Malaysian Multinational Insurance Companies,* International Journal of Information Technology and Business Management, Vol.7 No.1

70. Mme Ben Zaied Maalej Rim and , Mr Habib Affes (2005),*The relationship between the sources of knowledge management and organizational performance* , International Journal of Business & Economic Strategy (IJBES), Vol.2

71. Mohammed Tubigi and Sarmad N. Alshawi (2012), *The Impact of Knowledge Management Processes on Organizational Performance* , European, Mediterranean & Middle Eastern Conference on Information Systems

72. Murray E. Jennex (2008),*Current Issues in Knowledge Management*, San Diego State University, USA

73. Nabil El Sawalhi and Ahmad Nazmi Matar (2015), *An investigation on Knowledge Management and its Impact on Performance within Infrastructure and Camp Development Program at UNRWA*, International Journal Series in Multidisciplinary Research (IJSMR)

74. Nils Urbac, Frederik Ahlemann (2010), *Structural Equation Modeling in Information Systems Research Using Partial Least Squares*, Journal of Information Technology Theory and Application

75. Nonaka, I. and Takeuchi, H. (1995), *The knowledge-creating company: how Japanese companies create the dynamics of innovation*, Oxford University Press, New York, NY.

76. Nonaka, I. (1994), *A Dynamic Theory of Organizational Knowledge Creation, Organization Science*, Vol. 5, No. 1, pp. 14-37.

77. Pietro Masci (2011),*The History of Insurance: Risk, Uncertainty and Entrepreneurship*, Journal of the Washington Institute of China Studies, Vol. 5, No. 3, p25-68

78. Polanyi, M. (1958/1962), *Personal Knowledge, Corrected Edition*, Routledge, London.

79. Polanyi, M. (1966/1997), *The Tacit Dimension*,

80. Powell, T. C., & Dent-Micallef, A. (1997). *Information technology as competitive advantage: the role of human, business, and technology resources.* Strategic management journal, 18(5), 375-405.

81. Rajiv Sabherwal and Irma Becerra-Fernandez (2003), *An Empirical Study of the Effect of Knowledge Management Processes at Individual, Group, and Organizational Level*

82. Ronald Maier (Professor Dr.)(2007), *Knowledge Management Systems: Information and Communication Technologies for Knowledge Management* , Springer-Verlag Berlin Heidelberg ,Third edition

83. Riungu Aggrey Karani (2015),*Effect Of Knowledge Management Practices On Performance Of Mobile Telephone Companies In Kenya* ,Master Thesis

84. Samer Alhawari and Mufleh Al-Jarrah (2012), *The Impact of Knowledge Management Processes on the Improve of Strategic Competence: An Empirical study In Jordanian Insurance Companies,* International Journal of Trade, Economics and Finance, Vol. 3, No. 1

85. Sangeeta Shah Bharadwaj, Sumedha Chauhan, and Aparna Raman(2015),*Impact of Knowledge Management Capabilities on Knowledge Management Effectiveness in Indian Organizations*, The Journal for Decision Makers 40(4) 421–434

86. Sarra Berraies, Mehrez Chaher, Karim Ben Yahia(2014) ,*Employee Empowerment and Its Importance for Trust, Innovation and Organizational Performance*, Business Management and Strategy

87. Seleim, A. A., & Khalil, O. E. (2011), *Understanding the knowledge management-intellectual capital relationship: a two-way analysis.* Journal of Intellectual Capital, 12(4), 586-614

88. Shahram keshavarzi , *A survey factors affecting the knowledge management infrastructure in Iran insurance*

89. Shakeel Ahmed ,Mohammad Fiaz and Mohammad Shoaib (2015),*Impact of Knowledge Management Practices on Organizational Performance: an Empirical study of Banking Sector in Pakistan* , FWU Journal of Social Sciences, Vol.9, No.2, 147-167

90. Shiaw-Tong Haa May-Chiun Lob and Yin-Chai Wangc (2015),Relationship between Knowledge Management and Organizational Performance: A Test on SMEs in Malaysia, Procedia - Social and Behavioral Sciences 224 ,184 – 189

91. Shimels Chala (2013), *Study on Knowledge Generation and Transfer in Ethiopian Agricultural Researches*, Jimma University, Mater Thesis,

92. Shu-Hung Hsu, (2014),*Effects of Organization Culture, Organizational Learning and IT Strategy on Knowledge Management and Performance* ,The Journal of International Management Studies, Volume 9 Number 1

93. Sima Fattahiyan,Reza Hoveida,Seyed Ali Siadat and Huoshang Tallebi(2012),*Study Of Relationship Between Knowledge Management Enablers And Processes With Organizational Performance* ,Interdisciplinary Journal Of Contemporary Research In Business,Vol 4, NO 4

94. Sue Brelade and Chris Harman(2006),*A practical Guide To Knowledge Management*, India,

95. Taejun Cho(2011),*Knowledge Management Capabilities And Organizational Performance: An Investigation Into The Effects Of Knowledge Infrastructure And Processes On Organizational Performance*, PhD Thesis

96. Timothy J. Ellis and Yair Levy (2010),*A Guide for Novice Researchers: Design and Development Research Methods* ,Proceedings of Informing Science & IT Education Conference (InSITE)

97. Tony Greenfield (1996), *Research Methods: Guidance for Postgraduates*, London:Arnold.

98. Tuomi, I. (1999), *Data is More Than Knowledge: Implications of the Reversed Knowledge Hierarchy for Knowledge Management and Organizational Memory*, Journal of Management Information Systems, Vol. 16, No. 3, pp. 107-121.

99. Wilberforce Turyasingura(2011*),Interdependency of Knowledge Management and Organisational Learning: The Case of Higher Education Institutions in Uganda* , Johannesburg

100. Xiaoyan Wang(2010), *An Empirical Investigation of Personal and Social Factors on Knowledge Sharing in China*,University of Twente Maters Thesis.

101. Yafang Tsai (2011),*Relationship between Organizational Culture, Leadership Behavior and Job Satisfaction*

102. Yamane, Taro. (1967). *Statistics, an Introductory Analysis*, 2nd Ed., New York: Harper and Row

103. Young-Chan Lee and Sun-Kyu Lee(2007),*Capabilities, Processes, and Performance of Knowledge Management: A Structural Approach, Human Factors and Ergonomics in Manufacturing*, Vol. 17 (1) 21–41

104. Zack M, McKeen J and Singh S. (2009), *Knowledge management and organizational performance: an exploratory analysis*, Journal of Knowledge Management, 13 (6): 392-409.

Appendix 1

	Human Enabler	Knowledge Application	Knowledge Acquisition	Knowledge Creation	Knowledge Sharing	Organizational Performance	Organizational Culture	Organizational Structure	Technology
CI10	0.457	0.565	0.526	0.334	0.345	0.424	**0.737**	0.378	0.288
CI2	0.489	0.450	0.518	0.400	0.276	0.563	**0.873**	0.472	0.441
CI3	0.438	0.449	0.479	0.377	0.193	0.465	**0.811**	0.392	0.415
HI2	**0.916**	0.399	0.370	0.345	0.448	0.473	0.557	0.317	0.234
HI3	**0.821**	0.263	0.332	0.186	0.184	0.322	0.470	0.214	0.219
HI5	**0.800**	0.302	0.253	0.138	0.214	0.338	0.433	0.199	0.157
SI1	0.265	0.264	0.343	0.378	0.303	0.324	0.328	**0.753**	0.386
SI2	0.284	0.313	0.32	0.358	0.424	0.327	0.356	**0.752**	0.279
SI3	0.199	0.327	0.413	0.303	0.305	0.390	0.379	**0.805**	0.411
SI4	0.160	0.317	0.266	0.335	0.194	0.353	0.459	**0.775**	0.413
SI5	0.234	0.399	0.398	0.458	0.359	0.466	0.578	**0.755**	0.377
TI6	0.438	0.449	0.479	0.377	0.193	0.465	0.353	0.392	**0.949**
TI7	0.224	0.379	0.309	0.476	0.229	0.400	0.410	0.475	**0.919**
KA1	0.354	**0.832**	0.456	0.512	0.456	0.620	0.402	0.374	0.213
KA2	0.260	**0.737**	0.544	0.477	0.389	0.523	0.552	0.485	0.274
KA3	0.364	**0.802**	0.556	0.526	0.440	0.633	0.491	0.312	0.233
KA4	0.398	**0.850**	0.574	0.519	0.385	0.620	0.510	0.325	0.388
KA5	0.279	**0.889**	0.552	0.588	0.391	0.638	0.497	0.363	0.337
KA6	0.322	**0.875**	0.593	0.499	0.465	0.634	0.515	0.294	0.302
KA7	0.309	**0.817**	0.633	0.548	0.441	0.608	0.586	0.415	0.394

KA8	0.294	**0.777**	0.552	0.439	0.312	0.605	0.608	0.302	0.396
KC3	0.160	0.317	0.266	**0.781**	0.194	0.353	0.459	0.386	0.413
KC4	0.234	0.399	0.398	**0.737**	0.359	0.466	0.578	0.408	0.377
KC6	0.162	0.469	0.487	**0.762**	0.384	0.526	0.315	0.328	0.297
KC7	0.205	0.536	0.471	**0.812**	0.331	0.543	0.482	0.421	0.389
KC9	0.336	0.571	0.497	**0.765**	0.386	0.522	0.529	0.467	0.464
KQ1	0.325	0.601	**0.823**	0.458	0.295	0.554	0.616	0.445	0.378
KQ2	0.271	0.592	**0.831**	0.473	0.269	0.537	0.581	0.349	0.365
KQ5	0.313	0.545	**0.836**	0.497	0.413	0.499	0.454	0.380	0.216
KQ6	0.331	0.525	**0.772**	0.460	0.451	0.486	0.412	0.317	0.281
KS3	0.320	0.369	0.389	0.360	**0.745**	0.435	0.409	0.299	0.193
KS5	0.216	0.376	0.352	0.309	**0.828**	0.427	0.257	0.256	0.030
KS7	0.309	0.416	0.336	0.353	**0.846**	0.397	0.272	0.365	0.157
KS8	0.316	0.445	0.336	0.406	**0.856**	0.444	0.382	0.434	0.269
PF6	0.336	0.689	0.589	0.699	0.340	**0.790**	0.477	0.350	0.348
PF7	0.331	0.538	0.422	0.395	0.408	**0.784**	0.509	0.318	0.301
CP4	0.353	0.551	0.463	0.343	0.391	**0.758**	0.549	0.306	0.156
CP5	0.519	0.598	0.549	0.446	0.428	**0.781**	0.602	0.373	0.366
CP6	0.342	0.558	0.516	0.594	0.497	**0.814**	0.489	0.520	0.336
CP8	0.289	0.570	0.438	0.451	0.421	**0.748**	0.471	0.417	0.277
CP9	0.327	0.558	0.500	0.497	0.384	**0.828**	0.525	0.421	0.366
CP10	0.243	0.515	0.563	0.541	0.455	**0.819**	0.422	0.511	0.322

a

ble 5.12 Cross Loadings

Appendix 2

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Human Factor -> Knowledge Enablers Capability	0.267	0.266	0.029	9.099	0.000
Human Factor -> Knowledge Management Capability	0.088	0.087	0.011	8.185	0.000
Human Factor -> Organizational Performance	0.071	0.071	0.009	8.121	0.000
Knowledge Acquisition -> Knowledge Management Capability	0.169	0.169	0.010	16.607	0.000
Knowledge Acquisition -> Knowledge Process Capability	0.229	0.228	0.013	18.159	0.000
Knowledge Acquisition -> Organizational Performance	0.137	0.137	0.008	16.806	0.000
Knowledge Application -> Knowledge Management Capability	0.368	0.367	0.018	20.745	0.000
Knowledge Application -> Knowledge Process Capability	0.497	0.497	0.021	23.854	0.000
Knowledge Application -> Organizational Performance	0.297	0.298	0.015	20.031	0.000
Knowledge Creation -> Knowledge Management Capability	0.191	0.191	0.012	15.526	0.000
Knowledge Creation -> Knowledge Process Capability	0.259	0.259	0.015	16.783	0.000
Knowledge Creation -> Organizational Performance	0.155	0.155	0.010	15.301	0.000
Knowledge Enablers Capability -> Knowledge Management Capability	0.329	0.328	0.017	19.196	0.000
Knowledge Enablers Capability -> Organizational Performance	0.265	0.266	0.016	16.883	0.000
Knowledge Management Capability -> Organizational Performance	0.807	0.811	0.025	32.477	0.000
Knowledge Process Capability -> Knowledge Management Capability	0.739	0.739	0.018	40.437	0.000
Knowledge Process Capability -> Organizational Performance	0.597	0.599	0.021	27.860	0.000
Knowledge Sharing -> Knowledge Management Capability	0.130	0.130	0.011	11.526	0.000
Knowledge Sharing -> Knowledge Process Capability	0.176	0.176	0.015	11.457	0.000
Knowledge Sharing -> Organizational Performance	0.105	0.105	0.010	10.673	0.000
Organizational Culture -> Knowledge Enablers Capability	0.347	0.346	0.021	16.293	0.000
Organizational Culture -> Knowledge Management Capability	0.114	0.113	0.007	16.365	0.000
Organizational Culture -> Organizational Performance	0.092	0.092	0.006	15.684	0.000
Organizational Structure -> Knowledge Enablers Capability	0.475	0.473	0.032	14.919	0.000
Organizational Structure -> Knowledge Management Capability	0.156	0.155	0.012	12.828	0.000
Organizational Structure -> Organizational Performance	0.126	0.126	0.010	12.235	0.000
Technology -> Knowledge Enablers Capability	0.202	0.201	0.019	10.551	0.000
Technology -> Knowledge Management Capability	0.066	0.066	0.007	10.089	0.000
Technology -> Organizational Performance	0.054	0.053	0.005	10.071	0.000

Table 5.13 Bootstrapping result

Appendix 3

	Technology	Organizational Culture	Organizational Structure	Human Factor	Knowledge Creation	Knowledge Application	Knowledge Acquisition	Knowledge Sharing
TI6	27.411							
TI7	47.407							
CI2		44.388						
CI3		28.695						
CI10		19.214						
SI1			15.577					
SI2			19.189					
SI3			22.290					
SI4			17.177					
SI5			16.544					
HI2				23.953				
HI3				31.421				
HI5				19.421				
KC3					24.295			
KC4					21.467			
KC6					18.611			
KC7					24.005			
KC9					14.874			
KA1						11.994		
KA2						19.259		
KA3						16.945		
KA4						29.755		
KA5						41.552		
KA6						40.609		
KA7						27.593		
KA8						14.232		
KQ1							25.051	
KQ2							28.110	
KQ5							32.096	
KQ6							18.755	
KS3								16.029
KS5								16.553
KS7								21.934
KS8								25.198

Table 5.14 T-statistics of Outer Model

Appendix 4 Questionnaire

Dear Respondent,

My name is Ibrahim Abdel a post graduate students at Addis Ababa University (AAU) School of Information Sciences. Currently I am carrying out a research for my Master's theses at AAU. My research title is **"Impact of Knowledge Management on Organizational Performance: The Case of Ethiopian Insurance Corporation (EIC)".**

The purpose of this research is to investigate the effect of KM process (Knowledge Creation, Knowledge Acquisition, Knowledge sharing and Knowledge Application) and KM enablers (Organizational Culture, Organizational Structure, Human/people enabler, Technology) On organizational performance.

I am hereby requesting you to assist me in completing this questionnaire in order to achieve the research objective. The information provided will be used purely for academic purpose and will be treated with strict confidentiality.

If you have any questions or concerns about completing the questionnaire, Please contact me via the address provided below. By completing and submitting the survey, you are indicating your consent to participate in the study. Your participation is appreciated.

Thank You in Advance

Ibrahim Abdela
Mobile :+251-0911017879
Email: ibro_iobr@yahoo.com

This questionnaire consists of two (2) parts, Part A deals with background of respondents and Part B consists of the main survey question of the research .

PART A: Background Information of the Respondents

Please select the correct answer by putting tick sing (√) appropriately in the provided box.

1	**Gender**		**Answer**
		Male	
		Female	
2	**Age**		
		Less than 25 years	
		25-30 years	
		31-40 years	
		41-50 years	
		greater than 50	
3	**Higher level of education achieved**		
		College Diploma	
		Bachelor's Degree	
		Master's Degree	

4	**Years of Experience in EIC**		
		Less than 1 year	
		Between 2 and 5 years	
		Between 6 and 10 years	
		Between 11 and 15 years	
		Greater than 15 years	

PART B: Main Survey Question

Introduction: Knowledge management is the systematic process of creating, acquiring, sharing and applying knowledge for better organizational performance. Knowledge management has two main elements i.e Knowledge management process(Knowledge Creation, Knowledge Acquisition, Knowledge sharing and Knowledge Application) and knowledge management enablers (Organizational Culture, Organizational Structure, Human/people enabler and Technology) .The aim of this survey questions are to understand to what extent Ethiopian Insurance Corporation (EIC) uses this element for its organizational performance.

The following statements are intended to measure the extent to which EIC technology is used for interaction and knowledge sharing. Please select the correct answer by putting tick sign (√) on the scale ranging 1(strongly agree) through 5 (strongly disagree) in the appropriate space provided

No	Statement for Measures of Technology Knowledge Management Infrastructure *(*TIx)	Strongly agree(5)	Agree(4)	Neither Agree nor Disagree(3)	Disagree (2)	Strongly disagree(1)
TI1	My organization uses technology that allows Employees to collaborate/ cooperate with other persons inside the organization					
TI2	My organization uses technology that allows Employees to collaborate with other persons outside the organization					
TI3	My organization uses technology that allows People in multiple locations to learn as a group from a single source or at a single point in time					
TI4	My organization uses technology that allows People in multiple locations to learn as a group from a multiple					

	source or at multiple points in time					
TI5	My organization uses technology that allows It to retrieve and use knowledge about its products and processes					
TI6	My organization provides IT support that facilitate new Knowledge Creation					
TI7	My organization provides IT support (e.g., groupware) for Knowledge acquisition.					
TI8	My organization provides IT support (e.g., intranet) for Knowledge sharing					
TI9	My organization provides IT support for Knowledge Application					

The following statements are intended to measure the extent to which organizational structure of EIC impact creation, acquisition, sharing and application of knowledge. Please select the correct answer by putting tick sign (√) on the scale ranging 1 through 5 in the appropriate space provided

No	Statement for Measures of Organizational Structure Knowledge Management Infrastructure *(*SIx)	Strongly agree(5)	Agree(4)	Neither Agree nor Disagree(3)	Disagree (2)	Strongly disagree(1)
SI1	My organization ‘s Structure of departments and divisions encourage interaction and sharing of knowledge					
SI2	My organization ‘s Structure of departments and divisions encourage new knowledge Creation					
SI3	My organization ‘s Structure of departments and divisions encourage knowledge Acquisition from external sources					
SI4	My organization ‘s Structure of departments and divisions encourage knowledge Application					
SI5	My organization Encourages employees to go where they need for knowledge for errors/mistakes					

The following statements are intended to measure the extent to which EIC employee understand, share and collaborate with each other for better organizational performance. Please select the correct answer by putting tick sign (√) on the scale ranging 1 through 5 in the appropriate space provided

No	Statement for Measures of Human Knowledge Capability Knowledge Management Infrastructure *(*HIx)	Strongly agree(5)	Agree(4)	Neither Agree nor Disagree(3)	Disagree(2)	Strongly disagree(1)
HI1	Organizational employees can understand not only their own tasks, but also others' tasks					
HI2	There is a willingness to collaborate across organizational units within our organization.					
HI3	Our organization members are helpful					
HI4	Our organization members are generally trustworthy					
HI5	Our organization employees understand the importance of knowledge for better organizational performance					
HI6	Organizational employees can make suggestion about others' tasks					

The following statements are intended to measure the extent to which organizational culture of EIC impact creation, acquisition, sharing and application of knowledge. Please select the correct answer by putting tick sign (√) on the scale ranging 1 through 5 in the appropriate space provided

No	Statement for Measures of Organizational Culture Knowledge Management Infrastructure *(*CIx)	Strongly agree(5)	Agree(4)	Neither Agree nor Disagree(3)	Disagree (2)	Strongly disagree(1)
CI1	In my organization Employees understand the importance of knowledge to corporate success					
CI2	In my organization Employees are encouraged to create new knowledge					
CI3	In my organization Employees are encouraged to acquire knowledge internally and externally					
CI4	In my organization Employees are encouraged to share their knowledge					
CI5	In my organization Employees are encouraged to apply his/her knowledge					
CI6	In my organization On-the-job training and learning is valued					
CI7	In my organization Employees are valued for their individual expertise					
CI8	In my organization Overall organizational vision is clearly stated					

CI9	In my organization Overall organizational objectives are clearly stated					
CI10	My organization recognizes knowledge as an asset base.					
CI11	In my organization Senior management strongly support the role of knowledge management to business success					

The following statements are intended to measure the extent to which knowledge creation process found in EIC. Please select the correct answer by putting tick sign (√) on the scale ranging 1 through 5 in the appropriate space provided

No	Statement for Measures of Knowledge Creation KM Process *(*KCx)	Strongly agree(5)	Agree(4)	Neither Agree nor Disagree(3)	Disagree(2)	Strongly disagree(1)
KC1	My organization creates new knowledge for application across functional boundaries.					
KC2	My organization always provides the necessary sources (internet, publications, collages, etc) for me to create the knowledge I need to fulfill my job effectively					
KC3	Our organization stresses generating new knowledge					
KC4	Our organization uses knowledge to adjust strategic direction					
KC5	My organization Has recently produced new products					
KC6	In my organization Innovation of new product is frequent					
KC7	In my organization New business strategy and marketing system is implemented frequently					
KC8	My organization Has recently improved existing products					
KC9	In my organization Employee performance is based on knowledge creation					

The following statements are intended to measure the extent to which knowledge acquisition process found in EIC. Please select the correct answer by putting tick sign (√)on the scale ranging 1 through 5 in the appropriate space provided

No	Statement for Measures of Knowledge Acquisition KM Process *(*KQx)	Strongly agree(5)	Agree(4)	Neither Agree nor Disagree(3)	Disagree (2)	Strongly disagree(1)

KQ1	My Organization Has processes for acquiring knowledge about our customers					
KQ2	My Organization Has processes for generating new knowledge from existing knowledge					
KQ3	My Organization Has processes for distributing knowledge throughout the organization					
KQ4	My Organization Has processes for inter organizational collaboration					
KQ5	My Organization Has processes for acquiring knowledge about new products/services within our industry					
KQ6	My Organization Has processes for acquiring knowledge about competitors within our industry					
KQ7	My Organization Has teams devoted to identifying best practices					
KQ8	In my Organization experienced Employees are recruited to bring new knowledge into the organization					

The following statements are intended to measure the extent to which knowledge sharing process found in EIC. Please select the correct answer by putting tick sign (√) on the scale ranging 1 through 5 in the appropriate space provided

No	Statement for Measures of Knowledge Sharing KM Process *(*KSx)	Strongly agree(5)	Agree(4)	Neither Agree nor Disagree(3)	Disagree(2)	Strongly disagree(1)
KS1	My organization has processes for exchanging knowledge between individuals					
KS2	My organization members are supportive for knowledge sharing					
KS3	My organization engages in the process of distributing knowledge among departments					
KS4	My organization's employees share business manuals, models proposals ,reports and methodologies with each other					
KS5	My organization's employees share each other's success and failure stories					
KS6	My organization's employees share business knowledge gained from news, magazines, and journals					
KS7	My organization's employees share know-how from					

	work experiences with each other					
KS8	My organization's employees share expertise obtained from education and training					

The following statements are intended to measure the extent to which knowledge application process found in EIC. Please select the correct answer by putting tick sign (√) the scale ranging 1 through 5 in the appropriate space provided

No	Statement for Measures of Knowledge Application KM Process *(*KCx)	Strongly agree(5)	Agree(4)	Neither Agree nor Disagree(3)	Disagree(2)	Strongly disagree(1)
KA1	My organization Has processes for applying knowledge learned from mistakes					
KA2	My organization Has processes for applying knowledge learned from experiences					
KA3	My organization Has processes for using knowledge in development new products/services					
KA4	My organization Has processes for using knowledge to solve new problems					
KA5	My organization Matches sources of knowledge to problems and challenges					
KA6	My organization Uses knowledge to improve efficiency					
KA7	My organization Takes advantage of new knowledge					
KA8	My organization is able to locate and apply knowledge to changing competitive conditions					

The following statements are intended to measure the extent to which customer-related aspect of organizational performance in EIC. Please select the correct answer by putting tick sign (√) on the scale ranging 1 through 5 in the appropriate space provided

No	Statement for Measures of customer-related aspect of organizational performance *(*CPx)	Strongly agree(5)	Agree(4)	Neither Agree nor Disagree(3)	Disagree(2)	Strongly disagree(1)
CP1	In my organization Our services are considered leaders in the market					
CP2	In my organization Customers are leaving due to poor services					
CP3	In my organization Our products are considered					

	leaders in the market					
CP4	In my organization The quality of services that we provide has improved					
CP5	In my organization The number of products that we provide has improved					
CP6	In my organization The type of products that we provide has improved					
CP7	In my organization The number of people who are using our products has increased					
CP8	In my organization The demand for the products that we provide has increased					
CP9	In my organization Consistently meets the expectations of our customers					
CP10	My organization Takes actions to learn what products customers need					

The following statements are intended to measure the extent to which Employee Learning & Growth Aspect of Organizational Performance in EIC. Please select the correct answer by putting tick sign (√) on the scale ranging 1 through 5 in the appropriate space provided

No	Statement Measures of the Employee Learning & Growth Aspect of Organizational Performance (LGx)	Strongly agree(5)	Agree(4)	Neither Agree nor Disagree(3)	Disagree(2	Strongly disagree(1)
LG1	In my organization My job is directly related to our mission					
LG2	In my organization My job is satisfying					
LG3	In my organization employee are satisfied what the organization doing for its employee					
LG4	My organization has better staff retention and attraction method					
LG5	My organization has better method that helps to protect the firm from loss of knowledge due to employee turnover					
LG6	In my organization My job gives me a sense of accomplishments					
LG7	In my organization I lack of core competencies to perform my job (reverse scale)					
LG8	In my organization I have enough knowledge to make optimal decisions to accomplish my performance objectives					

LG9	In my organization I am very productive on the job					
LG10	My organization provides Training that is linked to organizational goals and objectives					
LG11	My organization provides Necessary equipment/tools to accomplish my performance objectives					

The following statements are intended to measure the perceptual financial aspect of organizational performance in EIC. Please select the correct answer by putting tick sign (√) on the scale ranging 1 through 5 in the appropriate space provided

No	Statement about the perceptual financial aspect of organizational performance (PFx)	Strongly agree(5)	Agree(4)	Neither Agree nor Disagree(3)	Disagree(2)	Strongly disagree(1)
PF1	My organization has improved its asset utilization					
PF2	My organization's net income has increased					
PF3	My organization sales volume have increased					
PF4	My organization's market value has increased					
PF5	My organization's market share has increased					
PF6	My organization becomes more innovative of new products and service					
PF7	My organization has better service for customers					
PF8	My organization has better quality in products					

Appendix 5 Descriptive Statistics of the Questionnaire

		Count	Percent (%)	Mean	Median	Min	Max	Standard Deviation	Excess Kurtosis	Skewness
Gender	Female	57	33.7%	1.663						
	Male	112	63.3%		2	1	2	0.473	-1.536	-0.695
Age	<25	21	12.4%							
	25-30	69	40.8%							
	31-40	56	33.1%							
	41-50	18	10.7%	2.50						
	>50	5	3.0%	9	2	1	5	0.943	0.018	0.444
Education	College Diploma	10	5.9%							
	Degree	134	79.3%	2.08						
	Master's	25	14.8%	9	2	1	3	0.446	1.753	0.397
Experience	<1	11	6.5%							
	2-5	62	36.7%							
	6-10	62	36.7%							
	11-15	10	5.9%	2.84						
	>15	24	14.2%	6	3	1	5	1.109	-0.262	-0.650
My organization uses technology that allows Employees to collaborate/ cooperate with other persons inside the organization (TI1)	Strongly Disagree	11	6.5%							
	Disagree	49	29.0%							
	Neither Agree Nor Disagree	23	13.6%							
	Agree	77	45.6%							
	Strongly Agree	9	5.3%	3.142	4	1	5	1.095	-1.086	-0.34
My organization uses technology that allows Employees to collaborate with	Strongly disagree	11	6.5%							
	Disagree	60	35.5%							
	Neither Agree Nor Disagree	49	29.0%	2.805	3	1	4	0.931	-1.093	-0.088

other persons outside the organization (TI2)	Agree	49	29.0%							
	Strongly agree	0	0.0%							
My organization uses technology that allows People in multiple locations to learn as a group from a single source or at a single point in time (TI3)	Strongly disagree	20	11.8%							
	disagree	89	52.7%							
	Neither Agree Nor Disagree	36	21.3%							
	Agree	22	13.0%							
	Strongly Agree	2	1.2%	2.391	2	1	5	0.898	-0.032	0.63
My organization uses technology that allows People in multiple locations to learn as a group from a multiple source or at multiple points in time (TI4)	Strongly Disagree	15	8.9%							
	Disagree	49	29.0%							
	Neither Agree Nor Disagree	50	29.6%							
	Agree	55	32.5%							
	Strongly Agree	0	0.0%	2.858	3	1	4	0.975	-1.037	-0.291
My organization uses technology that allows It to retrieve and use knowledge about its products and processes (TI5)	Strongly Disagree	14	8.3%							
	Disagree	54	32.0%							
	Neither Agree Nor Disagree	57	33.7%							
	agree	38	22.5%							
	Strongly agree	6	3.6%	2.811	3	1	5	0.991	-0.603	0.095
My organization provides IT support that facilitate new Knowledge Creation (TI6)	Strongly Disagree	14	8.3%							
	Disagree	84	49.7%							
	Neither Agree Nor Disagree	34	20.1%							
	agree	32	18.9%							
	Strongly agree	5	3.0%	2.586	2	1	5	0.982	-0.451	0.571
My organization	Strongly Disagree	16	9.5%	2.763	3	1	4	0.962	-1.04	-0.151

provides IT support (e.g., groupware) for Knowledge acquisition. (TI7)	Disagree	55	32.5%							
	Neither Agree Nor Disagree	51	30.2%							
	agree	47	27.8%							
	Strongly agree	0	0.0%							
My organization provides IT support (e.g., intranet) for Knowledge sharing (TI8)	Strongly Disagree	34	20.1%							
	Disagree	56	33.1%							
	Neither Agree Nor Disagree	42	24.9%							
	agree	37	21.9%							
	Strongly agree	0	0.0%	2.485	2	1	4	1.044	-1.175	0.087
My organization provides IT support for Knowledge Application (TI9)	Strongly Disagree	20	11.8%							
	Disagree	74	43.8%							
	Neither Agree Nor Disagree	27	16.0%							
	agree	40	23.7%							
	Strongly agree	8	4.7%	2.657	2	1	5	1.104	-0.856	0.395
My organization ‘s Structure of departments and divisions encourage interaction and sharing of knowledge (SI1)	Strongly Disagree	15	8.9%							
	Disagree	56	33.1%							
	Neither Agree Nor Disagree	37	21.9%							
	agree	56	33.1%							
	Strongly agree	5	3.0%	2.882	3	1	5	1.059	-1.068	-0.062
My organization ‘s Structure of departments and divisions encourage new knowledge Creation (SI2)	Strongly Disagree	21	12.4%							
	Disagree	58	34.3%							
	Neither Agree Nor Disagree	55	32.5%							
	agree	31	18.3%							
	Strongly agree	4	2.4%	2.639	3	1	5	0.994	-0.602	0.157
My organization ‘s	Strongly Disagree	17	10.1%	2.462	2	1	5	0.877	0.405	0.596

Structure of departments and divisions encourage knowledge Acquisition from external sources (SI3)	Disagree	80	47.3%							
	Neither Agree Nor Disagree	53	31.4%							
	agree	15	8.9%							
	Strongly agree	4	2.4%							
My organization ‘s Structure of departments and divisions encourage knowledge Application (SI4)	Strongly Disagree	12	7.1%							
	Disagree	56	33.1%							
	Neither Agree Nor Disagree	53	31.4%							
	agree	45	26.6%							
	Strongly agree	3	1.8%	2.828	3	1	5	0.961	-0.823	-0.012
My organization Encourages employees to go where they need for knowledge for errors/mistakes (SI5)	Strongly Disagree	26	15.4%							
	Disagree	65	38.5%							
	Neither Agree Nor Disagree	50	29.6%							
	agree	25	14.8%							
	Strongly agree	3	1.8%	2.491	2	1	5	0.98	-0.513	0.292
Organizational employees can understand not only their own tasks, but also others’ tasks (HI1)	Strongly Disagree	11	6.5%							
	Disagree	39	23.1%							
	Neither Agree Nor Disagree	41	24.3%							
	agree	71	42.0%							
	Strongly agree	7	4.1%	3.142	3	1	5	1.028	-0.763	-0.421
There is a willingness to collaborate across organizational units within our organization. (HI2)	Strongly Disagree	8	4.7%							
	Disagree	43	25.4%							
	Neither Agree Nor Disagree	36	21.3%							
	agree	81	47.9%							
	Strongly agree	1	.6%	3.142	3	1	5	0.963	-0.943	-0.57

Our organization members are helpful (HI3)	Strongly Disagree	6	3.6%							
	Disagree	18	10.7%							
	Neither Agree Nor Disagree	47	27.8%							
	agree	74	43.8%							
	Strongly agree	24	14.2%	3.544	4	1	5	0.979	0.06	-0.584
Our organization members are generally trustworthy (HI4)	Strongly Disagree	8	4.7%							
	Disagree	27	16.0%							
	Neither Agree Nor Disagree	63	37.3%							
	agree	66	39.1%							
	Strongly agree	5	3.0%	3.195	3	1	5	0.905	-0.137	-0.542
Our organization employees understand the importance of knowledge for better organizational performance (HI5)	Strongly Disagree	1	.6%							
	Disagree	21	12.4%							
	Neither Agree Nor Disagree	31	18.3%							
	agree	98	58.0%							
	Strongly agree	18	10.7%	3.657	4	1	5	0.85	0.143	-0.734
Organizational employees can make suggestion about others' tasks (HI6)	Strongly Disagree	10	5.9%							
	Disagree	32	18.9%							
	Neither Agree Nor Disagree	53	31.4%							
	agree	70	41.4%							
	Strongly agree	4	2.4%	3.154	3	1	5	0.955	-0.453	-0.561
In my organization Employees understand the importance of knowledge to corporate success (CI1)	Strongly Disagree	1	.6%							
	Disagree	10	5.9%							
	Neither Agree Nor Disagree	35	20.7%							
	agree	95	56.2%							
	Strongly agree	28	16.6%	3.822	4	1	5	0.794	0.675	-0.67

In my organization Employees are encouraged to create new knowledge (CI2)	Strongly Disagree	17	10.1%							
	Disagree	49	29.0%							
	Neither Agree Nor Disagree	56	33.1%							
	agree	40	23.7%							
	Strongly agree	7	4.1%	2.828	3	1	5	1.032	-0.668	0.025
In my organization Employees are encouraged to acquire knowledge internally and externally (CI3)	Strongly Disagree	9	5.3%							
	Disagree	33	19.5%							
	Neither Agree Nor Disagree	62	36.7%							
	agree	51	30.2%							
	Strongly agree	14	8.3%	3.166	3	1	5	1.007	-0.433	-0.163
In my organization Employees are encouraged to share their knowledge (CI4)	Strongly Disagree	12	7.1%							
	Disagree	41	24.3%							
	Neither Agree Nor Disagree	50	29.6%							
	agree	51	30.2%							
	Strongly agree	15	8.9%	3.095	3	1	5	1.084	-0.748	-0.106
In my organization Employees are encouraged to apply his/her knowledge (CI5)	Strongly Disagree	9	5.3%							
	Disagree	50	29.6%							
	Neither Agree Nor Disagree	47	27.8%							
	agree	55	32.5%							
	Strongly agree	8	4.7%	3.018	3	1	5	1.012	-0.857	-0.07
In my organization On-the-job training and learning is valued (CI6)	Strongly Disagree	6	3.6%							
	Disagree	17	10.1%							
	Neither Agree Nor Disagree	50	29.6%							
	agree	80	47.3%							
	Strongly agree	16	9.5%	3.491	4	1	5	0.924	0.346	-0.678
In my organization	Strongly Disagree	13	7.7%	2.982	3	1	5	0.982	-0.754	-0.343

Employees are valued for their individual expertise (CI7)	Disagree	41	24.3%							
	Neither Agree Nor Disagree	54	32.0%							
	agree	58	34.3%							
	Strongly agree	3	1.8%							
In my organization Overall organizational vision is clearly stated (CI8)	Strongly Disagree	2	1.2%							
	Disagree	22	13.0%							
	Neither Agree Nor Disagree	21	12.4%							
	agree	88	52.1%							
	Strongly agree	36	21.3%	3.793	4	1	5	0.96	0.06	-0.788
In my organization Overall organizational objectives are clearly stated (CI9)	Strongly Disagree	3	1.8%							
	Disagree	20	11.8%							
	Neither Agree Nor Disagree	21	12.4%							
	agree	95	56.2%							
	Strongly agree	30	17.8%	3.763	4	1	5	0.937	0.464	-0.901
My organization recognizes knowledge as an asset base. (CI10)	Strongly Disagree	9	5.3%							
	Disagree	32	18.9%							
	Neither Agree Nor Disagree	64	37.9%							
	agree	61	36.1%							
	Strongly agree	3	1.8%	3.101	3	1	5	0.908	-0.352	-0.488
In my organization Senior management strongly support the role of knowledge management to business success (CI11)	Strongly Disagree	28	16.6%							
	Disagree	42	24.9%							
	Neither Agree Nor Disagree	50	29.6%							
	agree	44	26.0%							
	Strongly agree	5	3.0%	2.74	3	1	5	1.106	-0.97	-0.078
My organization	Strongly Disagree	13	7.7%	2.728	3	1	5	0.94	-0.656	0.14

creates new knowledge for application across functional boundaries. (KC1)	Disagree	62	36.7%							
	Neither Agree Nor Disagree	55	32.5%							
	agree	36	21.3%							
	Strongly agree	3	1.8%							
My organization always provides the necessary sources (internet, publications, collages, etc) for me to create the knowledge I need to fulfill my job effectively (KC2)	Strongly Disagree	52	30.8%							
	Disagree	64	37.9%							
	Neither Agree Nor Disagree	38	22.5%							
	agree	13	7.7%							
	Strongly agree	2	1.2%	2.107	2	1	5	0.967	-0.201	0.616
Our organization stresses generating new knowledge (KC3)	Strongly Disagree	28	16.6%							
	Disagree	72	42.6%							
	Neither Agree Nor Disagree	50	29.6%							
	agree	18	10.7%							
	Strongly agree	1	.6%	2.361	2	1	5	0.9	-0.419	0.3
Our organization uses knowledge to adjust strategic direction (KC4)	Strongly Disagree	14	8.3%							
	Disagree	55	32.5%							
	Neither Agree Nor Disagree	54	32.0%							
	agree	42	24.9%							
	Strongly agree	4	2.4%	2.805	3	1	5	0.981	-0.746	0.022
My organization Has recently produced new products (KC5)	Strongly Disagree	6	3.6%							
	Disagree	37	21.9%							
	Neither Agree Nor Disagree	47	27.8%							
	agree	66	39.1%	3.254	3	1	5	0.997	-0.663	-0.277

	Strongly agree	13	7.7%							
In my organization Innovation of new product is frequent (KC6)	Strongly Disagree	29	17.2%							
	Disagree	78	46.2%							
	Neither Agree Nor Disagree	45	26.6%							
	agree	15	8.9%							
	Strongly agree	2	1.2%	2.308	2	1	5	0.897	-0.005	0.492
In my organization New business strategy and marketing system is implemented frequently (KC7)	Strongly Disagree	26	15.4%							
	Disagree	84	49.7%							
	Neither Agree Nor Disagree	34	20.1%							
	agree	25	14.8%							
	Strongly agree	0	0.0%	2.343	2	1	4	0.91	-0.566	0.45
My organization Has recently improved existing products (KC8)	Strongly Disagree	21	12.4%							
	Disagree	71	42.0%							
	Neither Agree Nor Disagree	52	30.8%							
	agree	25	14.8%							
	Strongly agree	0	0.0%	2.479	2	1	4	0.891	-0.716	0.164
In my organization Employee performance is based on knowledge creation (KC9)	Strongly Disagree	35	20.7%							
	Disagree	70	41.4%							
	Neither Agree Nor Disagree	43	25.4%							
	agree	20	11.8%							
	Strongly agree	1	.6%	2.302	2	1	5	0.947	-0.55	0.373
My Organization Has processes for acquiring knowledge about our customers (KQ1)	Strongly Disagree	12	7.1%							
	Disagree	53	31.4%							
	Neither Agree Nor Disagree	54	32.0%							
	agree	47	27.8%							
	Strongly agree	3	1.8%	2.858	3	1	5	0.963	-0.819	-0.072

My Organization Has processes for generating new knowledge from existing knowledge (KQ2)	Strongly Disagree	13	7.7%							
	Disagree	48	28.4%							
	Neither Agree Nor Disagree	66	39.1%							
	agree	39	23.1%							
	Strongly agree	3	1.8%	2.828	3	1	5	0.93	-0.538	-0.096
My Organization Has processes for distributing knowledge throughout the organization (KQ3)	Strongly Disagree	8	4.7%							
	Disagree	60	35.5%							
	Neither Agree Nor Disagree	54	32.0%							
	agree	47	27.8%							
	Strongly agree	0	0.0%	2.828	3	1	4	0.891	-1.055	-0.06
My Organization Has processes for inter organizational collaboration (KQ4)	Strongly Disagree	6	3.6%							
	Disagree	57	33.7%							
	Neither Agree Nor Disagree	68	40.2%							
	agree	37	21.9%							
	Strongly agree	1	.6%	2.822	3	1	5	0.831	-0.676	0.032
My Organization Has processes for acquiring knowledge about new products/services within our industry (KQ5)	Strongly Disagree	9	5.3%							
	Disagree	40	23.7%							
	Neither Agree Nor Disagree	65	38.5%							
	agree	55	32.5%							
	Strongly agree	0	0.0%	2.982	3	1	4	0.88	-0.666	-0.438
My Organization Has processes for acquiring knowledge about competitors within our industry (KQ6)	Strongly Disagree	16	9.5%							
	Disagree	58	34.3%							
	Neither Agree Nor Disagree	61	36.1%							
	agree	34	20.1%							
	Strongly agree	0	0.0%	2.669	3	1	4	0.902	-0.813	-0.075

My Organization Has teams devoted to identifying best practices (KQ7)	Strongly Disagree	24	14.2%							
	Disagree	60	35.5%							
	Neither Agree Nor Disagree	55	32.5%							
	agree	30	17.8%							
	Strongly agree	0	0.0%	2.538	3	1	4	0.942	-0.896	0.016
In my Organization experienced Employees are recruited to bring new knowledge into the organization (KQ8)	Strongly Disagree	25	14.8%							
	Disagree	71	42.0%							
	Neither Agree Nor Disagree	40	23.7%							
	agree	31	18.3%							
	Strongly agree	2	1.2%	2.491	2	1	5	0.992	-0.721	0.319
My organization has processes for exchanging knowledge between individuals (KS1)	Strongly Disagree	17	10.1%							
	Disagree	63	37.3%							
	Neither Agree Nor Disagree	46	27.2%							
	agree	41	24.3%							
	Strongly agree	2	1.2%	2.692	3	1	5	0.985	-0.912	0.089
My organization members are supportive for knowledge sharing (KS2)	Strongly Disagree	5	3.0%							
	Disagree	38	22.5%							
	Neither Agree Nor Disagree	42	24.9%							
	agree	80	47.3%							
	Strongly agree	4	2.4%	3.237	3	1	5	0.925	-0.721	-0.535
My organization engages in the process of distributing knowledge among departments (KS3)	Strongly Disagree	8	4.7%							
	Disagree	60	35.5%							
	Neither Agree Nor Disagree	65	38.5%							
	agree	36	21.3%							
	Strongly agree	0	0.0%	2.763	3	1	4	0.837	-0.797	-0.016

My organization's employees share business manuals, models proposals ,reports and methodologies with each other (KS4)	Strongly Disagree	8	4.7%	3.047	3	1	5	0.99	-0.984	-0.206
	Disagree	50	29.6%							
	Neither Agree Nor Disagree	42	24.9%							
	agree	64	37.9%							
	Strongly agree	5	3.0%							
My organization's employees share each other's success and failure stories (KS5)	Strongly Disagree	10	5.9%	2.811	3	1	4	0.929	-1.138	-0.059
	Disagree	62	36.7%							
	Neither Agree Nor Disagree	47	27.8%							
	agree	50	29.6%							
	Strongly agree	0	0.0%							
My organization's employees share business knowledge gained from news, magazines, and journals (KS6)	Strongly Disagree	15	8.9%	2.669	2	1	4	0.971	-1.167	0.121
	Disagree	72	42.6%							
	Neither Agree Nor Disagree	36	21.3%							
	agree	46	27.2%							
	Strongly agree	0	0.0%							
My organization's employees share know-how from work experiences with each other (KS7)	Strongly Disagree	4	2.4%	3.183	3	1	5	0.959	-1.078	-0.336
	Disagree	48	28.4%							
	Neither Agree Nor Disagree	35	20.7%							
	agree	77	45.6%							
	Strongly agree	5	3.0%							
My organization's employees share expertise obtained from education and training (KS8)	Strongly Disagree	6	3.6%	3.136	3	1	5	0.89	-0.554	-0.424
	Disagree	36	21.3%							
	Neither Agree Nor Disagree	59	34.9%							
	agree	65	38.5%							
	Strongly agree	3	1.8%							

My organization Has processes for applying knowledge learned from mistakes (KA1)	Strongly Disagree	14	8.3%							
	Disagree	57	33.7%							
	Neither Agree Nor Disagree	57	33.7%							
	agree	39	23.1%							
	Strongly agree	2	1.2%	2.751	3	1	5	0.941	-0.75	0.001
My organization Has processes for applying knowledge learned from experiences (KA2)	Strongly Disagree	15	8.9%							
	Disagree	46	27.2%							
	Neither Agree Nor Disagree	41	24.3%							
	agree	67	39.6%							
	Strongly agree	0	0.0%	2.947	3	1	4	1.01	-1.096	-0.413
My organization Has processes for using knowledge in development new products/services (KA3)	Strongly Disagree	16	9.5%							
	Disagree	39	23.1%							
	Neither Agree Nor Disagree	57	33.7%							
	agree	56	33.1%							
	Strongly agree	1	.6%	2.923	3	1	5	0.979	-0.792	-0.417
My organization Has processes for using knowledge to solve new problems (KA4)	Strongly Disagree	11	6.5%							
	Disagree	57	33.7%							
	Neither Agree Nor Disagree	48	28.4%							
	agree	53	31.4%							
	Strongly agree	0	0.0%	2.846	3	1	4	0.942	-1.112	-0.158
My organization Matches sources of knowledge to problems and challenges (KA5)	Strongly Disagree	11	6.5%							
	Disagree	57	33.7%							
	Neither Agree Nor Disagree	63	37.3%							
	agree	38	22.5%							
	Strongly agree	0	0.0%	2.757	3	1	4	0.874	-0.812	-0.095
My organization	Strongly Disagree	15	8.9%	2.858	3	1	4	0.975	-1.037	-0.291

Uses knowledge to improve efficiency (KA6)	Disagree	49	29.0%							
	Neither Agree Nor Disagree	50	29.6%							
	agree	55	32.5%							
	Strongly agree	0	0.0%							
My organization Takes advantage of new knowledge (KA7)	Strongly Disagree	17	10.1%							
	Disagree	49	29.0%							
	Neither Agree Nor Disagree	43	25.4%							
	agree	58	34.3%							
	Strongly agree	2	1.2%	2.876	3	1	5	1.033	-1.06	-0.235
My organization is able to locate and apply knowledge to changing competitive conditions (KA8)	Strongly Disagree	20	11.8%							
	Disagree	47	27.8%							
	Neither Agree Nor Disagree	53	31.4%							
	agree	47	27.8%							
	Strongly agree	2	1.2%	2.787	3	1	5	1.016	-0.924	-0.176
In my organization Our services are considered leaders in the market (CP1)	Strongly Disagree	11	6.5%							
	Disagree	36	21.3%							
	Neither Agree Nor Disagree	45	26.6%							
	agree	66	39.1%							
	Strongly agree	11	6.5%	3.178	3	1	5	1.045	-0.665	-0.362
In my organization Customers are leaving due to poor services (CP2)	Strongly Disagree	10	5.9%							
	Disagree	38	22.5%							
	Neither Agree Nor Disagree	49	29.0%							
	agree	51	30.2%							
	Strongly agree	21	12.4%	3.207	3	1	5	1.103	-0.771	-0.126
In my organization Our products are	Strongly Disagree	4	2.4%							
	Disagree	31	18.3%	3.456	4	1	5	0.929	-0.228	-0.807

considered leaders in the market (CP3)	Neither Agree Nor Disagree	27	16.0%							
	agree	98	58.0%							
	Strongly agree	9	5.3%							
In my organization The quality of services that we provide has improved (CP4)	Strongly Disagree	11	6.5%							
	Disagree	57	33.7%							
	Neither Agree Nor Disagree	55	32.5%							
	agree	41	24.3%							
	Strongly agree	5	3.0%	2.834	3	1	5	0.965	-0.679	0.1
In my organization The number of products that we provide has improved (CP5)	Strongly Disagree	8	4.7%							
	Disagree	40	23.7%							
	Neither Agree Nor Disagree	47	27.8%							
	agree	70	41.4%							
	Strongly agree	4	2.4%	3.13	3	1	5	0.958	-0.747	-0.427
In my organization The type of products that we provide has improved (CP6)	Strongly Disagree	12	7.1%							
	Disagree	55	32.5%							
	Neither Agree Nor Disagree	44	26.0%							
	agree	54	32.0%							
	Strongly agree	4	2.4%	2.899	3	1	5	1.007	-0.982	-0.077
In my organization The number of people who are using our products has increased (CP7)	Strongly Disagree	12	7.1%							
	Disagree	34	20.1%							
	Neither Agree Nor Disagree	59	34.9%							
	agree	60	35.5%							
	Strongly agree	4	2.4%	3.059	3	1	5	0.965	-0.508	-0.438
In my organization The demand for the products that we	Strongly Disagree	10	5.9%							
	Disagree	34	20.1%							
	Neither Agree Nor	64	37.9%	3.041	3	1	4	0.893	-0.51	-0.585

provide has increased (CP8)	Disagree									
	agree	61	36.1%							
	Strongly agree	0	0.0%							
In my organization Consistently meets the expectations of our customers (CP9)	Strongly Disagree	20	11.8%							
	Disagree	71	42.0%							
	Neither Agree Nor Disagree	57	33.7%							
	agree	21	12.4%							
	Strongly agree	0	0.0%	2.467	2	1	4	0.857	-0.605	0.13
My organization Takes actions to learn what products customers need (CP10)	Strongly Disagree	11	6.5%							
	Disagree	65	38.5%							
	Neither Agree Nor Disagree	46	27.2%							
	agree	43	25.4%							
	Strongly agree	4	2.4%	2.787	3	1	5	0.974	-0.845	0.169
In my organization My job is directly related to our mission (LG1)	Strongly Disagree	6	3.6%							
	Disagree	68	40.2%							
	Neither Agree Nor Disagree	34	20.1%							
	agree	55	32.5%							
	Strongly agree	6	3.6%	2.923	3	1	5	1.003	-1.144	0.156
In my organization My job is satisfying (LG2)	Strongly Disagree	4	2.4%							
	Disagree	50	29.6%							
	Neither Agree Nor Disagree	68	40.2%							
	agree	41	24.3%							
	Strongly agree	6	3.6%	2.97	3	1	5	0.88	-0.487	0.163
In my organization employee are satisfied what the	Strongly Disagree	25	14.8%							
	Disagree	55	32.5%							
	Neither Agree Nor	73	43.2%	2.485	3	1	5	0.884	-0.23	0.019

organization doing for its employee (LG3)	Disagree									
	agree	14	8.3%							
	Strongly agree	2	1.2%							
My organization has better staff retention and attraction method (LG4)	Strongly Disagree	19	11.2%							
	Disagree	75	44.4%							
	Neither Agree Nor Disagree	51	30.2%							
	agree	20	11.8%							
	Strongly agree	4	2.4%	2.497	2	1	5	0.924	-0.023	0.486
My organization has better method that helps to protect the firm from loss of knowledge due to employee turnover (LG5)	Strongly Disagree	12	7.1%							
	Disagree	63	37.3%							
	Neither Agree Nor Disagree	53	31.4%							
	agree	39	23.1%							
	Strongly agree	2	1.2%	2.74	3	1	5	0.931	-0.787	0.099
In my organization My job gives me a sense of accomplishments (LG6)	Strongly Disagree	7	4.1%							
	Disagree	42	24.9%							
	Neither Agree Nor Disagree	59	34.9%							
	agree	57	33.7%							
	Strongly agree	4	2.4%	3.053	3	1	5	0.918	-0.66	-0.245
In my organization I lack of core competencies to perform my job (reverse scale) (LG7)	Strongly Disagree	15	8.9%							
	Disagree	51	30.2%							
	Neither Agree Nor Disagree	73	43.2%							
	agree	25	14.8%							
	Strongly agree	5	3.0%	2.728	3	1	5	0.921	-0.118	0.111
In my organization I have enough knowledge to make	Strongly Disagree	3	1.8%							
	Disagree	43	25.4%							
	Neither Agree Nor	63	37.3%	3.107	3	1	5	0.891	-0.659	-0.009

optimal decisions to accomplish my performance objectives (LG8)	Disagree									
	agree	53	31.4%							
	Strongly agree	7	4.1%							
In my organization I am very productive on the job (LG9)	Strongly Disagree	15	8.9%							
	Disagree	62	36.7%							
	Neither Agree Nor Disagree	37	21.9%							
	agree	52	30.8%							
	Strongly agree	3	1.8%	2.799	3	1	5	1.03	-1.096	0.019
My organization provides Training that is linked to organizational goals and objectives (LG10)	Strongly Disagree	21	12.4%							
	Disagree	67	39.6%							
	Neither Agree Nor Disagree	33	19.5%							
	agree	48	28.4%							
	Strongly agree	0	0.0%	2.639	2	1	4	1.023	-1.231	0.07
My organization provides Necessary equipment/tools to accomplish my performance objectives (LG11)	Strongly Disagree	13	7.7%							
	Disagree	70	41.4%							
	Neither Agree Nor Disagree	46	27.2%							
	agree	39	23.1%							
	Strongly agree	1	.6%	2.675	3	1	5	0.933	-0.907	0.165
My organization has improved its asset utilization (PF1)	Strongly Disagree	7	4.1%							
	Disagree	35	20.7%							
	Neither Agree Nor Disagree	52	30.8%							
	agree	72	42.6%							
	Strongly agree	3	1.8%	3.172	3	1	5	0.917	-0.559	-0.534
My organization's net income has increased (PF2)	Strongly Disagree	4	2.4%							
	Disagree	11	6.5%							
	Neither Agree Nor	39	23.1%	3.686	4	1	5	0.851	1.205	-0.917

	Disagree									
	agree	95	56.2%							
	Strongly agree	20	11.8%							
My organization sales volume have increased (PF3)	Strongly Disagree	3	1.8%							
	Disagree	28	16.6%							
	Neither Agree Nor Disagree	33	19.5%							
	agree	92	54.4%							
	Strongly agree	13	7.7%	3.497	4	1	5	0.917	-0.202	-0.687
My organization's market value has increased (PF4)	Strongly Disagree	4	2.4%							
	Disagree	55	32.5%							
	Neither Agree Nor Disagree	44	26.0%							
	agree	62	36.7%							
	Strongly agree	4	2.4%	3.041	3	1	5	0.938	-1.123	-0.083
My organization's market share has increased (PF5)	Strongly Disagree	10	5.9%							
	Disagree	73	43.2%							
	Neither Agree Nor Disagree	44	26.0%							
	agree	41	24.3%							
	Strongly agree	1	.6%	2.704	3	1	5	0.921	-0.966	0.21
My organization becomes more innovative of new products and service (PF6)	Strongly Disagree	13	7.7%							
	Disagree	67	39.6%							
	Neither Agree Nor Disagree	48	28.4%							
	agree	33	19.5%							
	Strongly agree	8	4.7%	2.74	3	1	5	1.01	-0.531	0.369
My organization has better service for customers (PF7)	Strongly Disagree	21	12.4%							
	Disagree	71	42.0%							
	Neither Agree Nor Disagree	35	20.7%	2.604	2	1	5	1.039	-0.828	0.311

	agree	38	22.5%							
	Strongly agree	4	2.4%							
My organization has better quality in products (PF8)	Strongly Disagree	14	8.3%							
	Disagree	49	29.0%							
	Neither Agree Nor Disagree	44	26.0%							
	agree	57	33.7%							
	Strongly agree	5	3.0%	2.941	3	1	5	1.036	-0.945	-0.171

Table 6.1 Descriptive Statistics