THE IMPACT OF APPLYING KNOWLEDGE MANAGEMENT IN LIGHT OF MODERN INFORMATION TECHNOLOGY STUDY OF ITS APPLICATION AT AL-MUSTAQBAL UNIVERSITY

Abbas Ghadhban Alamarh  
Ministry of High Education, Iraq  
Hameed Jassem Alwin  
Al Mustaqlab University, Business Administration Department  
Ammar Ali Hussein  
Ministry of Oil / Oil Products Distribution Company  

ABSTRACT
The current research tests the correlation and influence between knowledge management and modern information technology. The problem of the present study was the extent of the role of knowledge management in light of modern information technology at Al-Mustaqlab National University. The questionnaire form was used to collect data, the research sample was distributed, and the data was analyzed using the (SPSS) program. Several statistical methods were used to test the research hypotheses. The research reached several conclusions, the most important of which was (the relationship or no relationship) between knowledge management and modern information technology, and ended with a set of appropriate recommendations.

Keywords: Knowledge Management, Information Technology.

1. INTRODUCTION
The significance of the current research is as follows:
1- Explaining the concept of knowledge management and how it is embodied as a management philosophy that seeks to bring about long-term strategic improvements in light of modern information technology and make it more innovative.
2- Emphasizing that knowledge management is no longer limited to industrial organizations but has greatly benefited the private and public sectors.
3- It addresses the issue of knowledge management as a modern administrative approach that achieves many advantages for organizations.
4- It is connected to technology, which focuses on developing the administrative process in conditions of openness, competition, and globalization.
5- The importance of identifying the elements and requirements of knowledge management and the steps for its application.

Aims of the Study
In light of the above, this research seeks to achieve the following objectives:
- What is the concept of knowledge management and its relationship to other related images?
- Clarifying the concepts of knowledge management and modern technology in institutions in general and the surveyed institutions in particular.
- Identifying the elements on which knowledge management is based and their importance.
- Reaching specific results about the impact of knowledge management in raising the efficiency of organizations’ performance.
Providing appropriate recommendations in this field.

Problem of the Study
Practicing knowledge management processes is the most important strategy adopted by any organization looking for excellence in its work, reflected in its services. The problem of this research lies in seeking to know the extent to which the researched organization in Babylon practices knowledge management operations from the standpoint of assessing the current reality to identify the obstacles that prevent the optimal application of the concept of knowledge in these organizations, which can be referred to on the other hand. Knowledge of what is available in sufficient readiness to adopt and practice knowledge management. The problem of the Study is addressed by answering the following two main questions:
What is the reality of applying knowledge management processes at Al-Mustaqbal Private University? .1
What is the role of the application level of knowledge management processes in the effectiveness of the activities of the Future Private University? .2
What is meant by knowledge management, where is its importance, and what are its elements? .3
What role can knowledge management play in ensuring the survival and growth of organizations? .4
What are the modern information technology systems applied at Al-Mustaqbal National University? .5

Previous studies
Here, a group of Arab and foreign studies related to the subject of the study is presented:
Third: Study by Al-Taie and Abu Ayyash (2004)
Al-Taie and Abu Ayyash (2004) conducted a study entitled (Knowledge Management in the Jordanian Hospitality Industry). The study aimed to determine and evaluate the standards of knowledge management in the hospitality industry from the point of view of the supervisory and executive departments in first-class hotels from international hotel chains in Jordan, in the case of Amman. The study was conducted on 100 people working in the hotel industry. The results showed that the employees’ evaluation of knowledge management standards in the hospitality industry was positive. It was found that there was a difference in the relative importance of each of the criteria, in addition to the existence of a blurry view of the distinction between explicit and implicit knowledge.
Fourth: The study of Al-Shammari and Al-Douri (2004)
Al-Shammari and Al-Douri (2004) conducted a study entitled (Knowledge Management and its Role in Enhancing the Strategic Decision-Making Process). The study aimed to determine the role and importance of knowledge management in enhancing and managing strategic and vital decisions that relate to strategic problems with multiple dimensions and in great depth. And complexity. Sixty-five questionnaires were approved and distributed to a sample of managers of industrial organizations in Baghdad. Analyzing the answers to the questionnaires statistically showed that the strategic decision-makers of industrial organizations realize the importance of
using knowledge and employing it in the process of building and making strategic decisions. However, the actual use or optimal investment in knowledge management is. The industrial sector still needs to be expanded due to obstacles and limitations related to managers and the available technical, informational, and material capabilities.

Fifth: Study by Al-Rifai and Yassin (2004)

Researchers Al-Rifai and Yassin (2004) conducted a study entitled (The Role of Knowledge Management in Reducing Bank Credit Risks). The study dealt with the field of knowledge management and its role in reducing bank credit risks by applying it to the banking sector in Jordan. A sample was taken from the banks that implemented knowledge management programs and projects to identify the reality of these projects and to know the opinions of the sample members, managers, and employees about the role of knowledge management in reducing bank credit risks and improving the quality of banking services provided to customers. To achieve the objectives of this study, the relationship between knowledge management and knowledge management systems in the banking industry was analyzed. In light of this, data was collected and researched, and hypotheses were tested using descriptive statistics methods. It was found that there were statistically significant differences in the opinions of the sample members about the relative importance of knowledge management factors in reducing bank credit risks from the point of view of Sample members. It was also found that there were no statistically significant differences in the sample members’ opinions about knowledge management in reducing bank credit risks if they were classified based on job positions (managers and employees).

Eighth: Abu Fara’s study (2006)

Researcher Abu Fara (2006) conducted a study entitled (The Reality of Using the Knowledge Management Approach in Banks Operating in Palestine). This study aimed to analyze and determine the reality of using the knowledge management approach in banks operating in Palestine. The study focuses on five functions of knowledge management: planning knowledge, updating and developing understanding, organizing and storing knowledge, spreading the culture of learning, and following up on inside and monitoring its activities. The study seeks to investigate the effect of some variables (job position, gender, educational degree, experience, and training) on the perception of the importance of knowledge management and its adoption in banks operating in Palestine. The research developed a questionnaire - as a scientific tool - to collect data related to the study from the study sample, and the researcher benefited from contributions and research in the field of knowledge management in constructing this questionnaire. The results showed significant and non-significant differences between the study variables. The significant differences are related to the perception of the importance of knowledge management - as a dependent variable - and the elements of age, experience, and training as independent variables. The non-significant differences are attributed to the details of job position, gender, and educational level - as independent variables. Using the arithmetic mean tool and the t-test showed the most important results of this study, which is that banks operating in Palestine carry out fundamental applications of the five essential functions of the knowledge management approach. Based on the results of this study, the researcher suggested that banks operating in Palestine pay greater attention to the applications of the knowledge management approach.

The Concept of Knowledge Management

Various organizations and institutions searching for excellence are obsessed with innovation.
and innovation to remain steadfast in the face of multiple changes. Here comes the role of the beneficiary of the knowledge management that he employs in enhancing innovation and creativity as practical elements to outperform competitors. Knowledge management is one of the trends in which management science is interested, and interest in it has coincided with the circulation of the concept of intellectual capital since the mid-seventies of the last century (Al-Qaryouti, 2007).

Some approached knowledge management from the perspective of organizations and societies and referred to it as “the efforts that are made to Complete several functions, namely collecting and acquiring knowledge, distributing and communicating knowledge, interpreting knowledge, and employing and investing in knowledge. (Al-Kubaisi, 2005). We conclude from the above that the concept of knowledge management, according to the researchers’ opinion: ((Is a set of experiences, beliefs, and optimal values acquired through previous experiences and knowledge or cumulative experiences. Knowledge includes two types: apparent knowledge that can be traded and stored and implicit knowledge that cannot be stored and traded but is firmly established in The human mind and can be obtained through other implicit means.

**Definition of Knowledge Management**

Alharithy, 2015:728 defines it as “all the authorities that are carried out based on knowledge by some relevant authorities jointly (individually or collectively) within the organization to achieve its goals based on the type of knowledge.”

As indicated by Omotayo, 2015 4: “A set of mechanical and logical tools that guide how work is conducted in organizations that intend to achieve continuity and creativity in light of fierce competition.

As Al Ahbabi et al., 2019: 4 explained, “It is a set of basic procedures and activities that the organization carries out in processing its important cognitive resources and activities and manipulating them according to the knowledge available to it in order to achieve the goals that it aspires to.”

As stated by Goswami and Agrawal, 2020: 25 “A specific systematic and organizational process for acquiring, organizing, and communicating tacit and explicit knowledge to employees. Other employees may use this knowledge to gain experience in their field to be more effective and productive to achieve their long-term goals.”

We conclude from this that knowledge management, according to the researchers’ opinion: “It is a set of activities carried out by organizations to obtain it from internal or external sources according to the type of knowledge, whether apparent, tacit, or through previous experiences, in order to achieve its goals. Here, it can be obtained according to each type.” Mentioned previously, and applying it on the ground to achieve competition or add some fundamental changes depending on the type or nature of the organization’s work.

The importance of knowledge management (Razouki, 2005)

1- Knowledge management is an excellent opportunity for organizations to reduce costs and raise their internal assets to generate new revenues.
2- It is an integrated, systematic process for coordinating the organization’s various activities towards achieving its goals.
3- Enhancing the organization’s ability to maintain and improve institutional performance based on experience and knowledge.
4- It is a tool to motivate organizations to be creative, create good knowledge, and reveal unknown
relationships and gaps in their expectations.
5- The importance of knowledge management lies in obtaining a lasting competitive advantage for organizations by adopting more innovations represented in offering new goods and services.
From the above, the importance of knowledge lies in achieving the following:
- Promoting and maintaining financial investment
- Coordination between different departments to create creativity and excellence in work
- Encouraging creative abilities in order to improve organizations
Achieving competitive advantage through creativity and good knowledge of scientific foundations represents the fundamental importance sought by organizations that aim to reach the summit.

Knowledge Management
Dimensions of Knowledge Management
The dimensions of knowledge management are many and varied. The study adopted these four dimensions for our current research, which are explained as follows:
1- Acquiring Knowledge:
Knowledge management is oriented towards obtaining Knowledge that can be described in many other terms - seeking, generating, creating, capturing, and collaborating - all of which are the subject of knowledge accumulation. According to Chakravarthy, Knowledge (accumulates when units within the organization acquire new understanding) (Alosaimi, 2016, p. 6). Acquisition relates to the creation of tacit and explicit Knowledge within the organization and the integration of the organizational level and assimilation of information and the external source of Knowledge (Martins & Gonzalez, 2017, p. 253). The process of Acquisition is based on the organizational motivation to teach workers how to acquire Knowledge in different ways, which makes the organization able to respond to environmental changes that are enhanced by developing a culture focused on learning (Martins & Gonzalez1, 2014, p. 134). It refers to “the Acquisition of Knowledge through the internal and external factors of the organization to achieve The self-esteem of employees within the organization to make them more motivated and committed and improve their work satisfaction through empowerment and organizational climate (Alyoubi et al., 2018, p. 15).
2- Storing Knowledge
The knowledge dimension is one of the essential concepts for organizations to store Knowledge and provide ways to access it in professional ways throughout the organization to benefit from us in achieving sustainable competitiveness, creating a sound knowledge base for the organization that contains usable Knowledge, achieving ensuring access to this knowledge base (3420: 2010, Omerzel). This process includes identifying, evaluating, storing, codifying, and preserving Knowledge, updating, mapping, and removing Knowledge (2017:149, al et Calad-Henao). Storing and organizing Knowledge constitutes an essential aspect of effective knowledge management (Alavi & Leidner, 2001, p. 118).
3- Transferring Knowledge
Knowledge transfer is a process of great importance due to its ability to help the management body benefit from private knowledge (Hussin & Noor, Hassan, 2017: 751). Knowledge transfer channels can be formal or informal, personal or impersonal. Information technology can support all forms
of transfer. Knowledge has been mainly applied to informal and impersonal “discussion databases” and formal and impersonal “organizational directories” (Gottschalk, 2005, p. 95). The process of transferring and circulating Knowledge is critical, and the main goal of the knowledge transfer process is to organize or create the capture and distribution of Knowledge and ensure its availability to users in the future (Kundrikova & Koman, 2016, p. 609). The transfer of Knowledge is necessary through which experiences and resources are exchanged internally and externally, and a solution to a problem is reached by relying on a group of experiences to reach a solution that enables organizations to benefit from it at the organizational level and achieve their desired goals.

4- Application of Knowledge:

Knowledge application is the final stage through which Knowledge is used within the organization to make decisions and perform tasks, thus contributing to organizational performance (Sabherwal & Fernandez-Becerra, 2015, p. 62). Knowledge itself depends on discovering, capturing, and sharing Knowledge. The better the discovery of Knowledge, the greater the likelihood of the need for Knowledge (2010:60-61, Sabherwal & Fernandez-Becerra). Knowledge requires learning and explaining through experiments and application.

(Alharithy, 2015, 728). According to Ni and others, the application of Knowledge is the direct goal of knowledge management, which leads to improving work efficiency and results. With the application of Knowledge, the organization can become more creative, which leads to the creation of more new Knowledge that lies from continuing the knowledge management process (2016:21, Munafu). When organizations apply knowledge management, it enables them to avoid many errors, deviations, and repetitions, increase efficiency, translate their organizational expertise accurately, and accelerate the process of developing their new products and processing administrative and technical systems (Ode & Ayavoo, 2020, p. 212).

Modern Information Technology
First: The concept of modern information technology

The term information technology emerged at the beginning of the fifties, referring to the use of electronic systems and computers in government and private business. Information technology includes all the techniques (computers, software, communications) used by the organization and its human elements in collecting the information necessary to accomplish all the activities and work related to the organization's performance to achieve its strategic goals, growth, and development. The concept of information technology is the best weapon for any organization to confront all changes, challenges, and circumstances of a sudden and changing nature through which effective decisions can be made on a clear and defined basis within cognitive concepts that enhance the relationship between business organizations (Sanders, 2007, p. 25).

As defined by (Al-Hawasi and Al-Barzanji, 19, 2014), "it is all the techniques used in collecting, storing, processing, and analyzing data and information, and drawing conclusions and information to guide its beneficiaries to complete their information work with accuracy, speed, and appropriate time."

As explained (Sherif and Odeh, 179, 2016), "It is the set of technologies represented by the physical entity, software components, and human resources that enable the organization to perform
its work with the required accuracy. Information technology has become the revolution of the current era and cannot be dispensed with in any organization, that is, the backbone of all public business organizations." And private.

We conclude from this, according to the opinion of the researchers, information technology lies in the following definition: It is a set of software and electronic tools that the organization uses to accomplish its work with the accuracy and speed required, thus analyzing, interpreting and processing the results and information within the modern philosophy of information technology.

IT jobs

Information technology is specialized in a group of functions that can be reduced to the following basic processes (Anderson & Post, 2000, p. 122) (Younis, 2007, p. 25):

1- Obtaining data: This is the first function information technology can provide by accumulating and collecting data. The process of obtaining data related to the external environment and preparing it for processing through data entry, recording, and editing. Users record this data on physical media such as paper and enter it directly into the computer by users of the system. Accuracy is the basic foundation for entering data correctly, based on which the accuracy and quality of the system's outputs depend.

2- Processing: It means processing data and converting it into information, which includes converting, analyzing, and synthesizing all forms of data and information. Processing includes multiple operations (words, information, documents) into text, including news reports, processing images, sounds, and other data.

3- Storage means storing data and information on any interface within computer systems and other applications. The storage process is considered the basic foundation of information systems, as it can be referred to later and benefited from.

4- Transmission: Sending information from one site to another by adopting multiple and different media, such as satellites, optical fibers, and other transmission methods. Figure illustrating the main functions of modern information technology.

METHODOLOGY

2. METHODS AND PROCEDURES

2.1 Population and Sample: At the time of study, there were about 1242 Industrial Companies listed in Amman Stock Exchange Market. The research sample is selected by random sampling method which resulted in 373 companies (30%). The researchers received 206 out of 373 (55%) responses which used for analysis. Unit of Analysis: The survey unit of analysis is composed of all top (General Managers, General Manager Assistants, and General Manager Deputies) and middle managers (Main Section Managers, Directors and Head of Departments) drawn from Jordanian industrial companies listed in Amman Stock Exchange Market.

2.2 The Questionnaire: The main tool for actualizing a research project is the questionnaire. Initial items to measure various constructs were developed depending on prior researches. Then the questionnaire was validated through expert interviews and a panel of judges. Independent Variables (Information Technology): Through literature review, the researchers have identified two important independent variables that contribute to knowledge management practices: Technology Type and Technical Capabilities. Independent variables are tested through 13 questions: 5 for Technology Type, and 8 for Technical Capabilities. Dependent variable (Knowledge Management Practices): Dependent variable of the study is related to knowledge
management practices, and tested through 25 questions included: 5 questions for each component: acquiring, creating, transferring, sharing and applying knowledge. All variables were measured by five-point Likert-type scale to tap into the individual’s perceptions, ranging from value 1 (strongly disagree) to value 5 (strongly agree) used throughout the questionnaire.

2.3 Validity: To confirm content validity (construct validity): Multiple sources of data (literature, expert inter views and panel of judges) were used to develop and refine the model and measures.

2.4 Reliability Test (Cronbach’s Alpha): Almost all studies mentioned that Cronbach’s Alpha coefficients above 0.6 are accepted (Sekaran, 2003). Table (1) shows that the Cronbach’s alpha for the study were above 0.75, which registered acceptable.

3. RESULTS

Table (2) result shows that this variable alone explained 38.2 percent of the variance, where (R^2 = 0.382, F = 126.324, Sig. = 0.000). Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that the information technology affects knowledge management practices, at (α ≤ 0.05). Beta (β) also supports the above result, which shows that the relationship between information technology and knowledge management practices is 58.1%, where (β = 0.581, t = 11.239, sig. ≤ 0.05). The results also indicated that information technology can affect all knowledge management practices components, where R^2 between 0.248 and 0.361, and F = between 67.182 and 81.733, sig. = 0.000. Beta (β) also indicated that there is strong relationship between information technology and each component of knowledge management practices, where β = (between 0.510 and 0.678), t = (between 8.196 and 10.739), at sig. = 0.000.

Table (2): Results of Multiple Regressions Analysis: Regressing Information Technology against Knowledge Management Practices

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>R</th>
<th>R</th>
<th>F</th>
<th>Df</th>
<th>Regressions Coefficient</th>
<th>Dependent B</th>
<th>Stand. Error</th>
<th>T Calculated</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquiring</td>
<td>0.53</td>
<td>0.29</td>
<td>41.8</td>
<td>(204)</td>
<td>IT</td>
<td>.72</td>
<td>0.063</td>
<td>9.023</td>
<td>0.000</td>
</tr>
<tr>
<td>Creating</td>
<td>0.61</td>
<td>3.72</td>
<td>60.1</td>
<td>(204)</td>
<td>IT</td>
<td>0.6</td>
<td>0.063</td>
<td>10.44</td>
<td>0.000</td>
</tr>
<tr>
<td>Transferring</td>
<td>0.53</td>
<td>0.28</td>
<td>40.8</td>
<td>(204)</td>
<td>IT</td>
<td>0.5</td>
<td>0.064</td>
<td>9.041</td>
<td>0.000</td>
</tr>
<tr>
<td>Sharing</td>
<td>0.49</td>
<td>0.24</td>
<td>33.4</td>
<td>(204)</td>
<td>IT</td>
<td>0.5</td>
<td>0.069</td>
<td>8.196</td>
<td>0.000</td>
</tr>
<tr>
<td>Applying</td>
<td>0.51</td>
<td>0.26</td>
<td>73.7</td>
<td>(204)</td>
<td>IT</td>
<td>0.5</td>
<td>0.059</td>
<td>8.590</td>
<td>0.000</td>
</tr>
<tr>
<td>KMP</td>
<td>0.61</td>
<td>0.38</td>
<td>126.</td>
<td>(204)</td>
<td>IT</td>
<td>0.5</td>
<td>0.052</td>
<td>11.239</td>
<td>0.000</td>
</tr>
</tbody>
</table>

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3.1 Hypotheses Testing

Multiple Regressions

H0-1: Information Technology
(Technology Type and Technical Capabilities) does not impact KnowledgeManagement Practices, at (α≤0.05). Table (2) result shows that this variable alone explained 38.2 percent of the variance, where (R²=0.382, F=126.324, Sig.=0.000). Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that the information technology affects knowledge management practices, at (α≤0.05). Beta β also supports the above result, which shows that the relationship between information technology and knowledge management practices is 58.1%, where (β=0.581, t=11.239, sig≤0.05). The results also indicated that information technology can affect all knowledge management practices components, where R² between 0.248 and 0.361, and F= between 67.182 and 81.733, sig.=0.000. Beta (β) also indicated that there is strong relationship between information technology and each component of knowledge management practices, where β= (between 0.510 and 0.678), t= (between 8.196 and 10.739), at sig.=0.000. Table (2): Results of Multiple Regressions Analysis: Regressing Information Technology against Knowledge Management Practices. Independent Variable R R² F DF Regressions Coefficient Dependent β Stand. Error Calculated Sig.

Acquiring .5350

The table (3) shows the information technology variables together have significant effect on knowledge management practices, where (R²=0.383, F=63.088, Sig.=0.000). H0.2: Technology Type does not impact Knowledge Management Practices, at (α≤0.05). The table (3) shows that the relationship between technology type and knowledge management practices is moderate, where β=0.180, t=2.166, sig≤0.05). Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that the Technology Type affects knowledge management practices, at(α≤0.05). It shows that technology type significantly affect knowledge management practices where (β=0.269, t=2.625, sig≤0.05), and knowledge applying, where (β=0.269, t=2.821, sig≤0.05). Whereas, the result shows that there is no significant effect of technology type on other components of knowledge management practices, where(sig<0.05).

H0.3: Technical Capabilities does not impact Knowledge Management Practices, at (α≤0.05). The table (3) shows that the relationship between technical capabilities and knowledge management practices is strong where, (β=0.389, t=5.861, sig≤0.05). Therefore, the null hypothesis is rejected and the alternative hypothesis is accepted, which states that the technical capabilities affect knowledge management practices, at(α≤0.05). It shows that the technical capabilities significantly and positively affects all knowledge management practices components, where (β between 0.261 - 0.549, t (between 3.431 - 6.835, sig≤0.05).
4. CONCLUSION
Software plays a significant role in Knowledge Management, but that also, undoubtedly, only solves some problems as obstacles having nothing to do with the technicalities must be considered. We know that things will not remain the same and that numerical technologies will still advance, particularly to overcome their weak points. However, technology will never solve emotional problems and could instead create some. For organizations, it is a question of preparing for a better technology that integrates human and organizational actions so that their evolution will not create new upheavals but facilitate Knowledge Management. In a homogeneous whole, including them and their collaborators. With this potential and these limits, one can certainly detect a complementary relationship between the strong and weak points of the brain and technology. Regarding cognitive functions, technologies are gifted in expression, treatment, and memorization but weak or non-existent at reception, training, and reasoning, which are the fields in which the brain excels. Cognitive or intellectual functions can be divided into four classes:

- Memory and training allow the storage and recall of information;
- Thought or reasoning concerning mental organization and reorganization of information;
- Receptive function allows acquisition, treatment, classification, and integration of information;
- Expressive functions allow communication of action.

The technology then can be considered as cement contributing to the neuronal network of the organization like bricks need cement to become a wall. Therefore, we must learn to strategically use ICTs for Knowledge Organisation and end-user satisfaction. From here, we conclude that information technology does not stop there. It now represents a strategic and cognitive goal for all institutions and sectors, as it is a work context closely linked to the individual's work at all levels. Technology has become multiple and advanced until we have reached modern concepts, including artificial intelligence, which has become a threat to the work of business companies.

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