



**T.C**

**BİNGÖL UNIVERSITY**

**SOCIAL SCIENCES INSTITUTE**

**BUSINESS ADMINISTRATION DEPARTMENT**

**THE ROLE OF KNOWLEDGE MANAGEMENT ON  
IMPROVING ORGANIZATIONAL PERFORMANCE**  
**A Study of a Sample of Faculty Members at the University of  
Human Development in Sulaimaniyah City-Iraq**

PREPARED BY

**Hawre Yaseen AHMED**

161203140

MASTER'S THESIS

SUPERVISOR

**Prof. Dr. Muammer ERDOĞAN**

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**İŞLETME BÖLÜMÜ**

**KURUMSAL PERFORMANSIN İYİLEŞTİRİLMESİNDE BİLGİ  
YÖNETİMİNİN ROLÜ**

**Süleymaniye'deki (Irak) İnsani Gelişim Üniversitesinin Öğretim  
Üyeleri İle Örnek Bir Çalışma**

Hazırlayan  
**Hawre Yaseen AHMED**  
161203140

YÜKSEK LİSANS TEZİ

Danışman  
**Prof. Dr. Muammer ERDOĞAN**

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## BİLİMSEL ETİK BİLDİRİMİ

Yüksek Lisans tezi olarak hazırladığım [ KURUMSAL PERFORMANSIN İYİLEŞTİRİLMESİNDE BİLGİ YÖNETİMİNİN ROLÜ Süleymaniye'deki (Irak) İnsani Gelişim Üniversitesinin Öğretim Üyeleri İle Örnek Bir Çalışma] adlı çalışmanın öneri aşamasından sonuçlanmasına kadar geçen süreçte bilimsel etiğe ve akademik kurallara özenle uyduğumu, tez içindeki tüm bilgileri bilimsel ahlak ve gelenek çerçevesinde elde ettiğimi, tez yazım kurallarına uygun olarak hazırladığım bu çalışmamda doğrudan veya dolaylı olarak yaptığım her alıntıya kaynak gösterdiğimi ve yararlandığım eserlerin kaynakçada gösterilenlerden oluştuğunu beyan ederim.

/ /2018

İmza

Hawre Yaseen AHMED

## THESIS ACCEPTANCE AND APPROVAL

BİNGÖL UNIVERSITY  
SOCIAL SCIENCES INSTITUTE DIRECTORATE

This thesis entitled “**THE ROLE OF KNOWLEDGE MANAGEMENT ON IMPROVING ORGANIZATIONAL PERFORMANCE: A Study of a Sample of Faculty Members at the University of Human Development in Sulaymaniyah City-Iraq.**” Prepared by Hawre Yaseen AHMED was found to be successful as a result of the thesis defense examination held on the date of [ / /2018] and accepted by our juror as the master degree in the department of business administration.

THESIS JURY MEMBERS:

Signature

President:

.....

Supervisor: Prof. Dr. Muammer ERDOĞAN

.....

Member:

.....

### CONFIRMATION

This thesis accepted by the jury determined in the, / /2018 session of the board of directors of the sciences institute of Bingöl University.

Director of the Institute

Doç. Dr. Yaşar BAŞ



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## ÖZET

### KURUMSAL PERFORMANSIN İYİLEŞTİRİLMESİNDE BİLGİ YÖNETİMİNİN ROLÜ

#### Süleymaniye'deki (Irak) İnsani Gelişim Üniversitesinin Öğretim Üyeleri İle Örnek Bir Çalışma

Bu Çalışma, Süleymaniye'deki insani Gelişim Üniversitesinin dört fakültesindeki kurumsal performansın iyileştirilmesinde bilgi yönetiminin rolünü ele almıştır. Bilgi yönetimi, kurumsal performansın iyileştirilmesi için kritik bir araç olarak bilinirken, performanstaki bilgi yönetiminin rolünün değerlendirilmesi, kuruluşların kurumsal performanslarını iyileştirmeğe yönelimini sağladığından giderek önem kazanmaktadır.

Bununla birlikte bu çalışma, bilgi yönetimi kavramının rolünün ve kurumsal performansın iyileştirilmesine yönelik boyutlarının uygulanmasında rol oynayan faktörleri ortaya koymaktadır. Ayrıca, kurum veya kuruluşların, bilgi yönetimi yeteneklerini ölçmelerine ve bilgi yönetimindeki muhtemel boşlukları belirlemelerine ve kurumsal performansı geliştirmenin muhtemel yollarını teklif etmelerine yardımcı olan bir değerlendirme aracı da sağlar.

Sonuçlar, bilgi yönetiminin tüm boyutlarının önemli bir etkiye ve kurumsal performans ile pozitif bir ilişkiye sahip olduğunu göstermiştir. Yani o demektirki, seçilen üniversite fakültelerinin bilgi yönetimi ile kurumsal performansı arasında mükemmel bir korelasyon vardır.

**Anahtar Kelimeler:** Bilgi Yönetimi, Kurumsal Performans ve Akademik Kuruluşlar.

## ABSTRACT

### THE ROLE OF KNOWLEDGE MANAGEMENT ON IMPROVING ORGANIZATIONAL PERFORMANCE

#### A Study of a Sample of Faculty Members at the University of Human Development in Sulaimaniyah City

This study examined the role of knowledge management in improving the organizational performance in all four faculties of the University of Human Development in Sulaimaniyah. Knowledge management is known as a critical means for improving organizational performance while the assessment of knowledge management role in performance has become increasingly significant since it provides the orientation for directing the institutions to improve their organizational performance.

However, this study provides a considerate of factors that involved in implementing the role of knowledge management concept and its dimensions to improve organizational performance. Besides, it provides a valuation instrument that benefits institutions or organizations to measure their knowledge management abilities and classify the possible existing gaps in their knowledge management and suggest the possible ways to improve organizational performance.

The results indicated that all dimensions of knowledge management have a significant impact and a positive relationship with organizational performance. So, it means that there is an excellent correlation between knowledge management and organizational performance of the selected university faculties.

**Keywords:** Knowledge Management, Organizational Performance, and Academic Institutions.

## **DEDICATION**

I dedicate this thesis to my family members. To my parents who are supports that I will always lean on. This project would have not been completed without their enormous support.

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## INTRODUCTION

The purpose of this study is to examine the role of knowledge management in improving organizational performance from perspectives of faculty members at the University of human development in Sulaimaniyah City-Iraq. While, a lot of researchers and writers believe that the twenty-first century is the period of a knowledge-based economy, in which most institutions and establishments possess knowledge that enables them to improve their organizational performance. In this regard, many researchers attempted to measure the contribution of the knowledge management in improving the organizational performance by different models.

Although, the use of knowledge, information, and knowledge management practices have increased in all types of organizations in general and particularly in institutions. To simplify all the academic activities and enhance the process of higher education's decisions making. Hence the importance of managing the institution's information and knowledge becomes very vital. If an institution or any business organization does not know, it cannot manage itself to be an active organization. So, knowledge management systems have become one of the fastest growing areas of the higher education sector.

However, institutions and their knowledge staffs are facing problems in well-organized knowledge management. The capability to generate and distribute knowledge across the entire institution is therefore compelling drivers for knowledge management. It is vital to study the role of knowledge management in the organizational performance.

Thus, knowledge-based economy in which the primary source of wealth and prosperity is the production and distribution of information and knowledge . Knowledge management has become an essential theme for many large business organizations as managers recognize that much of their organization's value depends on the organization's ability to make and manage knowledge. Leaders required playing their role in effective knowledge management practices for gaining a sustainable competitive advantage which is the direction for innovation and better organizational performance.

All institutions may have their competitive advantage in one way or the other. Knowledge can also be the institution's competitive advantage. In a comprehensive sense, when we define the term knowledge management than it means the course and

process of frequently managing all kinds of knowledge to fulfill the needs and to exploit existing and acquired knowledge for the new academic opportunities.

In this context, the advantages of knowledge management are not only assisting the collaboration in the organizational performance and innovation process but also include identifying the gaps between the knowledge base and remedies to fill the gaps. Above all knowledge management supports to flourish a knowledge-driven culture which fosters organizational performance.

Based on the results, it can conclude that knowledge management dimensions exercise a significant impact on improving organizational performance of the faculties selected. While from the descriptive statistics of the knowledge management dimensions obtained that all its scale questions are significant for all four faculties of the University of human development in Sulaimaniyah .

Subsequently, the knowledge acquisition and generating, knowledge distribution, and knowledge implementation, respectively . The most significant feature is motivating to an influence on organizational performance. However, knowledge storage dimension scored the lowest significant influence compared to other five knowledge management's dimensions.

The results also indicated that all dimensions of knowledge management have a significant impact and a positive relationship with organizational performance. So, it means that there is an excellent correlation between knowledge management and organizational performance of the selected university faculties.

The study organized into four chapters. Chapter one reviews the literature related to knowledge management background and its the concept. Chapter two distributed with the literature related to the organizational performance. While, chapter three discourses the study materials and method that includes the problem statement, the study significance, purposes, conceptual model, hypotheses of the study, data collection technique, population sample selection.

However, chapter four devoted to the data presentation, analysis, and findings, the conclusions of the findings presented along with recommendations, besides the study practical implications and suggestions for future study.



# **CHAPTER ONE**

## **KNOWLEDGE MANAGEMENT**

### **1.1. KNOWLEDGE MANAGEMENT BACKGROUND**

In this regard, this conducted by Darwza, (2008), this study is about to analyze the relationship between the requirements of knowledge management, its processes and their impact on the excellence of institutional performance. This study intended to classify the relationship between the requirements of knowledge management as; knowledge diagnosis, knowledge generation, knowledge storage, knowledge distribution, knowledge implement) and the impact of this relationship on the excellence of institutional performance. However, this study used the descriptive method and a questionnaire as a tool for the study data collection while the study population consists of employees in the Jordanian Ministry of Higher Education. The sample is a vertical sample consisting of (300) employees who have a diploma or higher education levels.

Moreover, this study has reached some outcomes, the most significant of which is that most of the knowledge management processes use storage knowledge. Also, the most significant practices in the process of knowledge diagnosis are the importance of the ministry in comparison to the internal and external reference, the process of generating knowledge relying on the acquisitions of external sources, and the process of knowledge storing that comprises databases with information on institutional knowledge subjects, databases.

Al-Ezabi, (2009), this study attempts to examine the effect of knowledge management on organizational innovation. Consequently, the purpose of this study is to recognize knowledge management and its effect on organizational innovations in the Algerian telecommunications sector. The researcher argued that the management of these companies should adopt a policy of continual improvements in their services and make them a competitive advantage through concentrating on the dimensions of knowledge management. Besides, utilizing knowledge management to improve its sustainable competitive advantage by improving organizational innovations. However, the researcher applied the descriptive method. The study sample consisted of (60) members of the administrative board based on these companies. Furthermore, this study has reached some results: the most important the existence of a positive

correlation among the study variables. Also, the positive impact of knowledge management on organizational innovation within companies.

Nuri, (2011), this study is about to examine the effect of knowledge management processes in the development of distinctive capabilities. Though, the purpose of the study is to realize the influence of knowledge management processes as (knowledge generation, knowledge organization, knowledge storage, knowledge implement, and knowledge distribution in the development of distinct capabilities.

The study used the descriptive approach and a questionnaire as a tool for the study data collection. The sample is a vertical sample containing (28) employees who hold supervisory positions.

This study has reached some results, the most important of which is that knowledge management processes have an active role in developing outstanding capabilities. Besides, the knowledge implement comes first in importance. Also, the results indicate that the essential practices in the process of generating knowledge are to establish alliances with other organizations, the process of organizing knowledge seeking knowledge constantly. To make the most of it, the process of preserving knowledge desired to preserve and training the staffs to preserve them, and in the distribution of knowledge published through seminars and meetings and lectures.

Madi, (2011), as the researcher mentioned that this study is attempted to analyze the role of knowledge management in the job performance. The study requests to classify the degree of implementation of the concept and processes of knowledge management and its effect on job performance while this study used the descriptive method as a tool for the study data collecting and tests.

The study used a comprehensive record method for the study population, which consists of (388) employees who have supervisory positions in the major municipalities in the Gaza Strip. Accordingly, this study has reached some findings, the most important of which are: The importance of the roles played by knowledge management processes in performance. It contributes to simplifying administrative procedures, the speed of completion of work, employee awareness of their tasks and providing new ways to solve problems.

Mahdi, (2012), the study is about to investigate the processes of knowledge management and its effect on creative capabilities. As the researcher mentioned that the purpose of the study is to diagnose the level of knowledge management processes

that included: (knowledge diagnosis, identification of knowledge goals, knowledge generation, knowledge storage, knowledge distribution, implement and use of knowledge) and diagnosis of creative abilities.

However, the researcher in this study applied the descriptive method and the questionnaire as a data collection instrument while this study's population contains university library employees in Baghdad.

The sample is a vertical that comprise of (40) employees who have supervisory positions. The study found some results such as the most common knowledge management processes are the identification of knowledge objectives, the essential practices in the process of diagnosis of knowledge is a way to diagnose the necessary capabilities of the employees. There are particular strategies for learning the process of knowledge generation about knowledge storage process, there are manuals for standards and working methods, and in the knowledge distribution process, there is an internal information network to access the database.

### **1.1.1. The Concept and Definitions of Knowledge**

Since the ancient times, knowledge has been known-well. Also, the ancient philosophers of the Greeks, Romans, and Muslims spoke about it, and the Holy Quran in its verses, and the high prophet (PBUH) in his hadiths mentions it.

However, the significant progress of ancient and modern civilizations is evidence of their ability to learn and share knowledge. The various and numerous concepts that have dealt with experience are due to the diversity of the scientific and professional backgrounds of researchers. Each researcher views the concept of knowledge from a perspective that corresponds to his vision or field of specialization. There are various definitions of knowledge that including, (Al-Salami, 1999:209) believes that the concept of knowledge is the scientific-cultural extension from one source or more, which leads to the broadening of the human perception to make it capable of facing any problem in the fields of knowledge that it has learned. It can also define as extractions and conclusions that can obtain from several sources.

Although, Khazraji and Baroudi, (2011:33) argue that the concept of knowledge refers to understanding, interests, and perspectives that are acquired through education and experience. It is also defined as the outcome of the use or

exploitation of information by researchers, employees, decision-makers, and users who transfer information to knowledge. (Hammoud 2010:62)

Knowledge is defined as the art of data, environment, and experience. The situation refers to the framework used by a person to look at life, which can include influences such as social values, religion, etc. The experience is the previous knowledge gained (Khatib and Zegan, 2009:7). Yet, it is all implicit or apparent that individuals invoke to perform their work flawlessly or to make sound decisions (Al-Douri and Salih, 2009:51). According to Hijazi, (2005:9) knowledge is the sum of facts, views, opinions, judgments, methods of work, experiences, information, data, the understanding, strategies, and principles possessed by the individual or organization. There are those who refer to knowledge as structured information that can be used to solve a particular problem that is understood, analyzed, and applied. It also adds what remains in the individual's mind or it is an intellectual construct created by the power of the human spirit. (Najm, 2004:390).

While, Housel and Bell, (2001:10) mention that the recent developments in information and communication technology have made it easy to store and transfer knowledge. Consequently, this progress has driven by globalization, increased global competition, and the philosophy of free markets, with many companies realizing that creating, moving, and managing knowledge is essential to success in today's competitive world. Though, in this regard, Spender and Grand, (1996), Drucker, (1999) and Hollsopple and Joshi, (2002) have identified knowledge as one of the essential resources for achieving competitive advantage and enhancing organizational performance (Shin, 2004: 181).

Hence, Alter, (2002: 70) argues that knowledge is a combination of talents, ideas, rules, and actions that guide actions and decisions. (Don et al., 2001: 428) As objects that can be stored and processed and as a process of application of experience. However, according to (Sher and Lee, 2004:937) knowledge should be captured, interpreted and transmitted in a way, to be invested in the service of the organization, regardless of the primary purpose of the individuals when collecting information.

So, the researcher considers that through the previous concepts we can conclude that knowledge refers to the concept of the following aspects:

- Understandable and analytical information.

- Used to perform a business, make decisions and achieve goals.
- To increase participation in knowledge, increase their value and benefit.

### **1.1.2. The Characteristics of Knowledge**

According to Hamshri, (2013:63) knowledge has a set of characteristics, and can be summarized as follows:

- a) Inhumane: human experience has been recognized by other organisms, as it is the one who transfers them from the different generation, which can find, digest, generate and renew.
- b) It is cumulative: knowledge is formed and occurs at relatively long intervals, accumulated and maintained by the individual or organization to address specific problems or locations.
- c) It is abstract and intangible: that is, it exists as a product of knowledge and apart from other material products.
- d) It generated and renewed: that some organizations have an intellectual richness that makes them able to create new knowledge and this is represented by innovative individuals in these organizations in particular and society in general, who rely on them in the process of generating and renewing the experience. Therefore, replacing knowledge at present is the key to gaining competitive advantage, which includes renovation is more to configure or create new awareness.
- e) Knowledge could be outdated or die: as we generate awareness and replenished, that could be outdated or expired, too, the expertise in the field of computer. For example, become obsolete faster than the speed of aging machines themselves, and some experience dies by the death of the person carrying them, and others die by replacing the old knowledge.
- f) It is owned and possessed: the knowledge holder can retain, sell or trade and yet remain at it.
- g) It stored: knowledge stored in documents, and brains of individuals, knowledge bases, and other Internet sites.
- h) Use does not deny it: knowledge is permanently usable for more than one purpose.

In addition to the above, knowledge, as indicated by (Al-Zyadat, 2008:22), has a range of other characteristics:

- Knowledge is human work
- Produced by thinking
- Knowledge generated at the current stage
- Belongs to groups
- Groups create knowledge in different ways
- Knowledge is created cumulatively within the limits of values.

### **1.1.3. The Importance of Knowledge**

According to Qamhush, (2012:68) the importance of knowledge can be illustrating as follows:

1. Knowledge has become the basis for creating and using a competitive advantage.
2. The knowledge management guides the managers of the organizations to how to perform their tasks efficiently.
3. Knowledge is the basis for how the organization developed and matured.

However, Kubaisi, (2005:13) presents some points regarding the importance of knowledge as follows:

1. Knowledge has contributed to the flexibility of organizations by pushing them to adopt forms of coordination, design, and structure that are more flexible
2. Knowledge has enabled organizations to focus on the most creative sections and to stimulate creativity and communication for individuals and groups.
3. Transformation of organizations into knowledge societies that radically transform the organization to cope with the rapid change in the business environment has given rise to increasing complexity.
4. Organizations can benefit from the same knowledge as a final commodity, by selling, trading or use it in developing a particular product or producing new products.
5. Human knowledge is the primary source of value.
6. Enable organizations to make the right decisions according to the available sources.

#### 1.1.4. The Sources of Knowledge

There are two sources for acquiring knowledge, both internal sources and external sources (Madi, 2010:35):

**Internal sources:** The internal causes are the experiences of the members of the institution accumulated on various subjects and their ability to benefit from the learning of individuals, groups, and organizations, as a whole, processes, and technology adopted. Organizations, procedures, and technology. So, examples of internal sources: internal conferences of individuals, electronic libraries, classroom learning, dialogue, and internal operations through intelligence and understanding, experience, skill or through work learning or research and domestic patent

**External sources:** those sources appear in the surrounding environment, which depends on the type of relationship with other organizations leading in the field, or affiliation to the communities that facilitate the process of knowledge reproduction. So, the examples of those sources are libraries, the internet and the sector in which the organization and its competitors, suppliers, customers, universities, scientific research centers and foreign patents.

#### 1.1.5. Knowledge Pyramid

The researchers and writers in the field of knowledge, mention knowledge pyramid, a pyramid that starts from the data that form the base of the pyramid and ends with the wisdom that creates the top of the pyramid that the highest hierarchy of knowledge. Views differed about the levels of the pyramid. However, there is agreement on the main shape of the pyramid of knowledge as revealed in Figure (1).

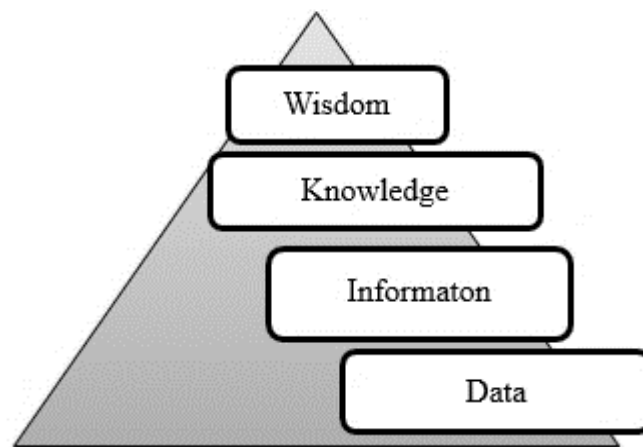


Figure 1: The First Knowledge Pyramid

**Source:** (Madi, 2011, 36)

Laith points out that data is the raw material from which information is derived and may appear in the form of numbers, letters, or signs or a picture without prior organization. Consequently, data becomes information when they are categorized, revised, analyzed and placed in a clear framework and concept (Al-Qahiwi, 2013:20).

While, Falih points out that information is a set of data that has been processed, arranged, and developed in a meaningful way for individuals and the institution (Khalaf, 2007:8). However, according to (Al-Douri and Saleh, 2009:69) knowledge is the experience in using data and information to issue judgments and decisions, and that wisdom is the excellent use of knowledge to explore, evaluate and make correct decisions about them.

Nevertheless, Hijazi indicates that Liebowitz and Beckman have developed a figure of another knowledge pyramid, adding levels of experience and capability. He explained that experience is the appropriate and efficient use of knowledge to achieve results and improve performance, while the capacity is the organization's experience in generating product or service at a high level (Hijazi, 2005:61). This pyramid starts from its bottom base with data, information, then knowledge, experience, and ends the pyramid head with the capability as shown in the figure below (2).

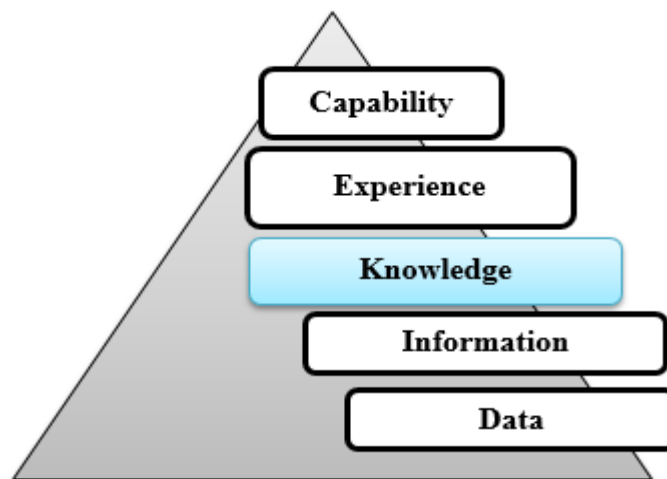


Figure 2: The Second Knowledge Pyramid  
Source: (Hijazi, 2005:61)



### 1.1.6. The Types of Knowledge

The different categories of knowledge differ due to the different views of individuals and organizations and the way they used, as well as various according to different sources. In this regard, the most famous types of knowledge are explicit and implicit knowledge:

**First, the explicit knowledge**, this virtual information relates to existing data stored in the organization's archives, including policy guidebooks, procedures, documents, operating and operational standards. In most cases, individuals within the organization can access, used, can be shared, besides shared with all staff through seminars, meetings, and books (Tete, 2010:43). However, Kubaisi, (2005:24) believes that explicit knowledge is the proper knowledge that can be encoded, written and transmitted to others.

**Second, the implicit knowledge**, this knowledge exists in the human mind, behavior, while refers to common-sense, sensation, therefore its personal, and hard to document, or codified, incorporating elements of cognitive and functional features. Moreover, cognitive aspects through the mental models that will help the individual identify what it is about, either technical factors include knowing how to practice because the implicit knowledge is knowledge of subtle and depends on experience it is difficult to convert them through electronic devices. However, can be transmitted through social interaction (Darwazah, 2008:28).

As Mustafa, (2008:81) defined, implicit knowledge is the knowledge hidden and refer to existing skills within the mind of each and which are difficult to move and transfer it to others, and maybe artistic or cognitive, not easy to understand as a processor expresses in words. However, this type of knowledge is difficult to manage and control because it exists only in the minds of its owners. However, it can be invested in some specific practices and convert some tacit knowledge to the phenomenon of the way note practice, annotating bulletins and booklets to read information (Al-Ghanam, 2013:15).

Table 1: Illustrates The Difference Between Implicit Knowledge and Explicit Knowledge

Element	Implicit knowledge.	Explicit knowledge.
<b>Enable in</b>	In the minds of individuals.	Paper, and Computer.
<b>Shape</b>	Experiences, skills, abilities, ideas, and concepts.	Policies, systems, regulations, procedures, plans, documents, and documents.
<b>Published and transmitted</b>	Difficult.	Easy.
<b>Methods of benefiting from them</b>	the scientific practices and record them to become information, participation among individuals, and motivate owners to disclose them.	Seminars, conferences, and meetings.

**Source:** (Al-Ghanam, 2013:15)

### 1.1.7. Knowledge Management and its Processes

In recent decades, the world has undergone many transformations driven by the influence of globalization, global competition, free markets, mergers and alliances, the emergence of transnational companies, and the development of communication technology. Therefore, this requires attention to the study of different cultures and has given evident importance to information in building the various strategies of the organization. So, all those requirements interested organizations in knowledge management.

The backgrounds of the term knowledge management can be traced back to the late 1970s and early 1980s through the writings of Zand (1969) and Rickson (1976). Zand in his paper that published in (1969) predicted the emergence of the knowledge society, the shift towards knowledge workers, and the significant changes required to manage the new kind of knowledge organizations, which was not just about knowledge management, but also about knowledge organizations.

While, Rickson, a sociologist, used the term knowledge management when he spoke about the role of large industrial organizations in creating and applying technical knowledge at all levels of society. Thus, the term knowledge management was used to analyze the processes and applications of experience in corporations rather than organizations. For this reason, the term had little resonance and was therefore used theoretically rather than practically. It took another 20 years for the word to reintroduced in the mid-1980s to its current environment, and this time it received considerable attention (Maier, 2002:18).

### **1.1.8. The Concept of Knowledge Management**

It is difficult to develop a unified concept of knowledge management to expand its scope, and thus give it different meanings by different specialists, as well as its continuous development, and addressing multiple new fields. However, researchers discussed the concept of knowledge management with a focus on various areas, through definitions and perspectives of the specialists, they have focused on topics such as knowledge management, information development and document management, document and information technology, intellectual capital, collective intelligence, a cost or financial perspective. Furthermore, the development of knowledge management, economic outlook, cognitive organizations, social perspective, a strategic perspective that is why we consider it preferable to prepare parts of each larger.

Knowledge management has attracted the interest of many experts in various fields and reflected those concerns in their studies and views on the concept of knowledge management. There are those who view it as a technical term. Others are considered to be intangible, and some addressed regarding organizational culture, information development or management of documents. As well financial perspective (Al-Dowaihi, 2009:2).

According to Al-Ghonn, (2013:17) knowledge management is the methodological process of directing the knowledge balance in the organization. While, (Ali, 2012:497) defined knowledge management as a conscious strategy to obtain the right knowledge of the right people at the right time, and help them share information and employ it in their business to improve organizational performance. (Lami and Al-Bayati, 2010:179) argues that the process through which the organization uses its collective intelligence to achieve its strategic objectives.

As Badir, (2010:33) defined, knowledge management is a set of processes that control, create, disseminate, use, and disseminate knowledge by practitioners, providing them with the background and knowledge theory needed to improve the quality and implementation of decisions. Alternatively, a process by which accumulated experience is collected and used from anywhere in the business, whether in documents, databases or the minds of employees, to add value to the organization through innovation, application, and integration of knowledge in an unprecedented way (Abdul Sattar et al., 2009:27).

Knowledge management is the process of producing and disseminating knowledge among workers and in improving performance, goods, and services provided by the organization (Nasr, 2008:79).

#### **1.1.9. The Importance of Knowledge Management**

According to Tamimi, (2011:9) knowledge management has great importance and can be summarized in the following points:

- a) Link all knowledge, information and experience to the development of the organization.
- b) The volume of information in each field has gathered.
- c) Use of duty stations to create and maintain knowledge management.

Though, Awad, (2012: 409) summarizes the importance of knowledge management in two key points:

1. Stimulate organizations to renew themselves and face unstable environmental changes.
2. The opportunity to obtain the permanent competitive advantage of the organization.

According to Dalkir, (2005:20) knowledge management is essential at three levels: **Individuals**, help individuals during a business performance by saving time through better decision making and problem-solving and promote the concept of community ties within the organization, increasing the chances of individual contribution in achieving the goals.

**At the level of practice groups**, the development of functional skills, enhance the effectiveness of networking and collaborative working and sharing knowledge in participatory language development within the organization.

**Besides, on the organizational level**, knowledge management contributes to leading the strategy, achieving its objectives, disseminating best practices within the organization and thus improving the integration of knowledge, as well as increasing opportunities for innovation and building organizational recollection.

#### **1.1.10. Knowledge Management Purposes**

According to Al-Muhairat, (2012:49) knowledge management pursues to achieve various objectives, as specified by the following purposes:

- Aiming at the knowledge of sources and storage and reuse. Also, attract more intellectual capital to develop solutions to the problems facing the organization.
- Identification of fundamental knowledge and how to obtain them and protect them. Moreover, the possibility of active learning, culture knowledge and motivation to develop and compete with human intelligence.
- Designed to gather smart ideas in the field, and contribute to the dissemination of best practice.
- Aimed at creativity, awareness, purposeful design, adaptation to disorder, environmental complexity, self-organization, intelligence, and learning.

However, according to Tete, (2010:45), there are other objectives of knowledge management as follows:

1. Focus on the development of social, cultural and organizational aspects of knowledge management as well as develop business guides and data related to the knowledge society.
2. Introduce and educate comprehensively the meaning of managing and developing knowledge and disseminating it among people in business so that the principles of knowledge management are used more widely and by making use of the opportunity to implement knowledge management.
3. Study of the social, cultural and economic conditions and the relevant regulations which affect the effectiveness of knowledge management initiatives.
4. Work on the development of social and cultural factors which satisfy individuals to share knowledge within the area. Also, working to increase the number of individuals who can access the accounts, the internet, and related technologies. The business community has institutionalized the topics of the knowledge society.
5. Develop principles and knowledge management qualification standards to help develop professional and educational aspects of knowledge management professionals.

## **1.2. DIMENSIONS OF KNOWLEDGE**

There are three basic dimensions of knowledge (Al-Zyadat, 2008:67): The **Technological dimension**, examples of this dimension include search engines, corporate entity software products, databases, intellectual capital management and

superior technologies, all of which address the problems of knowledge management in technology. Therefore, the organization strives to excel by acquiring the technological dimension of knowledge.

**The organizational and logistical dimension of knowledge**, this dimension reflects how awareness, control, management, storage, dissemination, promotion, replication, and reuse of knowledge identified. So, this relates to the identification of methods, procedures, facilities, aids, and processes necessary to efficiently manage experience to gain meaningful economic value.

**The social dimension**, this dimension focuses on sharing knowledge among individuals, building groups of knowledge industry and establishing a society based on innovations of knowledge makers, sharing personal experiences, building efficient networks of interpersonal relations and establishing a supportive organizational culture.

However, Ajlan, (2008:27) points out that knowledge management has four basic dimensions, each of that focuses on a specific axis:

- The first dimension focuses on individuals: the focus is on achieving the participation of individuals with available knowledge, expansion, building broad and distinct cognitive abilities.
- The second dimension is the focus on information management and information technology; the emphasis placed on knowledge related to technology and its uses.
- The third dimension focuses on intellectual assets and intellectual capital; this is focused on the use of knowledge to support and enhance the economic value of the institution and to ensure the provision of intellectual capital, which provides a lasting competitive advantage to ensure long-term success.
- The fourth dimension focuses on the effectiveness of the organization; the emphasis placed on the use of knowledge to lead to the development and improvement of operational efficiency and organizational effectiveness.

### **1.2.1. Elements of Knowledge Management**

As Nouralddin, (2010:37) mentioned in the knowledge management department, the knowledge management includes the following features:

1. **Cooperation** means the level where individuals within a team helping each other in their field to reach the goals of the organization, so that a culture of collaboration, influence the process of producing by increasing the level of knowledge exchange between individuals, units, and sections of the organization.
2. **Trust**, maintaining a distinct and mutual level of faith in each other's abilities at the level of intentions and behavior can facilitate the process of genuine and useful open exchange of knowledge. Trust and cooperation work together to enhance the effectiveness of knowledge management and complement each other.
3. **Learning** is an essential element. It means acquiring new knowledge to be used in decision-making or influencing others while learning helps organizations and individuals to prepare them for good knowledge creation.
4. **Centralization** refers to the concentration of decision-making powers and supervision of the implementation of the organization's supreme governing body. Consequently, researchers in knowledge and knowledge management go to the need for decisions to concentrated in the hands of the higher authorities of the organization based on their belief and trust that the process of creating knowledge essentially needs to decentralization, and therefore decentralization is a critical element of knowledge management.
5. **Official** the duration of formal decision-making within the framework of the organization means that planning based on the setting of goals and the formulation of policies. Hence, the proper controls the latter and therefore knowledge management are under it to control knowledge.
6. **Extensive and in-depth experience**, this means that the experience of the employees of the organization is extensive and extends horizontally at the same administrative level and characterized as diverse, focused and specialized. Which helps this executive level of leaders to exchange information, data, and provide them with expertise and thus result in achieving the objectives of the organization.
7. **Facilities and support of the information technology system**, researchers in knowledge management, are viewed as governor in creating knowledge and thus support instruction and essential elements of knowledge management.

**8. Organizational creativity** is the ability to find value, services, ideas or useful actions by making individuals who work together in a complex and social system (Habsi, 2012:30).

#### **1.2.1.1. Knowledge Management Functions**

Knowledge plays an essential role in the success of a modern organization, and there are multiple functions of knowledge management. While, (Stewart, 1997:124) believe that knowledge management has two essential functions:

1. Work on forming the organization's core resources lead to exercise different tasks with a high degree of effectiveness.
2. Provide valuable assets that successful sales and marketing operations.

However, to approach knowledge management can be through adopting one or more knowledge management activities or adopting all knowledge management activities.

#### **1.2.1.2. Knowledge Management Requirements**

According to Al-Malkawi, (2007: 78) active knowledge management needs some requirements that necessity to encountered as follows:

- 1) Provide the necessary infrastructure for the required technology is the network of communications and new ground restraints must be available, such as computers, software, and electronic search engines that facilitate access to knowledge efficiently.
- 2) Provide the necessary human resource, success in knowledge management and achieving organization's goals may depend on human resource. Individuals are responsible for carrying out the activities required to generate and preserve knowledge, create new awareness and produce advanced goods and services.
- 3) Organizational structure is one of the requirements for the success of any work, that may restrict the freedom to work and the creation of the original creations of employees. Therefore there must be a flexible organizational structure that members of knowledge management to launch their creations and work freely to discover and generate knowledge, control, managing, storage, enhancement, multiplication, and reuse. As well as the identification and renewal of the procedures, facilities, means and processes necessary for the efficient and



efficient knowledge management to gain a meaningful economic value (Ghazali 2012:127).

- 4) Cultural factor: which has a role in creating a knowledge society culture and circulation among individuals working in the institution or organization, which creates a kind of participatory learning, the acquisition of experience, skills and build relationships between the staff supports knowledge.

### **1.2.1.3. Reasons for Approaching the Knowledge Management**

Some studies such as Al-Rifai and Yasin, (2004: 3), Wickham, (2001: 233) and other reviews on knowledge management argues that organizations that have approached knowledge management have achieved a range of benefits, which can be summarized below:

- a) Improved decision-making process: decisions are made faster, especially at lower and middle administrative levels, with fewer resources, and better as if they taken to senior management levels.
- b) Implementation of the decisions taken in a better way: there's no need to explain and clarify those decisions, and that communication links between different administrative levels are shorter.
- c) The staff becomes more knowledge regarding their jobs and other professions near their roles: as a result, these staffs enable to better improvements initiatives add to learn new procedures faster and more efficient operations help improve work experience and rational.
- d) The staff becomes more aware of what is happening in the work environment: so, they understand what is happening, as it goes down the absences and job rotation.
- e) The staff becomes abler to collaborate better: they have a better understanding of how to adopt them all, and how it complements them all to know that knowledge to others.
- f) The organization's ability to satisfy clients is better: by providing higher quality products, services, and responses. Besides, work to improve internal processes which lead to lower costs.

#### **1.2.1.4. Knowledge Management Models**

Various researchers presented several models of knowledge management to understand and guide the efforts and activities of the knowledge management in institutions. The aim of each of them was to conduct the organizations to build knowledge strategies that help them achieve their goals and solve their problems. So, the following are some models that can utilize in the development and understanding of knowledge management in organizations.

##### **1.2.1.4.1. Wiig Model of Knowledge Management**

Wiig (1993) presented a model for knowledge management to achieve four primary goals: knowledge building, retention, collection, and use. In this model, the activities and functions of the individual described as sequential steps that facilitate the structure and application of knowledge, as some systems and features can be implemented in parallel or even turning back to repeat some of the tasks and activities that performed earlier but in different detail and a different focus .

The model also confirms that knowledge can be kept in different places, whether in the minds of individuals or books and documents, or calculated knowledge bases or any premises, either assembling knowledge takes many forms, ranging from lateral dialogues between individuals to networks of expertise and teamwork (Al-Utbi, 2006:73).

##### **1.2.1.4.2. Duffy Model of Knowledge Management**

This model illustrates that the organization obtains information from its outbound environment and transform it into knowledge through the participation of individuals, strategy, process, and culture. The new experience is created through knowledge management processes as follows (Bitar, 2010:15)

- The knowledge acquisition represents the polarization, purchase, and knowledge-generating.
- Organizing: Includes classification, tagging, and drawing.
- Retrieval: Includes search and access to stored knowledge
- Distribution: Includes participation and transportation
- Sustainability: Includes revision, nutrition, and growth.

As clarified in a figure below (3)

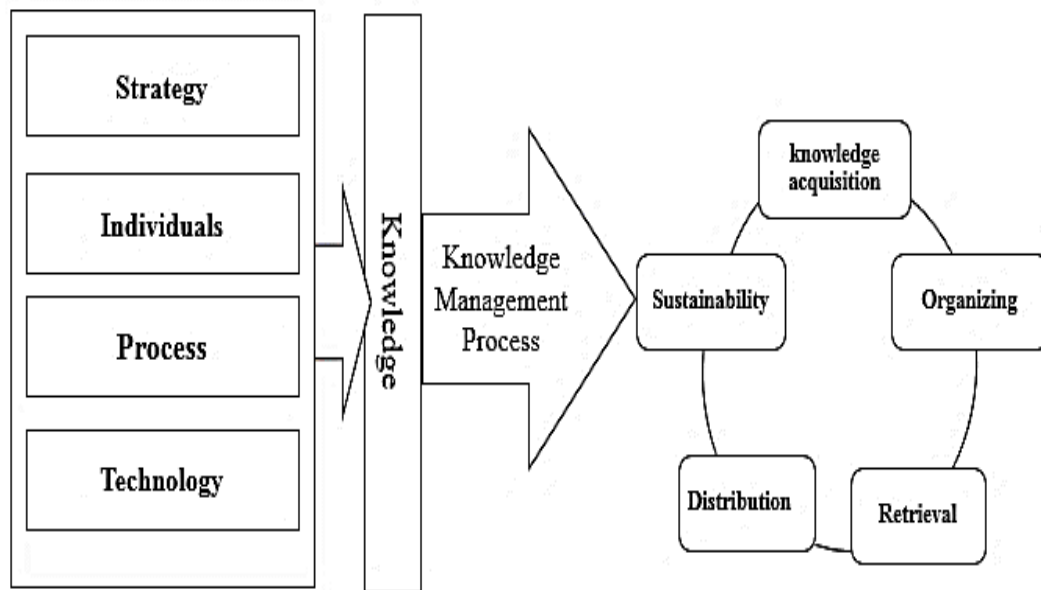


Figure 3: Duffy Knowledge Management Model  
**Source:** (Duffy, 2000:67)

#### 1.2.1.4.3. Leonard Barton Model

Leonard Barton presented this model as it indicates that knowledge in organizations represents a core capacity as it exists in different forms. Knowledge may be in a physical way that is evident in the organizations working on patents and take care of it here become knowledge.

Experience may be embodied in administrative systems through modalities learn things work more efficiently. It may also incorporate the specific and complete skills of the employees, i.e., the individual abilities that bring to the organization or develop within them through experience and practice. There may also know in what he calls (Barton) values to work with small standards of behavior in The work site, so-called organizational culture and figure (4) illustrates this model.

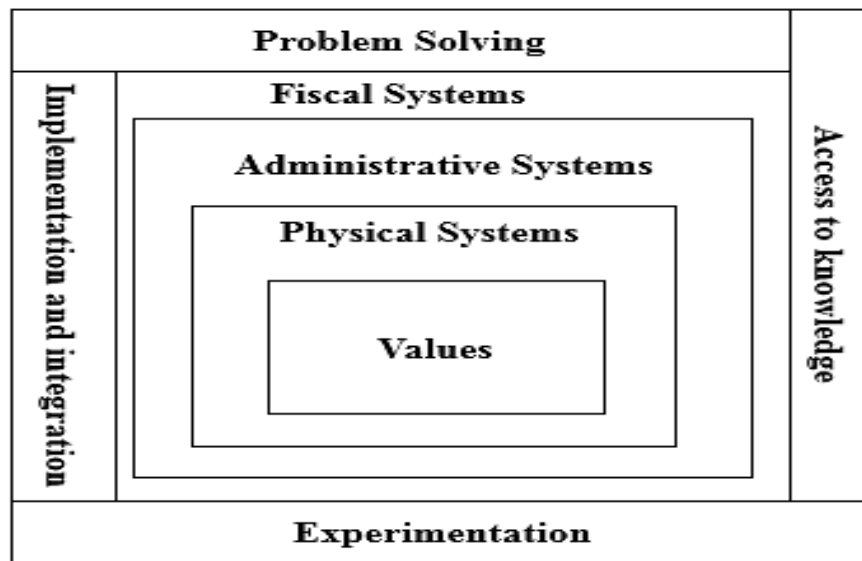


Figure 4: Leonard Barton Model of Knowledge Management

**Source:** (Barton, 2003: 112)

It noted that this model represents an attempt to expand knowledge in the organization to include all products, services, processes, systems, methods, and regulations to reach individuals where the underlying knowledge embodied in their skills, techniques, relationships and interactive contexts. Knowledge acquisition, experimentation, and innovation are limited.

Therefore, the organization should encourage these activities as problem-solving, access to knowledge, experimentation, and implementation and integration to efficiently achieve knowledge management objectives. (Barton, 2003: 113).

#### 1.2.1.4.4. Marquardt Model

This model proposes a holistic approach to knowledge management in the organization. This proposed model represents six steps to transfer knowledge to the user through the following sequential steps (Hamshri 2013:154).

- Acquisition
- Generation
- Storage
- Information extraction and analysis.
- Transportation and publishing.
- Implementation and authentication.

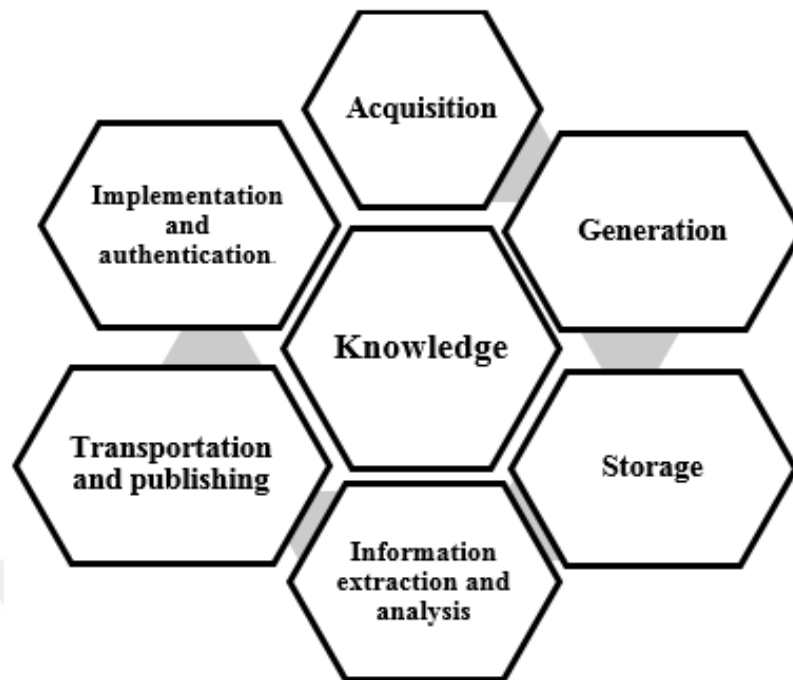


Figure 5: Marquardt Model of Knowledge Management  
**Source:** (Al-utbi, 2006:71).

The model also shows that institutions learn effectively and efficiently as these six processes grow and interact. Therefore, they are not independent of each other. They must apply as an integrated template. Each part focuses on the other parts and completes them in one. The information must distribute through multiple channels. Besides, each channel of these channels has different time horizons, and knowledge management must continually review and revise its processes.

#### **1.2.1.5. Knowledge Management Processes**

Knowledge management processes provide the significant to understanding knowledge, and how it best implemented within the organization, also helps to achieve efficiency, effectiveness and performance excellence. Hence, to accomplish this, it seeks to acquire knowledge.

Scholars and writers differed on knowledge management processes and activities, while, some researchers classified into three methods, although others expanded to include more. As mentioned the researchers varied on the operations of knowledge management, but despite their different views, they agreed on the following procedures: knowledge diagnosis, knowledge acquisition, generation, storage, distribution, and implement.

#### **1.2.1.5.1. Knowledge Diagnosis**

This process aims at identifying critical knowledge that gives value-added to the organization, its products, and services (Hamshri, 2013:122). Consequently, knowledge is vital within the organization on clients, market, service or product, however, it is the first step in knowledge management, and then the search for where it located in employee's mind, systems or procedures.

Besides, achieve the second goal of knowledge management which is knowledge creation, the existing knowledge assets of the organization and the knowledge assets required for the organization must be understood and compared. This difference represents the amount of effort that the organization needs to continue the process of creating new knowledge, used in the diagnosis of knowledge in the organization (Abdel Sattar, 2009:40).

#### **1.2.1.5.2. Knowledge Acquisition and Knowledge Generation**

The second stage of the process is acquiring knowledge from various sources. Many authors have pointed out that the origins of knowledge acquisition may be internal, such as knowledge repositories. Alternatively, through sharing experiences and practices, attending conferences, seminars, discussion, dialogue and communication among working groups and senior managers, clients, and staffs or from essential data such as financial and economic data through which knowledge is transferred from implicit to clear.

So, this results in the creation of organizational knowledge, maybe from external sources managed by the knowledge management to be brought across organizational boundaries or participate in it and assisted by technological developments and the facilities provided. Such as videoconferences, the Internet, and others, and the organization obtains knowledge through marketing intelligence analysis, research on the industry, academic research, industry experts, and experts. (Abdel Sattar 2009:42).

Moreover, generate knowledge, a successful organization is continuously making knowledge, over sub-processes, including capturing knowledge through the retrieval of explicit, implicit or external (expert consultants, suppliers or customers) or purchasing them in the form of paper or electronic documents or through employment contracts or the use of experts. The creation of new knowledge is

undiscovered, cloned or absorbed and indicates the ability of individuals to understand and digest understanding in preparation for re-installation and find new knowledge (Hamshri 2013:135).

#### **1.2.1.5.3. Knowledge Storage**

The process of storage of knowledge refers to the importance of organizational memory; institutions face significant risk as a result of the loss of many experiences that individuals. Who leave for one reason or another and store knowledge retention is significant especially for institutions that suffer from high rates employment turnover which depends on recruitment and use of temporary contracts and consulting formula for generating knowledge that these undocumented presumptive knowledge taking with them (Amer, 2011:45).

Information and communication technology plays a significant role in improving and expanding organizational memory and retrieval of information and knowledge is stored, there are tools like evidence of knowledge and document management model used in access to knowledge. Therefore, knowledge storage represents a bridge between knowledge capture and process (Trgini, 2011:37).

#### **1.2.1.5.4. Knowledge Distribution**

Knowledge, as increasingly frequent use, participation, and in the exchange of ideas, experiences and skills among people, and grows. The organizations, therefore, seek to encourage participation. The process of distributing knowledge encompasses the following procedures: distribution, spreading, and assistance, as follows:

- Project teams are ideologically diverse for internal distribution.
- Internal information network.
- The training of experienced old colleagues.
- Knowledge agents.
- The internal communities through documents.
- Expert teams, knowledge seminars and educational workshops.
- Seminars, conferences, and conferences.

It is clear that the training and discussion methods are appropriate for the distribution of implicit knowledge, but the apparent knowledge can be disseminated

with internal documents, brochures and education. The essential thing in delivery is to ensure that the appropriate expertise reaches the person he/she is looking for promptly (Kubaisi, 2005:76).

#### 1.2.1.5.5. Knowledge Implementation

This process refers to the terms of use, recycling, and implement knowledge allows for new individual and group learning processes that lead to the creation of new knowledge, hence, the knowledge management processes defined by the closed loop. Moreover, have used several methods for implementing knowledge including Multiple teams of internal expertise, employment initiatives, domestic expert proposals, adopt measures to control the knowledge. (Al-Kubaisi, 2005:79).

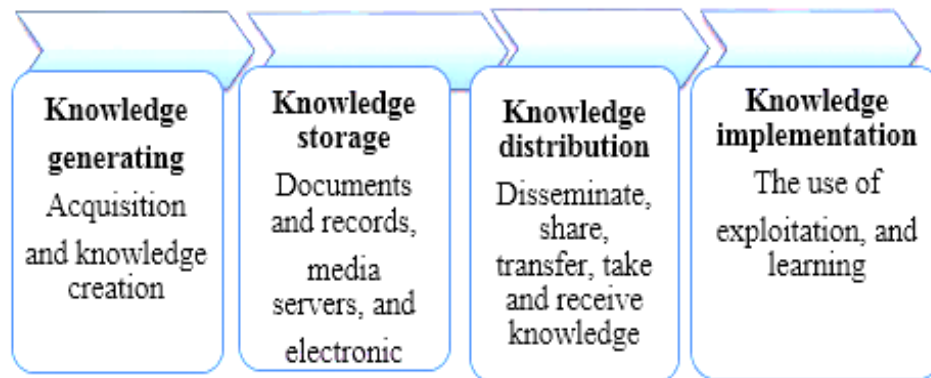


Figure 6: Core Knowledge Management Processes  
**Source:** (Hasina, 2015:25)

#### 1.2.1.6. Objectives of Using Knowledge Management Processes

According to Al-Zyadat, (2008:96), the organizations recognize that the use of knowledge management processes, not a goal but a means of attaining the goals of the organization. It also recognizes that there should be objectives for using knowledge management processes and that these objectives are clear and specific, without which it becomes merely a cost and a complicated process.

While Khudair (2009:10) shows that the objectives of using knowledge management processes are:

- Building information bases to store, provide and retrieve knowledge when needed.



- Encouraging work in the spirit of difference and achieving positive interaction between employees.
- Contribute to accelerate the development process in the organization to meet the requirements of adaptation to changes in the environment.
- Disseminate and share experiences, experiences and best practices.

From the above, it can conclude that the objectives of using knowledge management processes are to search for knowledge from its various sources. Besides, to attract the knowledge needed by the organization, to store it in databases and to update it, as well as to develop the knowledge that is the subject of use and to distribute it among administrative levels.

#### **1.2.1.7. The Importance of Using Knowledge Management Processes**

According to Al-Titi, (2010:105) the importance of using knowledge management processes is about making the right choices at the right time and place (Hammoud, 2010:71) points out that the importance of using knowledge management processes lies in the following:

- Satisfying the need for information and the availability of time and the right amount.
- Enable organizations to make the right decisions.
- Improve the effectiveness of regulatory activities and achieve satisfactory results.
- Helps the management of organizational performance because it contains the information related to all the activities of the organization.
- Improve staff productivity and reduce costs associated with performance.
- Increase the organization's flexibility in responding to the external environment.

However, Sultan (2005:75) limited the importance of using knowledge management processes in the following points:

- Convert without starting from scratch.
- Saving time and effort.
- Accelerate the decision-making process.

- Encourage the use of knowledge efficiently and promote cooperation and transfer of best practice.
- Encourage innovation and invention in processes and products.
- Extracts knowledge for use.

It can realize from the above that the importance of the use of knowledge management processes is that they contribute to speed decision-making, completion of tasks with less time and effort, develop the level of performance, develop the capabilities and skills of employees, improve the level of service provided, rapid response to changes.



## **CHAPTER TWO**

### **ORGANIZATIONAL PERFORMANCE**

#### **2.1. ORGANIZATIONAL PERFORMANCE BACKGROUND**

In this context, this study conducted by Ramadan, (2009), where this study attempted to analyze the effect of the use of decision support systems on the development of performance. So, this study purposed to examine the current reality of decision support systems and their influence on performance development. The study used the descriptive method and the questionnaire as a tool for study data gathering.

However, the researcher in this study used comprehensive staffs register technique for the study population, which consists of (230) employees of supervisory jobs in the Palestinian education department in the Gaza Strip. This study has reached some results, the most important that decision support systems affect the development of performance through simplifying procedures, giving employees new skills and their ability to act in the critical acceptance, and the completion of work promptly accurately with quality and less effort.

Atas, (2010), the study is about to examine the role of industrial policies in improving the performance of economic institutions. This study aims to clarify the nature of industrial policies, types, principles, objectives, economic justifications and their impact on the performance of the economic institution. It also talks about the role of industrial policies in improving the performance of Yemeni industry. The study concluded that the measurement of performance is significant for all institutions in different organizational forms and activities because it gives a realistic picture of the current state of the institution. Also, performance indicators should translate so that these indicators can be understood. The laws, regulations, financial, and administrative regulations are rigid and inconsistent with the changes required to achieve obstacles and improved factory performance.

Al-Djni, (2011), as the researcher, argued that in this study attempted to analyze the role of strategic planning in the quality of organizational performance.

Consequently, this study purposed to detect the reality of strategic planning in achieving the quality of the institutional performance and provide clear performance indicators and determinants of the efficient institutional performance of all its

components among the organizational indicators and standards. That fit the Palestinian environment with the development of proposals to improve the quality of institutional performance according to performance indicators of the areas of institutional work.

As the results, this study came up with several outcomes, the most important of which are: There is a relationship between the level of the role of strategic planning and the standard of philosophy, mission and goals are one of the dimensions of the quality of institutional performance, quality of strategic planning should be available. In the dimensions of environmental analysis including internal and external environment, and there should be a relationship between the role of strategic planning and quality of institutional performance.

Al-Harabi, (2011), this study is about to examine the extent to which the leadership development program contributes to the development of organizational performance. This study purposed to recognize the developmental concepts in behavior and performance that the leadership development program sought to achieve, the adequacy of its objectives with the requirements of organizational performance development, classifying the effects achieved by participants and their performance from their supervisors. The study used the descriptive method besides the questionnaire as a data collection instrument.

Further, this study used a comprehensive employee record method for the study population consisting of (189) officers from all civil defense officers who joined the program and their superior officers.

The study concluded that the most significant developmental concepts in behavior and performance that the program sought to achieve are: clarifying the program for the importance of participation among the president and lower-ranked officers. The program's most appropriate objectives with performance development requirements are its emphasis on knowledge development, instilling values and clarity of objectives, besides, that the most significant effects achieved for participants in the program are unbiased views, proposals, and teamwork.

Moumen, (2012), based on the researcher mentions this study aimed to investigate the role of management in operations and to improve the performance of the institution. While, this study purposed to: Improve the concept of operational management in the Algerian economic institution, gives solutions to the institution

through concentrating on the institutional method of institutions, using the concept of operations that permit. To control the operation of the institution, and a condition in the context of continuous compatibility with strategies regulations and information systems.

The study concluded with several results, the most important are: The department contributes to the improvement of performance, as an input to the leadership of the institution and its interest in satisfying all stakeholders. Also, most of the entries of the organizational performance of the institution are not significantly affect the jobs, and economic performance and these have led to improvement.

### **2.1.1. The Concept and Definitions of Organizational Performance**

Various studies addressed the concept of organizational performance, and varied definitions offered by researchers. So, the concept of organizational performance is multifaceted and the dimensions of its comparison and its overlap with several similar terms and concepts. There are those who mentioned performance as a function of efficiency and others considered by efficiency. Performance in other terms such as profitability and productivity and the result even although it differs from competitive these notions altogether.

According to Ben Ayshi, (2012:14) organizational performance is a possible behavior of an individual or group of individuals or organization is the work and actions of deliberate movements to achieve specific objectives. While, (Daoudi, 2010:217) believe that performance is a reflection of how the institution uses physical and human resources, and exploit them efficiently and effectively in a way that makes it able to achieve its objectives.

However, Hawari, (2010:75) argues that organizational performance is a result achieved due to the interaction of internal factors of different types and external influences and exploitation by the institution in achieving its goals. Performance is the achievement of institutional objectives using resources efficiently and effectively (Abdel Sattar et al., 2009:327). Consequently, total results achieved by the individual as a result of the effort and follow the regulations and instructions of the organization in which it works and seeks to achieve its objectives (Obaid, 2009:48).

Based on the previous definitions, it can conclude that the performance reflects the outcomes obtained by the organization in its quest to achieve their objectives, and involving all elements within the organization, and the organization itself through the functions to obtain excellent performance and high efficiency. Though, given the relevance of the concept of organizational performance to the success and capacity of the organization to achieve the objectives, its achievement is linked to the concept of the effectiveness and efficiency of the organization as the figure below shows the concepts related to organizational performance.

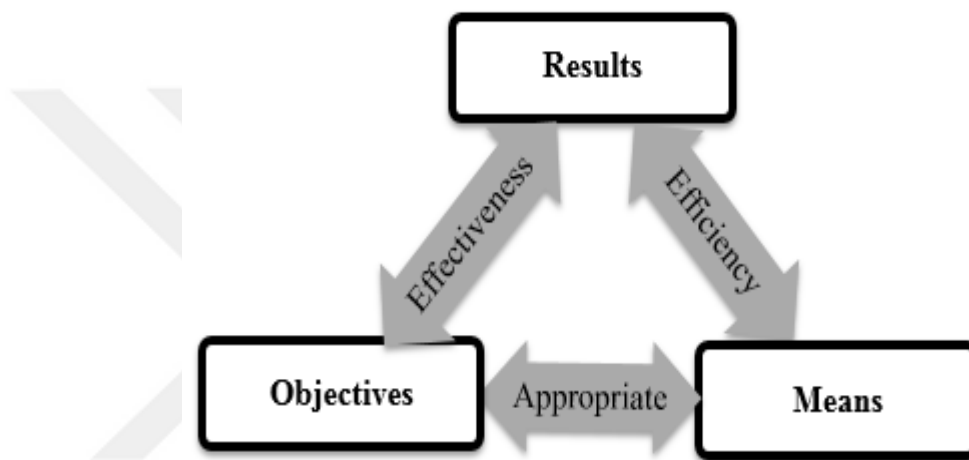


Figure 7: Concepts Related to Organizational Performance  
**Source:** Jacque, Barreaux, (1997: 33)

**Efficiency** is defined merely as the proper completion of business, and thus refers to the economical way in which work and activities are carried out and the exploitation of available resources. It also means obtaining the most significant amount of output (results) for the use of less quantity or less cost and this means that the costs kept to the minimum and profits are maximized. Efficiency is a concept that links outputs and inputs. The higher the output, the more efficient the organization is judged (Al-Jaliyah, 2006:130).

**Effectiveness** reflects the extent to which organizational performance (or decision is to take) contributes to the achievement of a specific goal that is predetermined, that is, it measures the degree of approaching the goal of a particular action (Khalis, 2004: 397).

Though, effectiveness can define as doing the right things and is concerned with the success of the organization in achieving its goals in the long term. Also,

effectiveness defines as the ability to achieve the goals that established, whatever the means used, and thus effectiveness is the issue of achieving results regardless of the efforts made to reach them. It is the ability to achieve by whatever the potential, it is calculated by the relationship between the goals achieved and the goals set (Ben Habib, 2004: 126).

$$\text{Effectiveness} = \frac{\text{Achieved Goals}}{\text{Controlled Goals}} = \frac{\text{Actual Outputs}}{\text{Planned Outputs}}$$

The definition of effectiveness may not be limited to this quantitative relationship, which is considered by some schools as a systems school, and Bennis as a classical school. Effectiveness can be defined and understood through many dimensions and aspects. It may indicate the organization's ability and willingness to survive and adapt to changes and continuity as well as to growth and profitability.

It is also known for its success in achieving the goals for which it was created and thus represented in both strategic objectives and tactical objectives (Boumediene, 2006: 121). Based on the above definitions, it is clear that several appearances characterize the organizational performance (Al-Jaliyah, 2006:128) the most important of which revealed below:

**Performance is a broad concept:** The meaning of performance varies according to the groups or individuals who use it. For the owners of the organization, it may mean profits. For the administrative leader, it may mean productivity and competitiveness. For the working person, it may mean good wages or an appropriate work environment.

Which is provided by the organization, so the performance remains a matter of perception varies from individual to group and from one organization to another, which raises the problem of difficulty to control and acceptance. According to the standards approved by all actors inside and outside the organization, and may prevent the organization from being in a good posture for all standards.

**Organizational performance advanced concept:** The performance components evolve, since the criteria on which performance is determined, whether internal to the organization or those determined by the external environment, are flexible. The factors that govern the success of the organization in the initial stage of

market entry may be inappropriate to judge, the performance in the stage of growth or maturity.

As there may be a particular combination of human factors, technical, organizational and financial performance makes high position or circumstance without being in a position or other conditions, because of these multiple and variable combinations through time, so that the primary challenge facing administrative leaders is to find the right combination to achieve high performance.

#### **2.1.1.1. The Importance of Organizational Performance**

Madi, (2011) explains that performance plays a prominent role within organizations. It is the outcome of its activities both at the individual and organizational level, where it plays a significant role in its stability and survival. The organizations pay considerable attention to their performance level and strive to develop it to achieve their objectives. For the following (Madi, 2011:77):

- a) An indicator of the degree to which the vision and mission of the organization achieved.
- b) The means to achieve the objectives of the organization.
- c) Authorizations the level of success of organization's staffs and management in the implementation of the tasks entrusted to them, and the degree of implementation of these tasks.
- d) Contributes to the staffs' knowledge and potential in the organization.

However, according to Mia et al., (2009:143) performance is an excellent interest at all levels, particularly at both employee and organizational level. Hence, its significance lies in:

1. The individual's performance is a reflection of the department performance, management, and the organization. It is also a measure of his/her ability to perform work in the present and the performance of other work in the future. One of the primary needs of the individual is the need for stability in currency and stability itself.
2. For organizations: the importance is paramount to each official by performance is evaluated by the organization managed or chaired or supervised by, so the officials in the organizations concerned with the performance of employees



because it is a reflection of the performance of the organization and the degree of effectiveness.

#### **2.1.1.2. The Performance Types**

Performance can be classified based on several standards, the most important of which are:

##### **2.1.1.2.1. According to the Standard Term**

Performance by this standard divided into long-term performance and short-term performance (Samira, 2008:58) so, long-term performance includes more than five years while short-term performance covers not more than one year.

##### **2.1.1.2.2. According to Source Standard**

Performance according to this standard is divided into internal performance and external performance (Sulaimani, 2007: 118),

- a) Internal performance results from the interaction of the various subsystems of the organization's performance any different partial performance of the human resources performance, technical performance, and financial performance of the financial capabilities used.
- b) The outside perimeter of the organization produces external performance, the performance resulting from changes in the environment surrounding the organization and therefore the organization cannot control this performance, as this may appear in the results of good obtained by the organization. For example may increase the volume of sales of the organization, because of the improvement in the economic situation or as a result of incentives by the state, as these changes may reflect the performance of positive or negative. Therefore, the organization must measure and analyze this performance because it can be a threat to them is not controlled as it is for internal performance.

##### **2.1.1.2.3. According to the Standard of Inclusiveness**

Performance-based on this standard can be classified as follows (Onis, 2016:22):

- a) It reflected in the achievements that all the functions and activities of the organization have contributed to achieving without a single part or component of their achievement. Through the overall performance, it is possible to judge the extent to which the organization achieves its objectives such as continuity, growth, and profitability.
- b) Partial performance, this is achieved at the level of the subsystems of the organization and is in turn divided into several different types of the functional standard of evaluating elements of the organization.

#### **2.1.1.2.4. According to the Standard of Career**

This standard is related to the functions and activities available to the organization. These functions include the financial function, productivity, personnel function, marketing function, and public relations function. (Mazhouda, 2001:89):

- a) Financial function performance, the performance of this function in institutions is reflected in ensuring the proper, and rationale for accreditations, and is embodied in the legality and validity of financial operations such as forgery, proper use of public funds and arrange their use and respect for legal norms.
- b) Production function performance, to achieve the performance of this function when the institution can achieve high rates of productivity, taking into account a certain level of quality and limits of available.
- c) Marketing function performance, the performance of this function is generally in the definition of the customer service and facilitate the convergence of the product to the purpose of production and delivery or service.
- d) Human resources' function performance, the human resource is the most critical resource in the organization and through other resources being mobilized and directed to achieve the objectives of the organization. So, this means that the survival and continuity of the organization depend on the performance of the human factor. However, this performance based on competencies and selection of highly skilled. So, the right person at the right place and time.
- e) Performance of public relations function, this function aims to develop positive relations between the institutions and their clients and improve their image and nature in their mind. It also plays an essential role in achieving communication among the institution, and it is broad public, both internal and external.

### **2.1.1.3. The Levels of Performance**

There are a range of levels of performance through which the organization can identify the level of its performance and represented as follows: (Hamdan and Idris, 2007:387)

- 1) Exceptional performance: It shows the superiority of performance in the long term, which expressed in the form of lucrative contracts and the prosperity of the financial situation of the organization.
- 2) Outstanding performance: It has access to several large contracts, the ownership of efficient frameworks, the possession of status and financial status is distinct.
- 3) Outstanding performance: shows the rigidity of performance and the visibility of the future in addition to enjoying an excellent financial situation.
- 4) Excellent performance: It has a distinct performance by prevailing rates with the balance of strengths and weaknesses in products or services and client base with a constant financial position.
- 5) Moderate performance represents a process of the performance below the average, and overcome weaknesses on the strengths of products or services and client base, with difficulty to obtain the necessary cash for survival and growth.
- 6) Poor performance: which is much below average performance, with the clarity of the weaknesses in almost all axes, as well as the existence of severe difficulties in attracting qualified tires, while facing severe problems in financial aspects.

### **2.1.1.4. Evaluation of Organizational Performance**

The performance evaluation process is an essential process for each organization. However, an important at all levels to achieve these following goals should be dealt with systematically and thoroughly with the participation of all parties based on performance evaluation process on the set of exponents and go through a set of stages also necessitate requirements for the rating to an acceptable level. Moreover, after the assessment process, the organizations are improving their performance to the paid motivation for improvement according to principles.

According to Karkhi, (2015:31) performance evaluation is all processes and studies aimed at determining the level of relationship between the available resources and the efficiency of their use by the organization. Furthermore, considering the development of the relationship mentioned during successive time periods or period

by making comparisons between the target and the verified objectives based on the particular criteria.

While, Nabil, (2013:104) identified as an important performance management process to measure the performance of an individual, group or organization and compare it to the target performance. It is also recognized as finding benchmarks by which the organization can achieve the objectives for which it was set up and compare these goals with the planned goals in order to identify deviations of what has already been achieved and identify the causes and methods of these deviations (Al-Issawi, 2008:250).

The researcher believes that the performance evaluation process includes all activities within the organization to confirm that the results are going as planned. Moreover, appraisal the performance of the organization in the economic exploitation of resources in achieving initiated, this is intended to take corrective decisions in the case of deviations of some activities from what planned.

However, according to Gharbi, (2007: 140) performance evaluation is essential for the following reasons:

- a) Helps to bring senior management to the attention of the centers that are more in need of supervision and where supervision is more productive.
- b) Work on the rationalization of the organization's human resources in future, where strong elements identified and developed as well as non-productive elements that need to be dispensed with or tried to reform them to increase their efficiency. Thus, performance evaluation is an objective basis for developing incentive systems and incentives.
- c) Help department managers to make decisions that achieve the objectives by directing their activity towards areas that will be measured and governance.
- d) The manager recognizes how to perform the work that will be carried out in advance, as well as provide the right basis for the establishment of a sound and efficient incentive system and helps to determine the extent to which the carrying of administrative responsibilities.
- e) Comparison between the different sectors within the organization and among other organization through evaluation indicators.

#### **2.1.1.5. Objectives of the Organizational Performance Evaluation**

According to Bin Khalifa, (2012: 58) the evaluation of the performance objectives to assess performance goals may come close to a goal from another relative to the nature of the process and manner of implementation, evaluations. These objectives can be summarized as follows:

Economic unity is defined starting from the objectives to confirm that the measurement was according to those objectives to confirm that the measurement was by those objectives:

- Confirm that the organization is moving towards its objectives set out in its founding act or its rules.
- Discover and learn its causes and propose design measures to replicate and help with various administrative levels to exercise oversight by directors, managers focus on the deviations detected and at the same time diverging to their other tasks.
- Rationalize management to prepare future plans.
- Motivating staffs to create an objective assessment of their efforts.
- Evaluating selection and training policies and identifying the effects of this and its implications for the staffs and their abilities.

#### **2.1.1.6. The Stages of the Performance Evaluation Process**

According to Hassan, (2014:41) the performance evaluation process goes through several necessary stages that can illustrate as follows:

**The stage of collecting statistical data and information**, the performance evaluation process requires the availability of data, information, reports, and indicators such as value-added, the value of a quantity, and value of production, number of workers, wages. Moreover, so that all this information is not limited to a particular time, to find out the nature of the development of industry for all areas of activity of the organization.

**Analysis and study of statistical data and information**, to determine the accuracy and validity of the standards and indicators necessary for the performance evaluation process, where a level of reliability in these data should provide where some statistical methods are used to determine the reliability of these data.

**Conduct the evaluation process**, using appropriate criteria for the activity exercised by the organization that includes the organization's overall activity assessment process which all responsibility centers to reach a substantive provision of reliable and accurate.

**Taking the right decision about evaluation findings**, that the unit was within port activity goals and deflections in the activity were all gained the solutions to address these deviations have been taken and that the plans have been put in place to move the unit for the better in the future.

**The stage of judging the results and determining deviations**, according to Al-Issawi, (2008:252) at this point the deviations are specified regarding how different productive units for specific quality standards. Moreover, maybe skewed due to lower quantity produced or because there is an imbalance in the productive relations between various departments in the project reflected the emergence of a few differences, and can with this operation the following steps:

- Identify the methods of the implementation plan.
- Recognize the criteria and performance evaluation standards.
- Measuring actual performance and comparing it to planned performance.
- Defining deviations, reasons, and centers responsible for them.
- Addressing these deviations.

#### **2.1.1.7. Performance Evaluation Methods**

The performance evaluation process is essential to enable the organization to take a snapshot of the current activity to assess the progress of their performance. While, internally comparing with the need to compare internally and with other organizations by the evaluation elements (Debgi, 2013:66):

- Compare of goals programmed with the objectives achieved.
- Assessment of current performance with previous periods performance.
- Evaluation of results achieved with the standard.
- Compare of the performance of the organization with the performance of other organizations.
- Compare the performance of the organization with the best performance in the sector called Benchmarking method, that help towards improvement and development.

### **2.1.1.8. Improving Organizational Performance**

According to Faraj, (2015: 67) improving performance is to use all available resources to improve the output, productivity of processes and integrate technology that engagements the best capital. Thus, improved performance of any organization requires a balance of the following elements, such as quality, productivity, and cost, and balance these elements confirm the expectations and needs of stakeholders in the organization had taken into account. In this regard, (Mukhery et al., 1999: 73) reviewed a set of proposed steps to develop an appropriate methodology to improve organizational performance:

- 1) Conduct detailed studies of factors affecting performance, including external factors and internal factors, as well as regulations, procedures, procedures, and activities involved in the organizational performance.
- 2) Identify the strengths and weaknesses of the organization to maximize the benefits of the strengths, including the comparative advantages of the organization, and to develop a clear strategy to overcome weaknesses to reduce the adverse effects of these aspects on organizational performance.
- 3) Preparation of detailed programs to sensitize the organization's staff at all administrative levels in the modern concept of organizational performance with the aim of creating an internal culture in the overall concept of organizational performance.
- 4) Conducting a comprehensive inventory of the problems and challenges facing organizational performance through a precise method that includes the survey of the clients' opinions, the opinions of their staffs and the opinions of the regulators on the performance of the organization.
- 5) Forming a team of experts to analyze the various problems faced by the organization in different fields.
- 6) Develop information systems in the organization to provide the data and information needed to implement the modern concept of organizational performance.
- 7) Develop a set of indicators to measure the different dimensions of organizational performance covering the basic aspects like: quality of services, efficiency in the use of economic resources, effectiveness in achieving objectives, and the relevance of programs provided by the organization to the needs of beneficiaries.

- 8) Develop appropriate mechanisms for conducting measurements using the indicators reached in the previous step.
- 9) Conduct multiple comparisons to judge the adequacy of organizational performance, including:
  - Comparing the current performance with the performance achieved in the previous period.
  - Evaluation of actual performance with planned performance.
  - Assessment of the actual performance of the counterpart organizations using the so-called performance benchmark.
- 10) Identify areas for improvement and development in the light of the comparisons made in the previous step.
- 11) Implementing specific programs and taking specific steps to improve and develop organizational performance based on the full commitment of the organization's staff to improve organizational performance.

While, (Moumen, 2012:58-59) mentioned five steps to improve performance to ensure that the organization achieves its objectives as follows:

**Step one: Performance Analysis**

Performance analyzed through testing the organization's performance within its priorities and capabilities, which is to define and analyze the current and expected situation of problems in work performance and competition (Moumen, 2012:58).

**Step two: Search for causes**

The cases analyzed in the gap among desired and realistic performance, besides failure to address performance problems usually done because the proposed solutions aim to address only the external symptoms and not the real causes of the problem. Nevertheless, when the problem addressed at its root, it will produce better results. So that an essential link between performance gap and appropriate measures to improve performance.

**Step three: select the means of intervention or treatment**

Intervention in selection is a systematic, comprehensive and integrated way to respond to performance problems and causes, and the most appropriate ways to



overcome them. Typically, the response is a set of measures that represent more than a means of improving performance.

The organization's appropriate procedures, financial position and expected cost based on the desired benefit, is measured by the extent to which the performance gap is reduced and measured by the extent to which the performance and results of the organization are improved. Any strategy for improvement and performance development must take into consideration changing the organization's objectives before implementing the strategy to ensure its acceptance and functional at all levels.

#### **Step four: Implementation**

After selecting the appropriate method is put into effect, then design a system to follow up and try to analyze or include the concepts of change want in the daily business while trying to pay attention to the effect of direct and indirect things for change to ensure effective and efficient organization.

#### **Step five: Monitoring and evaluation of performance**

This process must be continuous because some methods and solutions have direct effects on improving and developing performance. So, there should be means of monitoring. Besides, monitoring that focus on measuring the change that has been made to provide early feedback on the outcome of these methods and to assess the impact of trying to close the gap in performance.

Hence, the formal assessment of the actual desired performance must continuously compare and evaluated. Therefore, we have obtained information from the evaluation that can be used and used in other assessments again (Moumen, 2012:59).

#### **2.1.1.9. Measuring Organizational Performance**

The success of any organization depends on its ability to achieve its goals and objectives, which is the process that requires the development of a specific strategy and works to provide and exploit all the possibilities available for implementation in light of the internal or external environmental changes of the organization. The final stages of the administrative process, because they reflect the final result within a

specified period and are mainly related to the extent of the survey and determine the achievement and the organization to achieve its goals.

Consequently, measurement of organizational performance defines as an organized way of assessing input, output and production processes in an industrial and non-industrial establishment (Marzaqa, 2009:2). Organizational performance measurement also defines as the discovery and improvement of those activities that affect the organization's profitability through a set of indicators related to the organization's past and future performance to assess the extent to which the organization has achieved its stated objectives at present (Mohammad, 2009:193).

Nevertheless, it is also identified as a measure of continued surveillance of the achievements of the organization's programmes and recorded, in particular, monitoring and recording aspects of progress towards achieving the goals laid out in advance (Al-Ghali, 2007:487).

In this regard, Amiri, (2007:602) argues that the performance measurement is a stage of the administrative process in which we try to compare actual performance using specific indicators to identify deficiencies or shortcomings in performance. Therefore, take the necessary decisions or the way to correct this deficiency, often use comparison existing or already realized between what is being targeted by a particular time usually.

It is clear from these definitions that there is a difference between performance measurement and evaluation processes, although many use the terms to express the same meaning, measuring aimed at diagnosis evaluation aims to cure or reinforcement (Zuby, 2014: 65)

The researcher observed that the difference between measurement and evaluation is that the measurement is a collection of information and quantitative observation of the subject to be measured, namely, the assessment of objects and levels quantitatively according to a particular set of measures included. Evaluation is an institutional process that results in information useful in deciding or the evaluation process aims to determine the success or failure of achieving the goals, as well as the strengths or weaknesses so that the desired goals can achieve in the best possible way.

According to Hasina, (2015, 48) the importance of performance measurement is back to the inability of the organization to measure its activities that leading to

inability to control it, and therefore the organization needs to measure its performance for the following reasons

- Control: Performance measurement helps reduce distractions that occur during work.
- Self-assessment: a measurement used to evaluate the performance of operations and identify improvements to implement.
- Continuous improvement: a measurement used to identify sources of defects, operational trends, prevent errors, determine the efficiency and effectiveness of operations and enforce improvement.

However, Idris and Galby, (2009: 71) argue that without evaluation of management, there is no way to confirm efficiently and effectively, hence, showing the importance of measuring performance in the following points:

- Performance measurement improves internal communication between staffs as well as external communication between the institution and its clients.
- Performance measurement leads to better management and the delivery of products and services to clients.
- Performance measurement helps explain the implementation of the programs and their costs.
- Performance measurement encourages constructive orientation and problem-solving.

#### **2.1.1.10. Performance Measurement Indicators**

Performance measurement indicators can divide into the following:

##### **First: Traditional performance indicators:**

**1. Financial indicators**, there are many financial indicators used by many organizations to express their objectives, and financial results bear them. (Al-Dulaimi et al., 2012:178).

a) **Return on Investment (ROI)**: The most common measure that enters the basis of investment in income measurement, and the rate of return on investment define as the ratio of net profit to investment, calculated as follows:

$$\text{Return on Investment} = \text{Net profit} / \text{invested capital}$$

- b) **Return on Sales (ROS):** The net profit to sales ratio, often called the rate of return on sales, is a financial measure of the widely used performance. Moreover, the rate of return on sales is one component of the return on investment (Dupont) To determine the profitability of sales, i.e., efficiency data in generating profits.

$$\text{Return on Assets} = \text{Net Profit} / \text{Net Sales}$$

- c) **Earnings per share (EPS):** Earnings per Share: the most prominent performance indicators to economic organizations, because it relates directly to the success or failure of the organization to achieve the primary goal of the economic organization well known in economic theory, is to achieve the maximum profit possible.

$$\text{Earnings per Share} = \text{Net Profit} / \text{Number of Shares}$$

- d) **Return on equity (ROE):** This indicator measures the value of the return on equity of the shareholders, according to the following relationship.

$$\text{Return on Equity} = (\text{Net Profit} / \text{Equity}) * 100$$

2. **Non-financial indicators,** the use of non-financial indicators is enough to give a clear picture of the organization's position, and on this basis, there must be other non-financial indicators such as quality, client satisfaction, innovation and creativity, flexibility and other indicators to integrate with financial indicators give us a picture about organizational performance. However, ideal indicators do not exist, because the indicators vary from an economic unit to another because of differences in the nature and work of the organization size and relative importance of indicators used (Al-dulaimi et al., 2012:179), and can reconstitute in the following points (Mohammed, 2009:28).

- a) **Quality indicators:** Quality has become the first function of any organization, management philosophy, and the existence of any organization to enable it to gain a competitive advantage. To survive under continuous, rapid environmental variables, and the entrance of continuous performance philosophy and quality of production developer for goods and services with higher availability and lower cost production is free of defects and customer satisfaction.
- b) **Flexibility indicators:** flexibility is one of the most important characteristics that distinguish organizations in advanced industrial environments that include the Organization's ability to respond quickly to customer requests.

- c) ***Just in time indicators (JIT)***: a regulatory approach adopted by the organization to produce goods or services in the shortest possible time, and the lowest possible total cost through constant selection for all causes a waste, deviations from the planned standards. For quality, cost and time requires that inventory reduction, and improve the quality of processes and products, improve relationships with suppliers.
- d) ***Delivery performance indicators***: to maintain customer satisfaction, goods or goods must be delivered on time as quickly as possible. Fast delivery is an essential factor that governs the survival of organizations in a modern manufacturing environment.
- e) ***Research and Development Indicators***: research and development refer to the scientific and research efforts that ultimately lead to improvement and innovation in the outputs of the organization. The research and development process aims to reduce cost and increase financial returns, enable organizations to keep up with the latest developments in all fields and thus contribute to the competitive advantage of the organization.

**3. Organizational Field Effectiveness:** The standard performance is a short statement describing the result expected to be reached by the employee who performs a specific task. The objective of the standard performance is to monitor the performance on an ongoing basis to identify any fluctuation or change in the level of performance for timely intervention and correct the negatives and deficiencies. Routing overall performance so that the negatives are not repeated and turn into functional behavior in the workers is difficult to change. According to Ben Mani, (2006:73-75) The most important performance of organizational field effectiveness standards is:

- a) ***Quality***: reflects the level of work performance and therefore is a fundamental business strategy contribute to the evaluation of goods and services satisfy customers at home and abroad by meeting their expectations implicit and explicit, and quality carries the meanings of real sense. The real sense means the commitment of the organizations to use real indicators such as production rate, waste rate, and then use the standards and commitment of organizations according to accepted standards and values.

- b) **Quantity:** It means the volume of work done and this should not exceed the capabilities and abilities of individuals and at the same time not less than their abilities and potential because this means slow performance. Which affects the workers negligent and may lead to a problem in the future is the inability to increase the rates of organizational performance. Therefore, it is preferable to agree on the size and quantity of work done as a motive to achieve an acceptable rate of growth in the rate of organizational performance proportionate with the individual's experience and facilities.
- c) **Time** is essential to being a non-renewable resource; it is not capital income necessitating exploited right at every moment of our lives because time is dwindling and goes on forever, time is more precious than gold because it is priceless.
- d) **Procedures**, it is necessary to agree on the methods and approaches permitted and authorized to be used to achieve the objectives although the procedures and steps followed in completing the expected work and the code in the documents of the organization according to the rules, regulations and laws and instructions. However, it is preferable to agree between the superiors and subordinates on the procedures followed in the completion of work, whether about the completion of transactions or delivery or receipt so that the picture is clear to all parties so that the performance is not affected by the absence of one employee.

### **2.1.2. Modern Performance Indicators (Balanced Scorecard)**

According to Khafaji and Yaghi, (2015, 43) Balanced Scorecard is an administrative system designed to help the organization translate its vision and strategy into a set of strategic objectives and measurements related through the fields and motion graphic with its future movement. It also defines as an integrated system for measuring current performance with a focus on future performance engines. It also focuses on measuring financial and non-financial aspects and provides managers with a realistic view of what is happening inside and outside the organization (Mohammad, 2009:217).

While, Garrison et al., (2014:495) defined Balanced Scorecard as a tool that consists of a set of performance metrics derived from the organization's strategy. That enables the organization to translate its strategy through four sets of

performance measures related to client affairs, internal processes, growth and development, and financial matters.

In the light of the previous definitions, the researcher believes that Balanced Scorecard is the system of activities and performance of institutions in light of their vision and strategy, and balances the financial perspective, the perspective of customers, or internal processes, growth, and education.

### **2.1.3. Balanced Scorecard Components**

Kaplan and Norton introduced the balance performance card components as follows (Idris and Al-Ghalbi, 2009:154):

- The future vision, which shows where the organization is heading and what future body it will be.
- The strategy consists of overall goals and long-term plans.
- Objectives represent the results to be achieved, which contribute to access to the vision of the organization, where the distribution and allocation of goals on the four dimensions, where the goals must be realistic, measurable targets, specific, and time frame.
- Target values, a specific amount to be measured to determine the amount of deviation from the realized values.
- Strategic initiatives: record initiatives or things will do to achieve the goal. For example, the target might be increasing client satisfaction with the level of service; the cursor is the result of a poll of opinion has been its annual profit and does not require that the performance indicators are quantitative, qualitative or may even be descriptive.

### **2.1.4. The Balanced Performance Scorecard dimensions**

The basic dimensions of the Balanced Scorecard are as follows (Hasina, 2015:54):

#### **2.1.4.1. Financial Dimension**

For the financial success of the organization to achieve, it must determine with what skillful precision it must to do to achieve this goal and how it can achieve its objectives. The critical point is how the organization can measure non-financial aspects which are the future performance engines of the organization. However, they

incorporate these measures and retain them as they are necessary for the current and prospective investor.

#### **2.1.4.2. Beneficiary Satisfaction**

This aspect identifies the target market segments and measures the organization's success in these sectors to control its growth objectives. Organizations use measures such as market share, some new customers, customer satisfaction, and the latter are very important because it leads to the survival of the organization as long as there are customers that deal with them and earn profits and earnings.

#### **2.1.4.3. Internal Processes**

This dimension assesses the degree of success of the organization and its ability to meet the requirements of customers. As it measures the degree of skills of employees and the way of service delivery, productivity and others to measure the internal performance of the organization, and also focuses on innovation processes, as well as services provided to the client.

#### **2.1.4.4. Education and Growth**

This dimension aims at guiding individuals towards the continuous improvement and development necessary to survive. It defines the capacities in which the organization must grow to achieve high-level internal processes that create value for clients. This aspect focuses on measuring members' abilities, level of skills and satisfaction with work, and also measures the capabilities of the information system, reward system, and incentives.

#### **2.1.5. Success Factors for Implementing a Balanced Performance Scorecard**

There are several factors for the success of implementing the balanced performance scorecard in the organization, the most important of which are the following (Idris and Al-Ghalbi, 2009:175)

- Culture and organizational values must be strong and forward-oriented, accept change and seek to adopt standards on a permanent basis in all areas.
- Interest in formulating a clear strategy with a focus on future directions, without vision and strategy balanced performance card is not useful.



- Provision and support the senior management of the design and application of balanced card with the most necessities of the success of those programs.
- Focus the staff draft balanced scorecard with innovative, creative, accept the challenge, enthusiasm, and desire to prove oneself.
- It is necessary to formulate the organizational vision clearly and publicly understood by all staffs in the organization.
- Minimizing attention to past goals and focus on the future.
- The dimensions must provide for the balanced performance scorecard model, which is the four axes.

## **2.2.THEORETICAL RELATING THE KNOWLEDGE MANAGEMENT TO ORGANIZATIONAL PERFORMANCE**

Knowledge management has become a significant theme at many large business organizations and academic institutions as their leaders and managers realize that much of their organization's value depends on the organization's ability to create and manage their knowledge process.

Thus, managers must play their role for effective knowledge management practices for gaining a sustainable competitive advantage which is the direction for improvement and better organizational performance. Consequently, an organizational performance defined as an organization's capability to obtain and use its scarce resources and valuables as expeditiously as possible in search of its operations goals.

As Kalling, (2003:76) there has not much research done to link the organizational performance and knowledge management, but researchers have implicated that the more knowledge organizations can capture the higher is their performance. Managing knowledge does not substantially improve performance, but the knowledge managed should be linked to utilization and development of an organization to gain better performance

According to Davenport and Prusak (1998), knowledge management focused on processes and mechanisms for locating and sharing what is known by an organization or its external stakeholders however the capability to share internal best practices is essential to general organizational performance. While, (Iksan and Rowland, 2004:109), report that organizations should transfer knowledge from one unit to another to gain an overall performance. The ability to apply knowledge to

perform essential activities viewed as a source of competitive advantage. When knowledge is managed to improve development and subsequently utilized by individuals, only then KM can be used to improve performance.

However, one of the significant benefits of introducing knowledge management practices in organizations and particularly in institutions is its positive impact on organizational performance. According to Fugate et al., (2009) results collected in a logistics operations context prove the existence of a robust positive relationship between a knowledge management process and operational and organizational performance. Still, it not well understood how different knowledge management strategies affect organizational performance.

It indicated that leadership is an important critical success factor of KM and is also helpful in successful KM implementation. As the KM is a complex activity so it needs management leadership and support to achieve the highest level of organizational performance (Nawab et al., 2015:44).

In this regard, Ju et al., (2006:865) also investigated the relationship between knowledge management processes and innovation and organizational performance and found a direct impact of knowledge management processes on organizational innovation and performance. While, the knowledge management processes include the acquisition of knowledge, conversion of knowledge and application of knowledge.

The researchers suggested more studies due to lack of empirical evidence that looks into the relationship between knowledge management processes, organizational innovation, and performance. While, Choi et al., (2008: 238) show that combining the tacit internal oriented and explicit external oriented knowledge management strategies indicates a complementary relationship, which implies synergistic effects of knowledge management strategies on organizational performance. The results of the study conducted by (Rašula et al., 2012:148) suggest that knowledge management fully mediates the impact of organizational culture on organizational effectiveness, and partially mediates the impact of organizational structure and strategy on organizational effectiveness.

The results of the research conducted by (Ahn and Chang, 2004: 415). Show that knowledge management affects organizational performance positively, but this

relationship is complicated to prove. However, researchers often imply this positive effect of knowledge management on organizational performance.

While, Tan and Nasuridin, (2011: 164) described in their research that persistent and consistency of Knowledge management processes is the best way to improve technological innovation. The results of the study showed the positive relationship between Knowledge Management Processes with product and service innovation. The knowledge management processes studied was an acquisition, sharing, and application of knowledge.

Darroch and McNaughton, (2002:216) studied knowledge acquisition, dissemination and responsiveness as Knowledge Management processes and the researchers found that knowledge dissemination does not have any effect on incremental innovation opposite to what they hypothesized. They further pointed out that there is a lack of empirical studies that examined the relationship between Knowledge Management and innovation. They further recommended more research studies in this regard should be conducted to confirm the contrary results obtained as what they hypothesized.

Jantunen, (2005:345) studied the relationship between knowledge management processes and innovation activities and the results of the research revealed the positive relationship between these factors. The knowledge processes studied were the acquisition of knowledge, dissemination of knowledge and utilization of knowledge. They further described that organization could be more innovative when it can create new knowledge.

In this context Farshath, (2004:111) concluded study stating that Maldivian organizations are aware of the concept of knowledge management to some extent and are moving towards better implementation of knowledge management but the extent to which knowledge management practiced has never been a subject of research in the country. If NGOs develop a sustainable link between knowledge management and their activities, it is possible for them to capture the knowledge of volunteers.

## **CHAPTER THREE**

### **THE STUDY MATERIALS AND METHOD**

#### **3.1. THE STUDY MATERIALS**

The purpose of this chapter is to reveal the study materials and method that comprises the statement of study problem, the study purpose, the significance of the study, the study questions, the conceptual model of the study, the study hypotheses. While the section two of this chapter presents the materials and method, hence this chapter gives a basis for the entire study.

##### **3.1.1. Statement of Study Problem**

Even though the knowledge management and its dimensions namely; knowledge diagnosis, acquisition and generating, storage, distribution, and knowledge implementation practices well known within institutions. Moreover, the proper process designed to help faculties to categorize and reserve an optimal arrangement with the most essentials such as organizational performance, and environment within which the university exists in. Moreover, aforementioned and present studies and research have made it clear that there is an increased internal and external uncertainty due to surroundings progressing of opportunities and threats, also lack the realization of needs and the facilities related knowledge productions, environment and lack of course of action.

Therefore, the researcher instigated over investigational studies primarily those connected to the current study, that many of institutions and head of their faculties do not classify the real significance of knowledge management process and its role on the organizational academic performance. Therefore, we can formulate study problem. Is there a relationship between knowledge management and organizational performance?

##### **3.1.2. The Study Purpose**

The general purpose of this study is to investigate the role of knowledge management in improving organizational performance; a study of a sample of faculty members at the University of human development in Sulaimaniyah City-Iraq.

As the actual impact to develops organizational academic performance. Also, other factors can influence the organizational academic performance, however in the current study, only the most vital and joint aspects will be surveyed, and then the stress will narrow down to knowledge management process its dimensions and their role on the improvement of organizational performance. Thus, it likely that this study ranges the following purposes:

1. The clarify the levels of knowledge management and organizational performance performed by the surveyed faculties of the University of human development in Sulaimaniyah city.
2. Investigate if there is a covenant between the views of the faculty members towards the study variables as knowledge management and organizational performance.
3. To test whether the knowledge management impact the organizational performance of selected faculties of the University of human development in Sulaimaniyah city

### **3.1.3. The Significance of Study**

In this context, this study expected to have a significant impact on knowledge management process and to improve organizational performance of institutions. Since many universities and their faculties necessary to obtain a concerted level of knowledge management process to improving organizational performance. Likewise, the study results would contribute to better considerate on knowledge management process and organizational performance of institutions. Moreover, how the universities and their faculties achieve their academic objectives that support the organizational performance of the institution.

Consequently, this study may have practical significance for future studies, regarding rises significance in the academic aspect through advance two substantial managerial variables which concern knowledge management process and improving organizational performance. However, as the study topics are active and need continues improvement, while the study determinations are to existent a theoretical framework for these topics and to enhance the subject with possible methodical orientations.

Then, for faculty members or lecturers to comprehend the role of knowledge management in improving organizational performance and its findings expect to help enlighten decision-making in the area of knowledge management process. Further, the reputation of the field aspect of the study stems from the importance of the approaches it explores to utilize the knowledge management and improving organizational performance.

#### **3.1.4. The Study Questions**

In this regard, through appraising the previous studies and research that related to the topics of study, conversely, to formulate the current study problem and classify the suitable methods to endorse the positive impacts of the relationship between the knowledge management and improving organizational performance. Moreover, to find applicable solutions to their negative aspects and reduce them to improving organizational performance the researcher can categorize the study questions as follows:

1. Do knowledge management and organizational performance dimensions present significantly in surveyed faculties of the University of human development in Sulaimaniyah city?
2. What are the levels of knowledge management and improving organizational performance in surveyed faculties of the University of human development in Sulaimaniyah city?
3. Do knowledge management scopes vary in their relative substantial across surveyed faculties of the University of human development in Sulaimaniyah city?
4. Are knowledge management and its dimensions significantly correlated with the improving organizational performance?
5. What is the impact of knowledge management and its dimensions in the improving organizational performance?

### 3.1.5. The Conceptual Model of the Study

As displayed in the figure below (8) that by the contented of the study purpose and course of the study problem this study permitted the conceptual arrangement so to simplify the impact and relationship between the topics consequently to convert the study problem into applied variables so, the study engaged this scheme that relates the knowledge management and organizational performance.

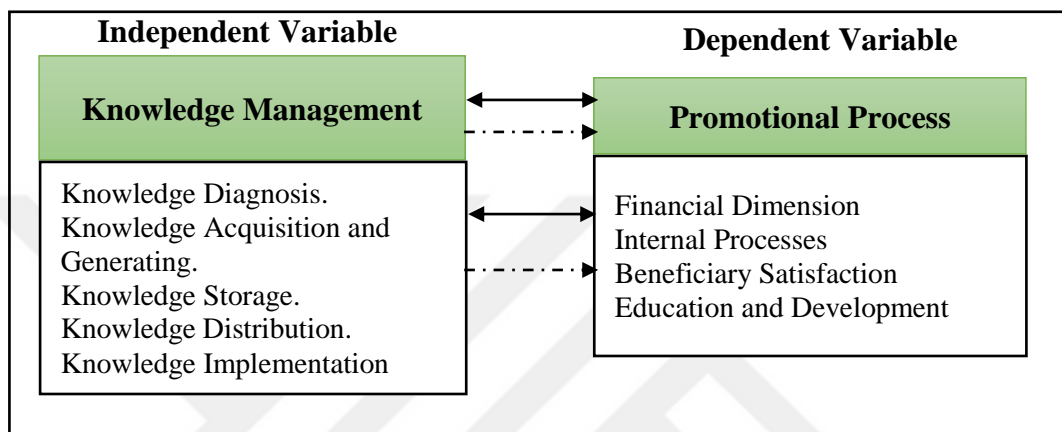


Figure 8: The Conceptual Study Model

Source: Developed by the researcher based on the literature reviewed

### 3.1.6. The Study Hypotheses

The study hypotheses formulated in cognizance on the subject of the above study conceptual model, the impact, and relationship between its central variables and their dimensions, the study hypotheses can establish as follows:

**H<sub>0.1</sub>: There is no a positive relationship between knowledge management and the organizational performance from the perspectives of the faculty members at the University of human development in Sulaimaniyah city.**

**H<sub>1</sub>: There is a definite relationship between knowledge management and the organizational performance from the perspectives of the faculty members at the University of human development in Sulaimaniyah city.**

**H<sub>1.1</sub>:** There is a definite relationship between knowledge diagnosis and organizational performance.

**H<sub>1.2</sub>:** There is a definite relationship between knowledge acquisition & generating and organizational performance.

**H<sub>1.3</sub>:** There is a definite relationship between knowledge storage and organizational performance.

**H<sub>1.4</sub>:** There is a definite relationship between knowledge distribution and organizational performance.

**H<sub>1.5</sub>:** There is a definite relationship between knowledge implementation and organizational performance.

**H<sub>0.2</sub>:** **There is not a significant impact the of knowledge management in the organizational performance from the perspectives of the faculty members at the University of human development in Sulaimaniyah city.**

**H<sub>2</sub>:** **There is a significant impact the of knowledge management in the organizational performance from the perspectives of the faculty members at the University of human development in Sulaimaniyah city.**

**H<sub>2.1</sub>:** There is a significant impact of the knowledge diagnosis in the organizational performance.

**H<sub>2.2</sub>:** There is a significant impact of the knowledge acquisition and generating in the organizational performance.

**H<sub>2.3</sub>:** There is a significant effect of the bank's planning in organizational performance.

**H<sub>2.4</sub>:** There is a significant effect on the knowledge storage in organizational performance.

**H<sub>2.5</sub>:** There is a statistically significant effect of the knowledge implementation in organizational performance.

### **3.2. THE MATERIALS AND METHOD**

This part aims to argue the material and method applied in this study to investigate the role of knowledge management in improving organizational performance; a study of a sample of faculty members at the University of human development in Sulaimaniyah City-Iraq.

Moreover, to respond to the study questions and the hypotheses. Consequently, the part argues the study approach and design, survey population and sampling, and data collection procedures, data collection instrument, scale, data analysis and the limitation of the study.



### **3.2.1. The Study Method and Design**

This study applied the quantitative method. Subsequently, a quantitative method shown suitable for the study is to investigate the role of knowledge management in improving organizational performance. However, the quantitative method usually practical in the study when engaged with statistical data. Therefore, quantitative research includes quantities and statistical techniques that help simplify, define, pursuit and illuminate the relationships among the study variables.

Besides, the measurable study can apprehend as a study process that over statistical and calculated results that recognized the practicality efforts to measure the study purpose. Further, the study design is more proper as it allowed respondents to offer their relevance information on the topics of interest to the study, through questionnaire form which used a five-point Likert scale that is more applicable for data collecting.

### **3.2.2. Study Population and Samplings**

The study population comprises four faculties of the University of human development in Sulaimaniyah. So, the university faculties selected as the study population, whereas they are more likely to better recall on knowledge management and organizational academic performance, as they have an awareness of the knowledge management process. Though, the University of Human Development is the specifically targeted population size, where the study pursues to discover their faculty members' approaches and opinions on their knowledge management process and organizational academic performance.

Consequently, the study sampling technique presented as well as the sampling arrangement. Therefore, the purpose of sampling procedures is, by forming a range of approaches, to narrow down a study population to classify the proper sample.

Accordingly, (100) questionnaire forms distributed among faculty members that they contributed over answering to the survey questionnaire statements which is self-administered and distributed in the departments of the University of human development in particular, to the professors, assist professors, lecturers and assist lecturers who willingly accepted the request to contribute in the survey. However,

21 form not returning or invalid and exclude from the sample therefore, the complete valid forms are (79) which launches the sample of the study.

### **3.2.3. The Survey Measurement**

#### **3.2.3.1. Conceptualization of Independent Variable (Knowledge Management Dimensions)**

Knowledge management is the process of producing and disseminating knowledge among workers and in improving performance, goods, and services provided by the organization (Nasr, 2008:79). As Badir, (2010:33) defined, knowledge management is a set of processes that control, create, disseminate, use, and disseminate knowledge by practitioners, providing them with the background and knowledge theory needed to improve the quality and implementation of decisions. Alternatively, a process by which accumulated experience is collected and used from anywhere in the business, whether in documents, databases or the minds of employees, to add value to the organization through innovation, application, and integration of knowledge in an unprecedented way (Abdul Sattar et al., 2009:27).

#### **3.2.3.2. Operational Definition**

From the definitions have explained the indicators below that will measure the independent variable as knowledge management and its dimensions:

First, knowledge diagnosis

Second, knowledge acquisition and generating

Third, knowledge storage

Fourth, knowledge distribution

Fifth, knowledge implementation

#### **3.2.3.3. Operationalization of Independent Variable**

The beyond indicators will measure the dimensions and level of knowledge management in the faculties of the University of human development in Sulaimaniyah. Through applying statistical survey data (quantitative method) and using the following statements or questions. For each of the questions measured with the five-points Likert scale, where one indicates as "strongly disagree", two indicates as "disagree", three indicates as "neutral", four indicates as "agree", and five indicates as "strongly agree".

1. The first indicator is knowledge diagnosis that measured by asking the following questions.

Table 2: Knowledge Management Statements for the Knowledge Diagnosis Indicators of Survey Data

Knowledge Diagnosis	<b>1. The university and its faculties are exploring knowledge over the internet.</b>
	2. The university and its faculties are benchmarking their internal and external environment.
	3. The faculty is designing a particular plan of internal knowledge and expertise.
	4. The faculty owns a portfolio of internal knowledge about foreign affairs.
	5. The university and its faculties provide supportive employment policies for freedom of scientific research.
	6. The university and its faculties have tools that support to discover knowledge and obtain it from different sources.

2. The second indicator knowledge acquisition and generating measured by asking the following questions.

Table 3: Knowledge Acquisition and Generating Indicators of Survey Data

Knowledge Acquisition And Generating	<b>1. The faculty encourages lecturers to continue learning and develop their skills and abilities.</b>
	2. The faculty transforms knowledge from individual to collective level.
	3. The faculty has formed teams of diverse knowledge with internal experts continuously.
	4. The faculty carried out research continuously.
	5. The university and its faculties attract employees with expertise, competencies and creative energies.
	6. The university and its faculties benefit from successful experiences.
	7. The university is establishing a knowledge treaty with domestic and foreign universities to generate and share knowledge.

3. The third indicator is knowledge storage will be measured by asking the following questions.

Table 4: Knowledge Storage Indicators of Survey Data

Knowledge Storage	<b>1. The university and its faculties follow the methods of stimulation and encouragement to exchange experiences.</b>
	2. The university and its faculties categorize data and then store them so quickly collected and then compiled.
	3. The university and its faculties electronic archiving by compiling and documenting information in a way that is easily accessible and retrieved quickly and accurately.
	4. The faculty has clear and specific knowledge standards that are appropriate to the nature of its work and activities.
	5. The university follows the method of storing implicit knowledge (experiences and sharing experiences).
	6. The university retrieves basic and new knowledge according to the regulations.
	7. The faculty uses traditional methods that a paper documents classified and indexed.
	8. The faculty has high flexibility in storing and retrieving knowledge.

- The fourth indicator is knowledge distribution and measured by asking the following questions.

Table 5: Knowledge Distribution Indicators of Survey Data

Knowledge Distribution	<b>1. The internal information network helps individuals to access the database.</b>
	2. The faculty issuing bulletins, periodicals and types of various publications.
	3. The faculty holds internal meetings, seminars, and workshops.
	4. The faculty holds internal training courses conducted by experienced and efficient individuals.
	5. The university and its faculties have movements and the role of lecturers.
	6. Modern technology uses to transfer and exchange information such as the internet, e-mail, and mobile messages.
	7. The faculty eliminates traditional methods of control and supervision, thereby increasing the opportunities for knowledge dissemination and transfer.

- The fifth indicator is Knowledge Implementation and measured by asking the following questions.

Table 6: Knowledge Implementation Indicators of Survey Data

Knowledge	<b>1. The university provides the physical and human requirements for the knowledge implementation.</b>
	2. The university interest in applying and using knowledge.
	3. The university implements the initiatives and programs on an ongoing basis related to knowledge.
	4. The university uses criteria and standards to control the applied knowledge.
	5. The focus on the knowledge implementation is the university's top priority.
	6. The university makes some adjustments and improvements after applying new knowledge.
	7. The university and its faculties transform knowledge into plans.

### 3.2.4. Conceptualization of Dependent Variable (Organizational Performance)

The organizational performance is a result achieved due to the interaction of internal factors of different types and external influences and exploitation by the institution in achieving its goals. Performance is the achievement of institutional objectives using resources efficiently and effectively. According to Ben Ayshi, (2012:14) organizational performance is a possible behavior of an individual or group of individuals or organization is the work and actions of deliberate movements to achieve specific objectives. While, (Daoudi, 2010:217) believe that performance is a reflection of how the institution uses physical and human resources, and exploit them efficiently and effectively in a way that makes it able to achieve its objectives.

### 3.2.4.1. Operational Definition of the Organizational Performance

From the definitions have explained the indicators below that will measure the dependent variable as organizational performance and its dimensions:

First, Financial Dimension

Second, Internal Processes

Third, Beneficiary Satisfaction

Fourth, Education and Development

### 3.2.4.2. Operationalization of Dependent Variable

The above indicator will measure the level of organizational performance in the in the faculties of the University of human development in Sulaimaniyah. By applying statistical survey data and using the following questions. For each of the questions measured with the five-points Likert scale, where one indicates as "strongly disagree", two indicates as "disagree", three indicates as "neutral", four indicates as "agree", and five indicates as "strongly agree".

1. The first indicator is a financial dimension that measured by asking the following questions.

Table 7: Financial Dimension Indicators of Survey Data

Financial Dimension	1. The university strives to fulfill its commitment to the community by providing services aimed at spreading awareness and knowledge.
	2. The university seeks to reduce unnecessary operational costs that do not contribute to improving the quality of service provided to its students.
	3. The university is increasing the efficiency of the services provided to improve its revenues.
	4. The university is working on developing continuous plans to increase the investment of funds in the service of students.
	5. The university is working to increase its revenue by opening up other sections or postgraduate studies on the private account or opening consulting offices.

2. The second indicator is internal processes that measured by asking the following questions.

Table 8: The Internal Processes Indicators of Survey Data

Internal Processes	1. The university and its faculties simplifying and facilitating the services offered to students and graduates.
	2. The university and its faculties provide the various information needed to accomplish the service work
	3. The university quickly responds to changes that occur in the internal work environment.
	4. The university is paying attention to the faculty proposals to develop and update the work.
	5. The university seeks useful references and modern volumes.
	6. The university promotes outstanding scientific research conducted by its faculties.

3. The third indicator is the beneficiary satisfaction that measured by asking the following questions.

Table 9: The Beneficiary Satisfaction Indicators of Survey Data

<b>Beneficiary Satisfaction</b>	1. The university is working on opening disciplines that suit the wishes and aspirations of students and the requirements of the labor market.
	2. The university is keen to develop its services to the community in line with its social responsibility.
	3. The university is trying to simplify the work procedures to satisfy its students.
	4. The university will develop integrated scheduling for all sections to avoid congestion and overcrowding among students.
	5. The university provides practical consultation and research that benefits the community.
	6. The university seeks to develop a field survey from time to time to measure the extent of the society's satisfaction with its services.

4. The fourth indicator is education and development that measured by asking the following questions.

Table 10: The Education and Development Indicators of Survey Data

<b>Education and Development</b>	1. Students are driven by their intellectual abilities and skills to acquire new knowledge.
	2. Students are encouraged to continue learning and develop their skills and abilities.
	3. The university is creating an organizational environment conducive to the culture of education.
	4. The university provides an enormous amount of data and information to guide the efforts of staffs.
	5. The university encourages creators and builds their creative ideas.
	6. The university relies on different training programs within and outside the region to enable them to improve performance levels

### 3.2.5. Data Collection Procedures

The survey questionnaire is a reasonable way to collect data from a potentially large number of participants. In this context, the questionnaire was designed based on (Hasina, 2015), (Al-Ghanam, 2013) and (Al-Azabi, 2009), as revealed in the table below. While the established questionnaire scale presented as a critical procedure of data collection for the study, subsequently this was precisely designed for this purpose and spread to professors, assist professors', lecturers and assist lecturers in the faculties of the University of human development in Sulaimaniyah City-Iraq.

Moreover, the study chose the survey questionnaire for data collection because of its significance for the study approach and design and for the possible assistance it offers. However, the questionnaire allocated into three sections. While each section of the questionnaire limited to statements and items that could measure the sample's

opinions specified in the questions and hypotheses of the study Appendix (1) show the survey questionnaire structure.

Table 11: The Questionnaire Structure

Main Variables	Dimensions	No of items	Scale Symbol	Resources
First: Demographical Variables	Gender, age, academic degree, scientific title, overall academic career experience, number of training courses that participated in during the last three years, and number of research published during the last three years	7	-	
Second: Knowledge Management	Knowledge Diagnosis.	6	X1-X6	Hasina, (2015).
	Knowledge Acquisition and Generating.	7	X7-X13	Al-Azabi, (2009).
	Knowledge Storage.	8	X14-X21	
	Knowledge of Distribution.	7	X22-X28	
	Knowledge Implementation	7	X29-X35	
Third: Organizational Performance	Financial Dimension	5	Y1-Y5	Hasina, (2015).
	Internal Processes	6	Y6-Y11	Al-Ghanam, (2013).
	Beneficiary Satisfaction	6	Y12-Y17	
	Education and Development	6	Y18-Y23	

### 3.2.6. Scale

As explained in the above part, the survey questionnaire divided into three sections, while, the first is demographic data that contained; gender, age, academic degree, scientific title, overall academic career experience, number of training courses that participated in during the last three years, and number of research published during the last three years.

Then the second section of a survey involves, knowledge management dimensions namely: knowledge diagnosis, knowledge acquisition and generating, knowledge storage, knowledge distribution, and knowledge implementation that have 35 questions under five dimensions. Those modified from (Hasina, 2015) and (Al-Azabi, 2009).

However, the third and the last section comprise the organizational performance dimensions as: financial dimension, internal processes, beneficiary satisfaction, and education and development that have 23 questions also adapted from questionnaires of (Al-Ghanam, 2013) and (Hasina, 2015) Where, all knowledge management dimensions and organizational performance questions measured by using a five-point Likert scale reaching from “Strongly Disagree “1 to “Strongly Agree” 5.

### 3.2.7. Reliability and Validity of the Scale

#### 3.2.7.1. The Reliability

The survey reliability checked to simplify the reliability of the data collected from the faculty members at the University of human development in Sulaimaniyah. Accordingly, Cronbach's alpha used to test the dependability of the scale, which indicated that how strong the questionnaire statements are measuring and its total values for the knowledge management is (0.866>0.60). Besides scores for its dimensions namely: knowledge diagnosis, knowledge acquisition and generating, knowledge storage, knowledge distribution, and knowledge implementation are (0.723, 0.794, 0.745, 0.716, and 0.727), respectively that all values bigger than (0.60)

Though, organizational performance Cronbach's alpha reliability value is (0.856>0.60) while, its dimensions as the financial dimension, internal processes, beneficiary satisfaction, and education and development score values are (0.727, 0.743, 0.651, and 0.749) respectively. Identified that a high level of reliability in the entire set of statements the overall value is (0.863>0.60). Therefore, the survey questionnaire used to collect the study data could consider as a highly reliable, as revealed in a table below (12).

Table 12: Reliability Test

Variables	Cronbach's Alpha	No. of Items	N	%
<b>Knowledge Management</b>	<b>0.866</b>	<b>35</b>	<b>79</b>	<b>100.0</b>
Knowledge Diagnosis	0.723	6	79	100.0
Knowledge Acquisition and Generating	0.794	7	79	100.0
Knowledge Storage	0.745	8	79	100.0
Knowledge Distribution	0.716	7	79	100.0
Knowledge Implementation	0.727	7	79	100.0
<b>Organizational Performance</b>	<b>0.856</b>	<b>23</b>	<b>79</b>	<b>100.0</b>
Financial Dimension	0.727	5	79	100.0
Internal Processes	0.743	6	79	100.0
Beneficiary Satisfaction	0.651	6	79	100.0
Education and Development	0.749	6	79	100.0
<b>Overall</b>	<b>0.863</b>	<b>58</b>	<b>79</b>	<b>100.0</b>



### **3.2.7.2. The Scale Validity**

The scale or survey validity refers to the values from a data collection instrument are accurate indicators of the variable measured and allow the researcher to draw proper clarifications (Plano and Creswell, 2015: 242).

The validity also relates to the credibility of the study but differs in that it is additionally deliberate on the researcher's observing and if the dependent variables vary because of the independent variable and not sense of some other variable (Gay, 1992: 55). Therefore, the measures also must be constant to make ultimate outcomes anywhere the study Saunders et al. (2009: 78). In this regard, the validity of survey questionnaire established over a range of characters. Whereas, almost the total of the scurvey statements adapted from related studies that before intensity tested as shown in scale part, however, some of the statements and items developed. So, the researcher confirmed the validity of the questionnaire through assembling it verified and assessed by experts who are so-called content validity, an appendix (2) displayed experts of questionnaire form.

### **3.2.8. Factor Analysis**

The factor analysis tested to reduce components that principles at answers to different variables, their scopes and analyses them into complex variables, recognized as factors that make an evaluation. Consequently, knowledge management has a total 35 questions under five dimension.

Moreover, the organizational performance has an overall 23 questions, which is compound to take and relate the results. Likewise, to make further investigate and test easier the factor analysis has used and revealed in the tables below.

#### **3.2.8.1. The KMO and Bartlett's Test for Knowledge Management**

As it revealed in a table (13), the factor analysis inspected through two essential factors, i.e., Kaiser- Meyer-Olkin (KMO) and Bartlett`s test of sphericity. The KMO overall measure of sample sufficiency is (0.696) hence, it means that offered high level and statistically significant at ( $p < 0.05$ ). Although, Bartlett`s test of sphericity is (1629.719) at df (300), which is the independence of functional connections among the questionnaire statements.

Table 13: The KMO and Bartlett's Test for the Knowledge Management

KMO and Bartlett's Test	
	Knowledge Management
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.696
Bartlett's Test of Sphericity (Approx. Chi-Square)	1629.719
Df	300
Sig.	.000

### 3.2.8.2. Rotated Component Matrix for Knowledge Management

The rotation of component for knowledge management as study independent variable deliberate to give an indication of how the factors primarily extracted contrast from each other and to deliver a clear image of which element loads on which factor.

Table 14: Rotated Component Matrix for Knowledge Management

Items	Component						
	1	2	3	4	5	6	7
Q8	0.886						
Q34	0.880						
Q11	0.778						
Q35	0.754						
Q2	0.751						
Q18	0.723						
Q26	0.706						
Q29	0.644						
Q13	0.606						
Q4	0.547						
Q16	0.440						
Q12		0.821					
Q27		0.805					
Q28		0.803					
Q9		0.733					
Q33		0.681					
Q15		0.601					
Q5		0.557					
Q6		0.545					
Q14		0.489					
Q31			0.887				
Q23			0.865				
Q24			0.786				
Q17			0.639				
Q32			0.439				
Q7				0.851			
Q30				0.806			
Q25				0.693			
Q10				0.621			
Q22				0.562			
Q20					0.780		
Q19					0.760		
Q21					0.589		
Q3						0.902	
Q1							0.772

Extraction Method: Principal Component Analysis.

Furthermore, this is a matrix to conclude factor loadings for separate factors produced seven factors which involving extra variables. Further, the distribution of the factors considers in the rotation of the factors; the combined has the factorial acceptance values (the lowest value is 0.439, and the highest value is 0.902). While, there is a substance that gives a high value to more than one factor, as shown in a table above (14).

### **3.2.8.3. Knowledge Management Indicators and Factor Loads**

As a Table above (14), revealed that all seven factors of knowledge management are positive. Moreover, the first factor A: involved eleven questions (Q8, 34,11,35,2,18,26,29,13,4, and Q16) respectively and the loadings on this factor are (0.886, 0.880, 0.778, 0.754, 0.751, 0.723, 0.706, 0.644, 0.606, 0.547, and 0.440) respectively.

The second factor A: contained nine questions or items that (Q12,27,28,9,33,15,5,6, and Q14) respectively also it has high factor loadings (0.821, 0.805, 0.803, 0.733, 0.681, 0.601, 0.557, 0.545, and 0.489) respectively. The third factor A: limited to five items as (Q31,23,24, 17, and Q32) respectively and the loadings on this factor are (0.887, 0.865, 0.786, 0.639, and 0.439). The fourth factor A: included five questions namely: (Q7, 30, 25, 10, and Q22) also it has high factor loadings (0.851, 0.806, 0.693, 0.621, and 0.562) respectively.

However, the fifth factor A: comprised three questions (Q20, 19, and Q21); and the factor loadings (0.780, 0.760, and 0.589) respectively. While the factor fifth and sixth each contained one only that is (Q3 and Q1) respectively, also they have high factor loadings (0.902, and 0.772). That is showing reliability studies for the elements and factors that rise after validity studies techniques.

### **3.2.8.4. Percentage of Eigenvalue and Variance Explanations Knowledge Management**

The percentage of eigenvalue and variance clarifications for knowledge management used, while, the percent of variance justifications for each factor, and the cumulative variance of the factor and the previous factors considered. However, the factors are which have the value more than one will extract. Nevertheless, as the result of constant factor analysis, seven factors of the knowledge management

determined. Consequently, the total variance combined described through these seven factors that are (73.8%) of factors. So, the variance extents shown through the factors specifically (25.67%, 13.84%, 9.47%, 7.83%, 6.76%, and 5.22%) respectively. While the higher the variance percentage attained at the end of the factor analysis, the stronger the factor construction becomes, as revealed in the table below (15)

Table 15: Percentage of Eigenvalue and Variance Explanations of the Determined Factors for Knowledge Management

Factors	Eigenvalues	Variance Explanation%	Cumulative%
1	6.418	25.671	25.67
2	3.462	13.848	39.51
3	2.369	9.475	48.99
4	1.959	7.838	56.83
5	1.691	6.765	63.59
6	1.305	5.222	68.81
7	1.266	5.063	<b>73.88%</b>

### 3.2.8.5. The KMO and Bartlett's Test for Organizational Performance

The table (16) reveals the Kaiser-Meyer-Olkin (KMO) measure of sample adequacy that used to test the significance of factor analysis. The KMO test result is (0.557) which is between (1.00 and 0.50) hence; it means that organizational performance delivered high value and significant at ( $p < 0.000 < 0.05$ ). Though Bartlett's test of sphericity is (1178.619) df (253), therefore factor analysis is appropriate for the variable organizational performance.

Table 16: The KMO and Bartlett's Test of the Organizational Performance

KMO and Bartlett's Test	
	Organizational Performance
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	<b>0.557</b>
<b>Bartlett's Test of Sphericity (Approx. Chi-Square)</b>	<b>1178.619</b>
<b>Df</b>	<b>253</b>
<b>Sig.</b>	<b>.000</b>

### 3.2.8.6. Rotated Component Matrix for Organizational Performance

As revealed in a Table (17) the rotated component matrix for organizational performance that is a matrix to determine factor loadings for particular factors produced eight factors that comprise additional variables.

Likewise, it realized that when the distribution of the factors considers in the rotation of the factors, the collective has the factorial acceptance values (the lowest value is 0.315, and the highest value is 0.896) so, there is a substance that gives a high value to more than one factor.

Table 17: Rotated Component Matrix for Organizational Performance

Items	Component							
	1	2	3	4	5	6	7	8
Q8	0.856							
Q5	0.749							
Q18	0.737							
Q9	0.577							
Q6	0.567							
Q22		0.761						
Q17		0.679						
Q23		0.665						
Q4		0.618						
Q14			0.896					
Q15			0.791					
Q10			0.594					
Q21				0.834				
Q19				0.726				
Q3					0.834			
Q16					0.635			
Q11					0.604			
Q20					0.315			
Q2						0.757		
Q13							0.893	
Q7							0.558	
Q12								0.838
Q1								0.641

Extraction Method: Principal Component Analysis.

### 3.2.8.7. Organizational Performance Indicators and Factor Loads

As revealed in the table above, that all eight factors of the organizational performance are positive. The first factor (B): included five questions (Q8,5,18,9, and Q6), further the factor loadings on this factor are (0.856, 0.749, 0.737, 0.577, and 0.567) respectively while all indicators have higher loadings on it. The second factor (B): covered four questions (Q22, 17,23, and Q4) and with the factor loadings are (0.761, 0.679, 0.665, and 0.618) respectively, so all survey indicators have higher loadings.

The third factor (B) cover three questions (Q14, 15, and Q10) with the high factor loadings (0.896, 0.791, and 0.594) respectively, so this factor has higher loadings. The fourth factor (B) included two questions as (Q21 and 19) respectively. Moreover, their factor loadings are (0.834, and 0.726).

However, the survey's fifth factor (B): contained four questions (Q3, 16,11, and Q20) and with the factor loadings from (0.834 to 0.315), so all indicators have higher loadings. However, the sixth factor (B) involved one statement only (Q2) and with the factor load on it (0.757). While, each of factor seventh and factor eighth are contained two questions (Q13, and 7) and (Q12, and 1) respectively, with factor loadings on then are (0.893, and 0.558) and (0.838, and 0.641) respectively, all indicators have a higher load on it.

### 3.2.8.8. Percentage of Eigenvalue and Variance Explanations for the Organizational Performance

As presented in a table (18) the percentage of eigenvalue and variance details of the determined factors for an organizational performance presented as one, likewise as a result of various factor analysis eight factors of organizational performance dimensions determined. Consequently, the overall variance amount of this eight factors (78.01%). However, the variance quantities revealed through the factors are (26.51%, 10.84%, 9.49%, 8.67%, 7.12%, 5.88%, 5%, and 4.47%) respectively. Therefore, the higher the variance proportions clarification gained at the end of the factor analysis, the stronger the factor organized develops.

Table 18: Percentage of Eigenvalue and Variance Explanations of the Determined Factors for the Organizational Performance

Factors	Eigenvalues	Variance Explanation%	Cumulative%
1	6.098	26.511	26.51
2	2.493	10.840	37.35
3	2.184	9.495	46.84
4	1.995	8.673	55.51
5	1.638	7.122	62.64
6	1.354	5.889	68.52
7	1.152	5.009	73.53
8	1.029	4.476	78.01

### 3.2.9. Data Analysis

The parametric and un-parametric statistical tests applied to investigate the study hypotheses through the survey reliability test used through the Cronbach's alpha. Furthermore, factor analysis smeared to find the essential analysts of the faculty members at the University of Human Development in Sulaimaniyah toward the knowledge management and the organizational performance indicators.

However, the descriptive statistics used for the study variables and to describe the variables and their dimensions significantly, though, correlation analysis used to classify the significant relationship between the study variables. Consequently, the Spearman correlation applied when two variables and their dimensions related. Accordingly, regression tests applied to state the significance of the planned model. Then to exuberant, the significance of the several factors comprises in the model. Besides, to simplify the effect of the knowledge management in organizational performance, whereas the measures showed through detecting the effect of some specific variables. So, the SPSS V-24 software employed for analysis and the results revealed in tables and figures.

#### **3.2.10. The Study Limitations**

The study bounded via spatial, temporal, and human limits as follows: First, the spatial limits, the study statements has applied on a sample of the faculty members at the University of human development in Sulaimaniyah city in the Kurdistan region of Iraq.

Second, time borders: represented by the duration of the study applied to the faculties of University of human development in questions which started by preliminary visits to classify the study questions and interviewing the lead departments and faculty members or lecturers. To discuss their views and suggestions regarding the survey and its objectives, also allocating the questionnaires and then return them.

Lastly, the human limits: that include human boundaries to look at lead departments and faculty members or lecturers of the University of human development in Sulaimaniyah city.

## **CHAPTER FOUR**

### **DATA PRESENTATION AND ANALYSES**

This aim of this chapter is to present the data analysis that beings with descriptive statistics for the demographic data that collected from the respondents the faculty members at the University of human development in Sulaimaniyah. The demographic data or information includes frequency distributions and descriptive statistics. Then at the second part of this section statistical results from the data analysis presented.

#### **4.1. THE STUDY DEMOGRAPHIC DATA**

The demographic data and information of the study collected and measured to provide a compacted of respondent's information of the sample in the study. Consequently, the following demographic data collected: gender, age, academic degree, scientific title, overall academic career experience, number of training courses that participated in during the last three years, and number of research published during the last three years from the faculty members at the University of human development in Sulaimaniyah city.

As revealed in the Table (19) the percentage of gender contribute in the survey 88.6%, or (70) individuals of the overall faculty members who contributed in the survey are male lecturers, while 11.4% or (9) person of total respondent are female lecturers. While, the contributor's ages, 51.9% of the total sample or (41) faculty members aged between 37-46 years old, 16.5% or (13) members aged 27-36 years however the same percentage for age group from 47 to 56 years old. Furthermore, 15.2% aged 57-66 years old.

The frequency and percentage of the respondents' academic degree, it is shown that of the total respondents: 55.6% or (44) respondents are master degrees' holders; while 44.4% or (35) faculty members are holding the Ph.D. It can see in Table below that the most the faculty members at the University of human development in Sulaimaniyah city, who contributed in the survey their overall job experience is between 6-10 years at the rate of 50.6%. Further the faculty members with academic career experience, 11-15 years came at a rate of 30.4% or 24 university lecturers. Additionally, 10.1% experienced between 1-5 years.



Furthermore, 5.1% or (4) respondents of total sample experienced 21 and more years. However, 3.8% or (3) faculty members experienced between 16-20 years.

Table 19: The Frequencies of Demographic Data

Demographic Data		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Gender</b>					
<b>Valid</b>	Male	70	88.6	88.6	88.6
	Female	9	11.4	11.4	100.0
	<b>Total</b>	<b>79</b>	<b>100.0</b>	<b>100.0</b>	
<b>Age Groups</b>					
<b>Valid</b>	27-36	13	16.5	16.5	16.5
	37-46	41	51.9	51.9	68.4
	47-56	13	16.5	16.5	84.8
	57-66	12	15.2	15.2	100.0
	<b>Total</b>	<b>79</b>	<b>100.0</b>	<b>100.0</b>	
<b>Academic Degree</b>					
<b>Valid</b>	Ph.D.	35	44.4	44.4	44.4
	Master	44	55.6	55.6	100.0
	<b>Total</b>	<b>79</b>	<b>100.0</b>	<b>100.0</b>	
<b>Overall Job Experience</b>					
<b>Valid</b>	1-5	8	10.1	10.1	10.1
	6-10	40	50.6	50.6	60.8
	11-15	24	30.4	30.4	91.1
	16-20	3	3.8	3.8	94.9
	21 and more	4	5.1	5.1	100.0
	<b>Total</b>	<b>79</b>	<b>100.0</b>	<b>100.0</b>	
<b>Scientific Title</b>					
<b>Valid</b>	Professor	4	5.2	5.2	5.2
	Assist Professor	16	20.2	20.2	25.4
	Lecturer	35	44.3	44.3	69.7
	Assist. Lecturer	24	30.3	30.3	100.0
	<b>Total</b>	<b>79</b>	<b>100.0</b>	<b>100.0</b>	
<b>Number of Training Courses that Participated in During the last three years</b>					
<b>Valid</b>	Not participated	11	13.9	13.9	13.9
	1-5	43	54.4	54.4	68.4
	6-10	20	25.3	25.3	93.7
	11-15	5	6.3	6.3	100.0
	16 and more	0	0	0	
	<b>Total</b>	<b>79</b>	<b>100.0</b>	<b>100.0</b>	
<b>Number of Research Published During the Last Three Years</b>					
<b>Valid</b>	None	4	5.1	5.1	5.1
	1 research	19	24.1	24.1	29.1
	2 researches	15	19.0	19.0	48.1
	3 and more	41	51.9	51.9	100.0
	<b>Total</b>	<b>79</b>	<b>100.0</b>	<b>100.0</b>	

The scientific titles of faculty members, it offers that of the total respondents: 44.3% or (35) faculty members who contributed in the survey are a lecturer, although 30.3% or (24) faculty members are assisting lecturer. However, 20.2% or (16) assisted professor and 5.2% or (4) faculty members are a professor.

The number of training courses that participated in during the last three years, it presented that of the total respondents: 54.4% or (43) faculty members participated in (1-5) scientific training courses. Whereas, 25.3% or (20) members participated in (6-10) academic training courses. Nevertheless, 13.9% or (11) faculty members of

total respondents who contributed to the survey did not participate in any training courses in last three years. However, 6.3% or (5) faculty members participated in (11-15) academic training courses. Lastly, no one participated in (16 and more) in academic training courses.

The number of research published during the last three years, it presented that of the total respondents: 51.9% or (41) faculty members published three and more research during the last three years. Although the faculty members who published one research same at the rate 24.1% or (19) lecturers. Whereas, 19% or (15) lecturers published two types of research in the same period. Nevertheless, 5.1% or (4) faculty members did not publish any research during the last three years.

#### **4.1.1. Descriptive Statistics**

This part aims to reveal statistical analyze on survey contributors replies to the scale statements, the faculty members or lecturers who invited to rate the significance of the knowledge management and dimensions as well as organizational performance and its dimensions on the five-point Likert Scale. Consequently, descriptive statistics applied to compute the (statistical mean, deviation, and rate of agreement) of each variable and sub-dimensions, moreover to find if there are any variables and their dimensions vital of significant.

##### **4.1.1.1. The Study Descriptive Statistics**

###### ***Knowledge Management***

As the results revealed in a table below (20a and 20b) the statistical mean and standard deviation's values of the knowledge management as an independent study variable are (4.146, and 0.2972) respectively while the rate of agreement is 82.9% of the overall survey sample, thus, it means that the faculty members agreed on the significance of the knowledge management for institutions at a high rate of agreement, as shown in the tables below

Table 20a: Result of Descriptive Statistics of the Knowledge Management

No. of items	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Deviation	Rate of Agreement
		1	2	3	4	5			
X1	79	-	2	10	36	31	4.22	.762	84.4
X2	79	-	-	18	35	26	4.10	.744	82
X3	79	-	1	17	52	9	3.87	.607	77.4
X4	79	-	-	20	35	24	4.05	.749	81
X5	79	-	-	9	44	79	4.22	.634	84.4
X6	79	-	2	14	44	19	4.01	.725	80.2
Knowledge Diagnosis							<b>4.078</b>	<b>.4158</b>	<b>81.5%</b>
X7	79	-	1	8	27	43	4.42	.727	88.4
X8	79	-	-	12	31	36	4.30	.722	86
X9	79	-	1	14	31	33	4.22	.779	84.4
X10	79	-	2	7	25	45	4.43	.763	88.6
X11	79	-	-	13	20	46	4.42	.761	88.4
X12	79	-	1	6	31	41	4.42	.691	88.4
X13	79	-	3	14	36	26	4.08	.813	81.6
Knowledge Acquisition and Generating							<b>4.325</b>	<b>.5027</b>	<b>86.5%</b>
X14	79	-	-	9	53	17	4.10	.568	82
X15	79	-	1	12	48	18	4.05	.658	81
X16	79	-	5	1	54	19	4.10	.709	82
X17	79	-	-	15	44	20	4.06	.667	81.2
X18	79	-	4	23	40	12	3.76	.772	75.2
X19	79	-	1	32	34	12	3.72	.733	74.4
X20	79	-	3	21	45	10	3.78	.710	75.6
X21	79	-	4	27	38	10	3.68	.760	73.6
Knowledge Storage							<b>3.908</b>	<b>.4192</b>	<b>78.1%</b>
Knowledge Management							<b>4.146</b>	<b>.2972</b>	<b>82.9%</b>

*Mean\*100*

$$\text{*Rate of agreement} = \frac{\text{Mean*100}}{5 \text{ (Five-point Likert Scale)}}$$

It performs from the table (20a) the statistical and standard deviation values are (4.078, and 0.4158) respectively. Also, 81.5% of the total responses stated that knowledge diagnosis as a knowledge management first dimension is significant, and only 18.5% of the sample did not agree. That the highest frequencies are (X<sub>1</sub>) and (X<sub>5</sub>) “The university and its faculties are exploring knowledge over the internet.” Moreover, “The university and its faculties provide supportive employment policies for freedom of scientific research.” In this regard, the least frequency compares to others is (X<sub>3</sub>) “The faculty is designing a particular plan of internal knowledge and expertise.”

From Table (20a) the statistical and standard deviation (4.325, and 0.5027) respectively, 86.5% of the overall responses stated that institution’s knowledge acquisition and generating significant. The result indicates that (X<sub>10</sub>), (X<sub>11</sub>) and (X<sub>12</sub>) riches the knowledge acquisition and generating “The faculty carried out research

continuously. The university and its faculties attract employees with expertise, competencies and creative energies. Besides, the university and its faculties benefit from successful experiences.” Where the smallest frequent compare to others is (X<sub>13</sub>) “The university is establishing a knowledge treaty with domestic and foreign universities to generate and share knowledge.” (M= 4.08, SD= 0.813). It has also presented that all the items are significant.

As is shown in the table (20a) the statistical mean and standard deviation values are (3.908, and 0.4192) respectively, although 78.1% of the total responses identified that knowledge storage is significant, however, 21.9% stated that this dimension has not influence on organizational performance. The result appearances that (X<sub>14</sub>) and (X<sub>16</sub>) riches knowledge storage “The university and its faculties follow the methods of stimulation and encouragement to exchange experiences. Moreover, the university and its faculties electronic archiving by compiling and documenting information in a way that is easily accessible and retrieved quickly and accurately.” Furthermore, the lowest frequency is (X<sub>21</sub>) “The faculty has high flexibility in storing and retrieving knowledge.” (M= 3.68, SD=0.760). It has also obtained that all the knowledge storage questions are significant.

Table 20b: Result of Descriptive Statistics of the Knowledge Management

No. of items	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Deviation	Rate of Agreement
		1	2	3	4	5			
X22	79	-	-	11	44	24	4.16	.649	83.2
X23	79	-	1	9	40	29	4.23	.697	84.6
X24	79	-	-	14	37	28	4.18	.712	83.6
X25	79	-	2	11	27	39	4.30	.806	86
X26	79	-	6	8	37	28	4.10	.871	82
X27	79	-	-	3	42	34	4.39	.564	87.8
X28	79	-	-	7	42	30	4.29	.623	85.8
<b>Knowledge Distribution</b>							<b>4.236</b>	<b>.3908</b>	<b>84.7%</b>
X29	79	-	-	-	64	15	4.19	.395	83.8
X30	79	-	1	-	55	23	4.27	.524	85.4
X31	79	-	-	14	38	27	4.16	.706	83.2
X32	79	-	3	5	47	24	4.16	.706	83.2
X33	79	-	1	4	44	30	4.30	.627	86
X34	79	-	-	14	35	30	4.20	.723	84
X35	79	-	-	13	41	25	4.15	.681	83
<b>Knowledge Implementation</b>							<b>4.206</b>	<b>.3519</b>	<b>84.1%</b>

It performs from the table (20b) the mean and standard deviation values are (4.236, and 0.3908) respectively, further 84.7% of the total answers stated that knowledge distribution is significant, while 15.3% of the sample did not agree on the importance of this dimension. However, the result indicated that ( $X_{27}$  and  $X_{25}$ ) “Modern technology uses to transfer and exchange information such as the internet, e-mail, and mobile messages.” and “The faculty holds internal training courses conducted by experienced and efficient individuals.” So, these questions riches this dimension. It has also displayed that all the items are significant.

As it revealed in the table (20b), the statistical mean and standard deviation values are (4.206, and 0.3519) respectively, although 84.1% of the total responses identified that knowledge implementation is significant, however, 15.9% indicated that this dimension has not influence on organizational performance. The result appearances that ( $X_{33}$ ) and ( $X_{30}$ ) riches knowledge implementation “The focus on the knowledge implementation is the university's top priority. Moreover, the university interest in applying and using knowledge.” Moreover, the lowest frequent compared to other five questions is ( $X_{35}$ ) “The university and its faculties transform knowledge into plans.” Where ( $M=4.14$ , and  $SD=0.681$ ). It has also obtained that all the knowledge implementation questions are significant

### ***Organizational Performance (Balanced Performance Card)***

As the results of the organizational performance (balanced performance card) shown in a table below (21) the statistical mean and standard deviation's values are (3.962, and 0.3931) respectively. While the rate of agreement is 79.2% of the overall survey sample, it means that the faculty members agreed on the significance of the organizational performance for institutions at a high rate of agreement, as revealed in the table below.

As the table below (21) summarizes the mean values results of the organizational performance dimensions namely; financial dimension, internal, processes, beneficiary satisfaction, and education and development are: (4.02, 3.93, 4.00, and 3.89) respectively. And standard deviation scores for the same dimensions are (0.528, 0.548, 0.445, and 0.7878) respectively.

However, (80.4%, 78.6%, 80.1%, and 77.9%) respectively of the complete answers specified that public institution's organizational performance dimensions are

essential. While the result indicates that (Y<sub>1</sub>) and (Y<sub>3</sub>) “The university strives to fulfill its commitment to the community by providing services aimed at spreading awareness and knowledge as well as the university is increasing the efficiency of the services provided to improve its revenues,” riches the financial dimension.

Table 21: Result of Descriptive Statistics of the Organizational Performance (Balanced Performance Card)

No. of items	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Deviation	Rate of Agreement
		1	2	3	4	5			
Y1	79	-	1	10	45	23	4.14	.674	82.8
Y2	79	-	7	8	44	20	3.97	.847	79.4
Y3	79	-	-	14	45	20	4.08	.656	81.6
X4	79	3	1	19	31	25	3.94	.979	78.8
Y5	79	3	3	10	40	23	3.97	.960	79.4
<b>Financial Dimension</b>							<b>4.020</b>	<b>.5287</b>	<b>80.4%</b>
Y6	79	-	14	13	35	17	3.70	1.005	74
Y7	79	-	4	26	31	18	3.80	.853	76
Y8	79	-	3	26	22	28	3.95	.918	79
Y9	79	-	13	6	49	11	3.73	.902	74.6
Y10	79	-	3	1	57	18	4.14	.615	82.8
Y11	79	-	1	3	49	26	4.27	.593	85.4
<b>Internal Processes</b>							<b>3.930</b>	<b>.5486</b>	<b>78.6%</b>
Y12	79	-	3	10	42	24	4.10	.761	82
Y13	79	-	-	17	43	19	4.03	.679	80.6
Y14	79	-	7	13	37	22	3.94	.896	78.8
Y15	79	-	-	11	46	22	4.14	.635	82.8
Y16	79	-	3	12	46	18	4.00	.734	80
Y17	79	3	6	13	35	22	3.85	1.039	77
<b>Beneficiary Satisfaction</b>							<b>4.008</b>	<b>.4457</b>	<b>80.1%</b>
Y18	79	-	4	20	36	19	3.89	.832	77.8
Y19	79	-	1	22	45	11	3.84	.669	76.8
Y20	79	-	1	19	48	11	3.87	.648	77.4
Y21	79	-	-	23	46	10	3.84	.629	76.8
Y22	79	-	3	27	32	17	3.80	.822	76
Y23	79	-	15	16	29	19	3.66	1.049	73.2
<b>Education and Development</b>							<b>3.8987</b>	<b>.7878</b>	<b>77.9%</b>
<b>Organizational Performance (Balanced Performance Card)</b>							<b>3.962</b>	<b>.3931</b>	<b>79.29%</b>

Moreover, (Y<sub>11</sub>) and (Y<sub>10</sub>) “The university promotes outstanding scientific research conducted by its faculties. As well as The university seeks useful references and new volumes”. Riches internal processes as it is the second dimension of the organizational performance. However, the result indicated that (Y<sub>15</sub> and Y<sub>12</sub>) “The university would develop integrated scheduling for all sections to avoid congestion and overcrowding among students.” and “The university is working on opening disciplines that suit the wishes and aspirations of students and the requirements of the labor market.” So, these items riches this dimension beneficiary satisfaction. It has also displayed that all the items are significant.

Accordingly, regarding the knowledge management's dimensions will influence the organizational performance mainly surveyed university.

Subsequently, the knowledge acquisition and generating, knowledge distribution, and knowledge implementation, respectively. The most significant feature is motivating to an influence on organizational performance. However, knowledge storage dimension scored the lowest significant influence compared to other five knowledge management's dimensions with a rate of agreement (78.1%).

#### **4.1.1.2. ANOVA Test**

The ANOVA and t-test applied to clarify if there is variance among survey sample answers, with demographic data (*Gender, age, academic degree, scientific title, overall academic career experience, number of training courses that participated in during the last three years, and number of research published during the last three years*). The ANOVA and t-test results indicate that for all demographic data in regards the knowledge management (Sig>0.05), therefore, there isn't variance in the means between male and female faculty members, F (0.253; Sig0.616> 0.05).

Then for age F (3.079; Sig0.053> 0.05), academic degree F (0.827; Sig0.366> 0.05), scientific title F (0.353; Sig0.554> 0.05), overall academic career experience F (1.421; Sig0.236> 0.05), number of training courses that participated in during the last three years F (1.358; Sig0.262> 0.05), and number of researches published during the last three years F (3.315; Sig0.062> 0.05)) respectively, there aren't variances in the means among them, where (Sig>0.05) as revealed in table below.

Table 22: ANOVA Test Results According to the Demographic Data for Knowledge Management and Organizational Performance

Knowledge Management		Sum of Squares	DF	Mean Square	F	Sig.
<i>By Gender</i>	Equal variances assumed	Levene's Test for Equality of Variances			0.253	0.616
<i>By Age Groups</i>						
Between Groups		.756	3	.252	3.079	0.053
Within Groups		6.137	75	.082		
Total		6.893	78			
<i>By Academic Degree</i>						
Equal variances Assumed		Levene's Test for Equality of Variances			0.827	0.366
<i>By Scientific Title</i>						
Equal variances assumed		Levene's Test for Equality of Variances			0.353	0.554
<i>By Job Experience</i>						
Between Groups		.492	4	.123	1.421	0.236
Within Groups		6.401	74	.087		
Total		6.893	78			
<i>By The number of training courses participated</i>						
Between Groups		.355	3	.118	1.358	0.262
Within Groups		6.538	75	.087		
Total		6.893	78			
<i>By The number of research published</i>						
Between Groups		1.208	3	.303	3.315	0.062
Within Groups		5.685	75	.076		
Total		6.893	78			
Organizational Performance		Sum of Squares	DF	Mean Square	F	Sig.
<i>By Gender</i>	Equal variances assumed	Levene's Test for Equality of Variances			0.040	0.843
<i>By Age Groups</i>						
Between Groups		1.381	3	.240	2.079	0.083
Within Groups		10.677	75	.142		
Total		12.058	78			
<i>By Academic Degree</i>						
Equal variances Assumed		Levene's Test for Equality of Variances			0.023	0.881
<i>By Scientific Title</i>						
Equal variances assumed		Levene's Test for Equality of Variances			0.955	0.331
<i>By Job Experience</i>						
Between Groups		1.133	4	.283	1.918	0.116
Within Groups		10.925	74	.148		
Total		12.058	78			
<i>By The number of training courses participated</i>						
Between Groups		.293	3	.098	0.623	0.602
Within Groups		11.765	75	.157		
Total		12.058	78			
<i>By The number of research published</i>						
Between Groups		.244	3	.081	0.516	0.673
Within Groups		11.814	75	.158		
Total		12.058	78			

Subsequently, the ANOVA and t-test results display that for all demographic data regards organizational performance (Sig>0.05), so, there isn't variance in the means between male and female faculty members' responses, F (0.040; Sig0.843> 0.05). Moreover, for other groups such as age, academic degree, scientific title, overall academic career experience, number of training courses that participated in



during the last three years, and number of research published during the last three years respectively. There aren't variance in the means among them, where (Sig0.083>0.05, Sig0.881>0.05, Sig0.331>0.05, Sig0.116>0.05, Sig0.602>0.05 and Sig0.673>0.05) respectively, Nevertheless, F (2.079, 0.023, 0.955, 1.918, 0.623, and 0.516) respectively, there aren't variances in the means among them, where (Sig>0.05) as revealed in table above .

#### 4.1.2. Correlation Matrix Between Variables

The table below (23) illuminates the result of the correlation matrix analysis carried out to test the first main hypotheses which state that there is a definite relationship between knowledge management and the organizational performance. To test the relationship between the variables; Spearman's r (0.727\*\*) correlation calculated. The correlation coefficient for the data revealed that variables confirmed that positively and significantly correlated.

Table 23: Correlation of Knowledge Management and the Organizational Performance

		Knowledge Management	Organizational Performance
Spearman's rho	Knowledge Management	Correlation Coefficient	1.000
		Sig. (2-tailed)	.000
		N	79
	Organizational Performance	Correlation Coefficient	0.727**
		Sig. (2-tailed)	.000
		N	79

\*\* . Correlation is significant at the 0.01 level (2-tailed).

As summarized in a table (24) that the results of correlation matrix analysis simplify that the dimensions of knowledge management namely; (knowledge diagnosis, acquisition and generating, storage, distribution, and knowledge implementation) all have positive correlation with organizational performance, through r (0.690\*\*, 0.439\*\*, 0.502\*\*, 0.260\* and 0.569\*\*> Sig. (2-tailed) 0.000) respectively, is less than (0.05). Moreover, the table reveals that knowledge diagnosis achieved the highest positive correlation with organizational performance. While knowledge distribution has the weakest correlation with organizational performance, compare to other four dimensions. Therefore, the hypotheses ( $H_{1.1}$ ,  $H_{1.2}$ ,  $H_{1.3}$ ,  $H_{1.4}$ , and  $H_{1.5}$ ) accepted.

Table 24: Correlation of Knowledge Management Dimensions and the Organizational Performance

		Organizational Performance
<b>Knowledge Diagnosis</b>	<b>Correlation Coefficient</b>	<b>0.690**</b>
	<b>Sig. (2-tailed)</b>	<b>0.000</b>
<b>Knowledge Acquisition and Generating</b>	<b>Correlation Coefficient</b>	<b>0.439**</b>
	<b>Sig. (2-tailed)</b>	<b>0.000</b>
<b>Knowledge Storage</b>	<b>Correlation Coefficient</b>	<b>0.502**</b>
	<b>Sig. (2-tailed)</b>	<b>0.000</b>
<b>Knowledge Distribution</b>	<b>Correlation Coefficient</b>	<b>0.260*</b>
	<b>Sig. (2-tailed)</b>	<b>0.000</b>
<b>Knowledge Implementation</b>	<b>Correlation Coefficient</b>	<b>0.569**</b>
	<b>Sig. (2-tailed)</b>	<b>0.000</b>
**. Correlation is significant at the 0.01 level (2-tailed).		
*. Correlation is significant at the 0.05 level (2-tailed).		
c. Listwise N = 79		

#### 4.1.3. Regression Analysis of the Variables

The study used multiple linear regression tests to search and find the impact of the knowledge management and its dimensions in the organizational performance. Whereas, R square which is the proportion of variation in the dependent variable is 0.562. The adjusted R square is 0.557 presenting the impact and relationship between the investigational and expected values of the dependent variable.

Table 25: Regression Analysis (Model Summary)

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate		
<b>1</b>	<b>.750a</b>	<b>.562</b>	<b>.557</b>	<b>.26184</b>		
Model		Sum of Squares	df	Mean Square	F	Sig.
<b>1</b>	Regression	<b>6.779</b>	<b>1</b>	<b>6.779</b>	<b>98.882</b>	<b>.000b</b>
	Residual	<b>5.279</b>	<b>77</b>	<b>.069</b>		
	Total	<b>12.058</b>	<b>78</b>			

a. Dependent Variable: Knowledge Management

b. Predictors: (Constant), Organizational Performance

While, this indicates that (knowledge diagnosis, acquisition and generating, storage, distribution, and knowledge implementation) accounts for 56.2% of the organizational performance from the perspectives of faculty members at the University of human development in Sulaimaniyah city. However, F-test of significance analysis results of examining variance, the sum of squares, the degree of freedom (*df*), mean square, regression and residual values obtained from the regression analysis. The mean square which is the sum of squares divided by the degrees of freedom was (6.779). Besides, the F static which is regression mean

square divided by the residual mean calculated was (98.882), and **DF** is (1,78). Statistically, the overall model is significant, with significant value, P value = 0.000, ( $P < 0.05$ ), Then the hypotheses ( $H_2$ ) accepted.

As the results of regression coefficients revealed in Table (26) clarifies that statistically there are significant impacts of knowledge management and its dimensions as knowledge diagnosis, acquisition and generating storage, distribution, and knowledge implementation in the organizational performance. As decided by the amounts of (0.750, 0.620, 0.491, 0.643, 0.333, and 0.591) respectively, the high impacts of the knowledge storage and knowledge diagnosis, while the lower one was knowledge distribution between dimensions of knowledge management.

Table 26: Regression Coefficients

Model	Standardized Coefficients Beta	T-test	P-value	Collinearity Statistics	
				Tolerance	VIF
(Constant)	-	1.361	.015		
<b>Knowledge Management</b>	<b>.750</b>	<b>9.944</b>	<b>.000</b>	<b>1.000</b>	<b>1.000</b>
<b>Knowledge Diagnosis</b>	<b>.620</b>	<b>6.935</b>	<b>.000</b>	<b>1.000</b>	<b>1.000</b>
<b>Knowledge Acquisition and Generating</b>	<b>.491</b>	<b>4.948</b>	<b>.000</b>	<b>1.000</b>	<b>1.000</b>
<b>Knowledge Storage</b>	<b>.643</b>	<b>7.369</b>	<b>.000</b>	<b>1.000</b>	<b>1.000</b>
<b>Knowledge Distribution</b>	<b>.333</b>	<b>3.103</b>	<b>.003</b>	<b>1.000</b>	<b>1.000</b>
<b>Knowledge Implementation</b>	<b>.591</b>	<b>6.433</b>	<b>.000</b>	<b>1.000</b>	<b>1.000</b>

a. Dependent Variable: Organizational Performance

Furthermore, the table above (26) also indicate collinearity statistics. Accordingly, the persistence of this test is to identify whether any link between independent variables found or not. A good regression model should be free from the correlation between variables. So, the tolerance values and VIF values for each variable were; 1.000 and 1.000, respectively for knowledge management, further 1.000 and 1.000 respectively and same values for the rest dimensions. It means that  $VIF < 5$  and tolerance value  $> 0.1$ , so it means collinearity does not exist. Furthermore, the t-test (9.944) for knowledge management as the independent variable, it means significant impact and supports the results, consequently, the t (6.935, 4.948, 7.369, 3.103, and 6.433) respectively, for the rest of five dimensions, also  $p < 0.05$  for all dimensions. Then the hypotheses ( $H_{2.1}$ ,  $H_{2.2}$ ,  $H_{2.3}$ ,  $H_{2.4}$ , and  $H_{2.5}$ ) confirmed.

## CONCLUSIONS AND RECOMMENDATIONS

### 1. Conclusions

As early mentioned that the general purpose of this study is to test the role of knowledge management in improving organizational performance from perspectives of faculty members at the University of human development in Sulaimaniyah City-Iraq. Hence, the study tested the relationship between knowledge management and organizational performance by taking a suggestion from selected all four faculties of the University of human development in Sulaimaniyah, as well as the study, established the impact of knowledge management on improving organizational performance.

Based on the results, it can conclude that knowledge management dimensions exercise a significant impact on improving organizational performance of the faculties selected. While from the descriptive statistics of the knowledge management dimensions obtained that all its scale questions are significant for all four faculties of the University of human development in Sulaimaniyah.

Subsequently, the knowledge acquisition and generating, knowledge distribution, and knowledge implementation, respectively. The most significant feature is motivating to an influence on organizational performance. However, knowledge storage dimension scored the lowest significant influence compared to other five knowledge management's dimensions.

The ANOVA and t-test results demonstrated that for all demographic data regards the knowledge management and organizational performance there isn't variance in the means between the demographic variables of the faculty members.

Also, the study found a significant and definite relationship between knowledge management and the organizational performance. However, knowledge diagnosis achieved the highest positive correlation with organizational performance. While knowledge distribution has the weakest correlation with organizational performance, compare to other four dimensions.

Moreover, the regression results exemplify that statistically, the knowledge management and its dimensions have all impact on improving organizational performance. However, the high impacts of the knowledge storage and knowledge diagnosis, while the lower one was knowledge distribution between dimensions of knowledge management. The conclusions indicated that indeed, knowledge

management produces an active role in the improving organizational performance and academic prosperity of faculties of the University of human development in Sulaimaniyah .

## **2. Recommendations**

The faculties of the University of human development in Sulaimaniyah can use the results of this study to realize better practices of knowledge management in their academic departments and also utilized it in improving skills learned or existing in the faculty members working in the University and is also supportive to promote a knowledge-oriented environment.

Thus, the level of organizational performance in the faculties of the University of human development as a result of knowledge management may be capable of performing better compared with traditional means to conduct the knowledge activities of the faculties.

Consequently, for the faculties to have academic supportable and stability, they should hold best practices of knowledge management which will ensure the improvement of the organizational performance. Through provide supportive employment policies for freedom of scientific research, encourages lecturers to continue learning and advance their abilities and skills as well as establishing a knowledge treaty with domestic and foreign universities to generate and share knowledge.

The faculties of the University of human development in Sulaimaniyah should expand and invest knowledge acquisition and generating besides knowledge storage dimensions based on their significant role in improving organizational performance, however, more practices of each of knowledge distribution and implementation through providing internal information network that helps individuals to access the database.

Holding internal meetings, seminars, and workshops . However, provides the physical and human requirements for the knowledge implementation, also implements the initiatives and programs on an ongoing basis related to knowledge. Moreover, its faculties transform knowledge into plans.

### **3. Practical Implications and Suggestions for Future Study**

The effect of this study comprises of the distribution of the nature of the relationship between knowledge management and improving organizational performance from the perspective of the faculty members at the University of human development in Sulaimaniyah.

Accordingly, the results of this study can further institutions understanding the knowledge management and organizational performance relationship in the context of public universities. Furthermore, this study will contribute to knowledge management literature.

Nevertheless, the results are based only on four dimensions of organizational performance namely: the financial dimension, internal processes, beneficiary satisfaction, and education and development that adapted on the base of balanced performance card. Moreover, future study should utilize a more significant number of organizational performance factors to test for significance.

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## APPENDIXES

### Appendix (1) Questionnaire Form



T.C  
BİNGÖL UNIVERSITY  
SOCIAL SCIENCES INSTITUTE  
BUSINESS ADMINISTRATION DEPARTMENT

Dear Sir / Madam Respondent

This questionnaire survey is a part of the thesis study titled "**The role of knowledge management on improving organizational performance: A study of a sample of faculty members at the University of human development in Sulaimaniyah City-Iraq.**" So, this is a part of Requirements for the degree of Masters in the jurisdiction of the Administrative Sciences.

I kindly request to take the time and reply the below statements, after reading all its contented wisely. Please give it time and responsiveness, as the replies will use to reach the results of this study. While, the result will use for any educational purpose only, so names will not mention on the form. However, all the answers will be confidential.

Thanks in advance.

**Supervisor**

Prof. Dr. Muammer ERDOĞAN

**Researcher**

Hawre Yaseen AHMED  
Master Student

**Please mark one choice for each of the following statements**

**First Section: General Information**

1. **Gender:** ( ) Male ( ) Female
2. **Age:** ( ) 27-36, ( ) 37-46, ( ) 47-56, ( ) 57-66
3. **Academic Degree:** ( ) PhD ( ) Master
4. **Scientific Title:** ( ) Professor, ( ) Assist. Professor, ( ) Lecturer, ( ) Assist. Lecturer
5. **Overall Academic Career Experience:** ( ) 1-5, ( ) 6-10, ( ) 11-15 ( ) 16-20, ( ) 21 years and above
6. **Number of training courses that participated in during the last three years:**  
( ) Did not participate, ( ) Participated in 1-5, ( ) 6-10, ( ) 11-15, ( ) Participated in 16 training courses and more.
7. **Number of researches published during the last three years:**  
( ) None, ( ) One, ( ) Two, ( ) 3 and above.

**Second Section: The Scale of Knowledge Management**

Q	Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<b>First, Knowledge Diagnosis</b>						
1	The university and its faculties are exploring knowledge over the internet.					
2	The university and its faculties are benchmarking their internal and external environment.					
3	The faculty is designing a particular plan of internal knowledge and expertise.					
4	The faculty owns a portfolio of internal knowledge about foreign affairs.					
5	The university and its faculties provide supportive employment policies for freedom of scientific research.					
6	The university and its faculties have tools that support to discover knowledge and obtain it from different sources					
<b>Second, Knowledge Acquisition and Generating</b>						
7	The faculty encourages lecturers to continue learning and develop their skills and abilities.					
8	The faculty transforms knowledge from individual to collective level.					
9	The faculty has formed teams of diverse knowledge with internal experts continuously.					
10	The faculty carried out research continuously.					
11	The university and its faculties attract employees with expertise, competencies and creative energies.					
12	The university and its faculties benefit from successful experiences.					
13	The university is establishing a knowledge treaty with domestic and foreign universities to generate and share knowledge.					
<b>Third, Knowledge Storage</b>						
14	The university and its faculties follow the methods of stimulation					

	and encouragement to exchange experiences.					
15	The university and its faculties categorize data and then store them so quickly collected and then compiled.					
16	The university and its faculties electronic archiving by compiling and documenting information in a way that is easily accessible and retrieved quickly and accurately.					
17	The faculty has clear and specific knowledge standards that are appropriate to the nature of its work and activities.					
18	The university follows the method of storing implicit knowledge (experiences and sharing experiences).					
19	The university retrieves basic and new knowledge according to the regulations.					
20	The faculty uses traditional methods that a paper documents classified and indexed.					
21	The faculty has high flexibility in storing and retrieving knowledge.					
<b>Q</b>	<b>Statements</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
<b>Fourth, Knowledge Distribution</b>						
22	The internal information network helps individuals to access the database.					
23	The faculty issuing bulletins, periodicals and types of various publications.					
24	The faculty holds internal meetings, seminars, and workshops.					
25	The faculty holds internal training courses conducted by experienced and efficient individuals.					
26	The university and its faculties have movements and the role of lecturers.					
27	Modern technology uses to transfer and exchange information such as the internet, e-mail, and mobile messages.					
28	The faculty eliminates traditional methods of control and supervision, thereby increasing the opportunities for knowledge dissemination and transfer.					
<b>Fifth, Knowledge Implementation</b>						
29	The university provides the physical and human requirements for the knowledge implementation.					
30	The university interest in applying and using knowledge.					
31	The university implements the initiatives and programs on an ongoing basis related to knowledge.					
32	The university uses criteria and standards to control the applied knowledge.					
33	The focus on the knowledge implementation is the university's top priority.					
34	The university makes some adjustments and improvements after applying new knowledge.					
35	The university and its faculties transform knowledge into plans.					

**Third Section: The Scale of Organizational Performance (Balanced Performance Card)**

Q	Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<b>First, Financial Dimension</b>						
1	The university strives to fulfill its commitment to the community by providing services aimed at spreading awareness and knowledge.					
2	The university seeks to reduce unnecessary operational costs that do not contribute to improving the quality of service provided to its students.					
3	The university is increasing the efficiency of the services provided to improve its revenues.					
4	The university is working on developing continuous plans to increase the investment of funds in the service of students.					
5	The university is working to increase its revenue by opening up other sections or postgraduate studies on the private account or opening consulting offices.					
<b>Second, Internal Processes</b>						
6	The university and its faculties simplifying and facilitating the services offered to students and graduates.					
7	The university and its faculties provide the various information needed to accomplish the service work					
8	The university quickly responds to changes that occur in the internal work environment.					
9	The university is paying attention to the faculty proposals to develop and update the work.					
10	The university seeks useful references and modern volumes.					
11	The university promotes outstanding scientific research conducted by its faculties.					
<b>Third, Beneficiary Satisfaction</b>						
12	The university is working on opening disciplines that suit the wishes and aspirations of students and the requirements of the labor market.					
13	The university is keen to develop its services to the community in line with its social responsibility.					
14	The university is trying to simplify the work procedures to satisfy its students.					
15	The university will develop integrated scheduling for all sections to avoid congestion and overcrowding among students.					
16	The university provides practical consultation and research that benefits the community.					
17	The university seeks to develop a field survey from time to time to measure the extent of the society's satisfaction with its services.					
<b>Fourth, Education and Development</b>						
18	Students are driven by their intellectual abilities and skills to acquire new knowledge.					
19	Students are encouraged to continue learning and develop their skills and abilities.					
20	The university is creating an organizational environment					

	conducive to the culture of education.					
<b>21</b>	The university provides an enormous amount of data and information to guide the efforts of staffs.					
<b>22</b>	The university encourages creators and builds their creative ideas.					
<b>23</b>	The university relies on different training programs within and outside the region to enable them to improve performance levels					



## Appendix (2) List of Questionnaire Arbitrators

S	Name	Scientific Title	Experts	Workplace
1	Dr. Yunis Ali	Assistant Professor	Economics	Sulaimaniyah University The College of Administration and Economics
2	Dr. Pershing Saleh Mohammed	Assistant Professor	Marketing Management	Sulaimaniyah University The College of Administration and Economics
3	Dr. Wrya Najm Rashid	Lecturer	Leadership and Organizing	Sulaimaniyah University The College of Administration and Economics
4	Dr. Sakar Zaher Omar Amin	Lecturer	Financial Accounting and Auditing	Northern Technical University.

### Appendix (3) Curriculum Vitae

**Name and Surname:** Hawre Yaseen AHMED

**Place and Date of Birth:** 17 May 1990, Iraq, Tuz Khurmatu

#### Education:

Degree	College	Field	University	Year
<b>Undergraduate</b>	Law and Politics	Department of Law	Salahaddin University	2012
<b>Graduate</b>	Business Administration	Business Administration	Bingöl University	2018

#### Work Experience:

Workplace	Position	Year
<b>Self-Employer</b>	Lawyer	From 2012 till now

Foreign Languages: Arabic, English and little of Turkish

Publication:

Email: [hawre\\_karkuky@yahoo.com](mailto:hawre_karkuky@yahoo.com)

Phone: 00964 770 220 4646

Date: 17 May 2018