

# Knowledge Management And Its Relationship To Entrepreneurial Orientation An Exploratory Study On The Opinions Of A Sample The University Of Mosul

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ARTICLE INFO	ABSTRACT
	<p>There are many and diverse forms of leadership, but it aims to strengthen the innovative capacity of knowledge management by increasing its initiative and willingness to adopt risks. To provide outstanding performance, the research community was chosen as a sample of two teachers in one of the university's colleges by distributing (25) questionnaires to the individuals surveyed at their work sites, which included several questions. According to the study attempt, the statistical program (SPSS) was used to calculate the frequency distribution, percentages, arithmetic mean, and standard deviation. The research reached a number of conclusions, the most prominent of which was that knowledge management has a positive impact on entrepreneurial orientation, as it contributes to increasing the growth of projects to become medium and large projects in the country. the future.</p>

## Introduction:

Entrepreneurial orientation is one of the productive and important activities that many companies depend on using to ensure their success, survival, and growth in the market and their superiority over competitors. To achieve a larger market share, and to achieve entrepreneurial orientation, companies adopt several methods, the most important of which is knowledge management, as knowledge management is one of the knowledge management systems that most have been adopted to use. Companies in recent years knowledge management began to take its place by being considered an important intellectual development in the world of business administration. Knowledge management and its processes are also considered among the basics that must be in place for the purpose of achieving excellence and creativity, whether in products or processes.

## 1. Research Methodology

### 1.1 The research problem

The research problem includes several questions that can be formulated as follows:

- 1- Do the individuals studied in the college under research have a clear perception of the concept of knowledge management?
- 2- Do the individuals studied in the college under research have a sufficient idea of the concept of entrepreneurial orientation?
- 3- Does knowledge management contribute to achieving the entrepreneurial orientation in the college under study?

### 1.2 Research objectives

The research seeks to achieve a set of objectives:

- 1- Introducing the college administration and the individuals surveyed to the concept of knowledge management
- 2- Identify the role played by knowledge management in achieving the college's entrepreneurial orientation.
- 3- Analyzing and diagnosing the research variables.
- 4- Present a set of proposals consistent with the conclusions and recommendations reached by the research.

### 1.3 Research hypothesis

In line with the research objectives, the researcher relied on the following hypothesis:

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There is a statistically significant effect of knowledge management in terms of its dimensions (knowledge generation, knowledge storage, knowledge sharing, knowledge application) on entrepreneurial orientation in terms of its dimensions (creativity, reactivity, and risk-taking).

The first main hypothesis is divided into several sub-hypotheses, which are:

A - There is an impact of the knowledge generation dimension on entrepreneurial orientation in its three dimensions (creativity, reactivity, and risk).

B - There is an impact of the knowledge storage dimension on entrepreneurial orientation in its three dimensions (creativity, reactivity, and risk).

T - There is an impact of the knowledge-sharing dimension on the entrepreneurial orientation in its three dimensions (creativity, reactivity, risk).

There is an impact of the knowledge application dimension on entrepreneurial orientation in its three dimensions (creativity, reactivity, and risk).

## 2. Theoretical Side

### 2.1 knowledge management

#### 2.1.1 The concept of knowledge management

(Al-Khairo and Jalal, 2010, 3) see it as the systematic, integrative process of coordinating hospital activities in light of knowledge acquisition, creation, storage, participation, development, and repetition by working individuals and groups seeking to achieve the main organizational goals.

(Al-Rifai and Yassin, 2010, 7) pointed out that it is the process of attracting knowledge, creating knowledge, sharing knowledge, storing and distributing knowledge, and managing strategic synergy between intellectual capital and information technology with the aim of achieving a proven competitive advantage for the hospital. He also defined it (Al-Shammari and Al-Douri, 2011, 10) as the processes that help the hospital generate and obtain knowledge, select it, organize it, use it, disseminate it, and transfer the important information and expertise that the hospital possesses and which it considers necessary for various administrative activities such as decision-making, problem-solving, and learning. And strategic planning.

As (Titi, 2010, 98) sees it, it is the process of implementing activities related to the discovery, capture, sharing, and application of knowledge to support the improvement process, taking into account the cost and the impact of knowledge on achieving the goals of the relevant unit in the company.

He pointed out (Al-Safoor, 2010, 74) that they are the processes of planning, organizing, and controlling that help organizations generate knowledge, select and organize it, use it, disseminate it, and finally transfer the important information and expertise that the hospital possesses, which is necessary for the various administrative functions represented by production, marketing, personnel, and finance, and thus obtain greater Value to the hospital.

He defined it (Hanna, 2011, 29) as all activities related to the transfer and flow of knowledge between individuals and groups, storing it and applying it to manage the scientific and information expertise of the hospital, improve its performance and maintain it, increase the level of creativity and innovation, and raise the level of efficiency of the decision-making process.

He also defined it (Al-Zatma, 2011, 30) as a continuous, dynamic process that includes a set of activities and practices aimed at identifying, creating, developing, distributing, using, preserving, and facilitating retrieval of knowledge, which results in raising the level of performance, reducing costs, and improving capabilities related to the process of adapting to the requirements of rapid change in the surrounding environment. In the hospital.

They all agreed (Al-Ali et al., 2012, 27) that it is critical knowledge management that depends on the knowledge base and aims to add value to the business, and is carried out through regular processes represented in diagnosing, acquiring, generating, storing, developing, distributing and applying knowledge in the company.

#### 2.1.2 The importance of knowledge management

Knowledge management is a great opportunity for organizations to reduce costs and raise their internal assets to generate new revenues. Where (Al-Obaidi and Al-Jarrah, 2012, 11) see that the importance of knowledge management is as follows:

- 1- It is an integrated, systematic process for coordinating the company's various activities towards achieving its goals.
- 2- It enhances the hospital's ability to maintain and improve organizational performance based on experience and knowledge.
- 3- Knowledge management is a tool for effective organizations to invest their intellectual capital, by making access to the knowledge generated by it for other people who need it an easy and possible process.
- 4- Knowledge management allows the company to identify the required knowledge, document what is available, develop it, share it, apply it, and evaluate it.
- 5- It is a motivational tool for organizations to encourage the creative capabilities of their human resources to create good knowledge and detect in advance unknown relationships and gaps in their expectations.

6- It provides the opportunity to obtain a permanent competitive advantage for organizations through its contribution to enabling the company to adopt more innovations represented in offering new goods and services.

### 2.1.3 Objectives of knowledge management

(Al-Maliki, 2010, 107) believes that the objectives of knowledge management are as follows:

- 1- Simplifying operations and reducing costs by eliminating lengthy or unnecessary procedures.
- 2- Improving customer service by reducing the time it takes to provide the required services.
- 3- Adopting the idea of creativity by marketing products and services more effectively.
- 4- Increasing financial returns by marketing products and services more effectively.
- 5- Activating knowledge and intellectual capital to improve the delivery of services.
- 6- Creating an interactive environment to collect, document, and transfer the cumulative experiences gained during daily practice.
- 7- Improving the quality of service and productivity.

### 2.1.4 Types of knowledge management

Types of knowledge differ according to their sources, and in the past, they were classified into theoretical and applied. Another new classification has emerged, which is tacit knowledge and explicit knowledge. In general, writers and researchers differed in classifying knowledge, and some of these opinions are as follows: (Al-Hafiz, 2010, 33) and (Hanna, 2011, 55)

1- Tacit knowledge: This is the knowledge that is contained in people who have this knowledge and which their minds store, and the knowledge and ideas that these minds contain that are inseparable from them. Tacit knowledge also refers to personal knowledge that contains internal meanings, mental models, experiences, insight, intuition, and intuitive feeling. There are two types: one is technical and goes back to the depth of (knowing how) technical knowledge in experience, and the second has a cognitive dimension that contains a mental blueprint, mental models, beliefs, and perceptions that guide individuals in their daily actions and behaviors. Tacit knowledge is expressed as informal or subjective knowledge, expressed in qualitative and intuitive ways that cannot be transferred and taught. The classification of knowledge into tacit and apparent is one of the most approved and agreed-upon approaches among writers and researchers. This knowledge may sometimes be called individual knowledge. Because the individual owns it, keeps it, remains in his possession, and can dispose of it, and it is latent or implied for the hospital; Because it was not published or edited and only appears when it is needed. The characteristic of this knowledge is that it is not written. It is stored in the minds of individuals, which enables human memory to recall it through known thinking mechanisms. The dimensions of this type of knowledge can be determined as follows: (Salman, 2010, 14).

- Intuition: refers to the breadth of perception and the ability to link different ideas and quickly analyze information available from multiple sources at the same time, focusing on the speed of intuition and imagination. It is a personal trait that contributes to building the accumulation of knowledge in the minds of managers.

- Experience: refers to the scientific accumulation that a person acquires through formal learning, working life, or through dealing with others, or it includes basic abilities and talent, which is a personal characteristic that contributes to building knowledge accumulation in the minds of managers.

- Skill: refers to a person's ability to perform something or to re-perform the tasks assigned to him with perfection, which may be physical or mental.

- Thinking: means the ability to imagine many alternatives for dealing with problems. It is a personal trait that depends on the individual's personality and his ability to generate and put ideas together in a new structure or formulation. It is available to all people, but it varies between them. It helps in reaching solutions to problems and stimulates the power of thinking. To create knowledge in the minds of managers.

2- Apparent knowledge: which is embodied in a material form by embodying the knowledge on paper in the form of a book, report, study, or bulletin, or by storing it in a computer or other documentation and storage devices. Thus, knowledge is capable of being stored, published, transmitted, and distributed. Then we can benefit from it and apply the solutions it produces to problems and treatments for real-life situations. It is the knowledge that is formal, standardized, encoded, systematic, quantitatively expressed, transferable, and teachable. It is also called leaked knowledge because of the possibility of it leaking outside the hospital. We find it in the forms of legally protected intellectual property such as patents, copyrights, trade secrets, etc. Knowledge is considered to be the type of generalized knowledge among all hospital employees, whether they are executives or managers, so it is called collective knowledge or Organizational knowledge represents the aspect of knowledge that is revealed and can be easily transmitted and shared by everyone and by everyone at any time. The apparent knowledge is easy to communicate and is subject to formulation and automation that can be easily realized.

3- Knowledge about patents: refers to the hospital administration's information and perceptions about the optimal method for investing in internal and external patents and the accumulation of information about those who have patents.

4- Scientific knowledge: It can be scientific knowledge, that is, intellectual or theoretical knowledge, and it may be scientific and practical knowledge at the same time.

5- He also pointed out (Al-Qahtani, 2009, 37-38) that knowledge can be divided into four types:

- a. Declared knowledge: This is knowledge that is expressed through facts, expressions, drawings, and visualizations. It can be documented in paper or electronic form, and it can also be recycled.
- b. Technical knowledge: It is part of tacit knowledge and expresses ingenuity, experience, and skill at work.
- c. Superficial knowledge and deep knowledge: Shallow knowledge means little understanding of the indicators of problem areas. As for deep knowledge, it requires deep analysis of different situations.
- d. Causal knowledge and directed knowledge: Causal knowledge is that which is based on linking concepts together using methods of deduction and induction. As for directed knowledge, it is the knowledge that is built based on the number of years of experience in a certain job and becomes a guide and guide for behavior as a result of learning.

### **2.1.5 Knowledge management processes**

(Al-Zaghir, 2014, 25), (Danuk, 2020, 14), and (Abdullah et al., 2019, 22) agreed that knowledge management processes are as follows:

1- Knowledge generation: It aims to be the process of generating knowledge based on the fact that knowledge is by its nature intangible and difficult to discover, especially tacit knowledge. Therefore, it is important for companies to display it and invest in it. This requires the preparation of knowledge maps that determine the sources and paths of knowledge that make it easier for workers to use and invest in it.

2- Storing knowledge: Knowledge must be stored so that it can be retrieved and used by employees of the company or institution. This is done through document management systems according to a comprehensive framework that stores all documents, knowledge databases, and expert systems that help retain knowledge by transforming knowledge into Organizational culture and processes.

3- Distribution of knowledge: It means sharing and exchanging knowledge by everyone within the industrial institution, whether it is acquired or developed knowledge, as every person within the institution should know what others know, and any person's experience should be easily accessible to everyone. That is, most of the knowledge management applications are represented by their processes, such as disseminating knowledge to Internet-friendly programs approved at the organization level as a maximum. Due to technological growth, the available solutions have become easier and more flexible, such as emails, links to networking sites, and applications that integrate collaborative tools, business intelligence, video lectures, and e-learning materials.

4- Application of knowledge: Successful knowledge management is the one that uses available knowledge at the right time, without losing the opportunity it provides to achieve an advantage or solve an existing problem. The use and application of knowledge is linked to serving society and its development, and it is one of the most important goals of institutions and their most important functions. Among the most important areas in which it is used to serve and develop society are the following points: research consultations, marketing university research, research contracts, and preserving knowledge from damage and loss so that it can benefit from it in development and renaissance.

## **2.2 Entrepreneurial orientation**

### **2.2.1 The concept of entrepreneurial orientation**

Pioneer is an old term that was used for the first time in the French language at the beginning of the sixteenth century, as it was used in the sense of taking risks and enduring the hardships that accompanied military exploration campaigns. The use of this term with the same meaning was also widespread in that period to denote works and activities that involve risk, such as engineering work and work. Building bridges and at the beginning of the eighteenth century, the term "entrepreneur" entered economic business to express business and commercial activities that are accompanied by risk (Abu Fara, 2010, 19).

It was pointed out by (Al-Zoubi, 2011, 17) that it is a result of organizations being exposed to a wave of rapid changes in various technological, social, and economic fields, which prompted them to the need to awaken the entrepreneurial spirit within their organizations.

As (Al-Sharif, 2004, 39) defined entrepreneurial organizations, in terms of focusing on increasing national income, as organizations that work with a positive force in economic growth and form the relationship between the effects on the market and lead to increasing national income through creating job opportunities as well as providing technology. Modern to offer products and services.

(Al-Otaibi, 2008, 62) defined as organizational leadership as the readiness and desire to strive for organizational recruitment and adventure to achieve and exploit new opportunities, which means that organizational leadership has three elements: represented by creativity in providing new products, services or technologies that no one has ever achieved before and opening new markets. While the questionnaire is actively researching unique ways to achieve the organization's goals and finally taking risks based on scientific foundations to make rational decisions to confront environmental uncertainty.



### 2.2.2 The importance of entrepreneurial orientation

Entrepreneurship is one of the important fields in the economies of advanced industrial countries, as entrepreneurial projects contribute effectively to achieving comprehensive economic development. They are the basic building blocks in building small, medium, and large organizations, as well as their role in the emergence of new types of goods and services that contribute to the growth of new markets and thus work to reduce the gap. Among the economies of countries, the importance of entrepreneurial orientation is highlighted through the following: (Al-Bahadli, 2014, 47)

- 1- Increasing efficiency by increasing competition, as the entry of new competitors stimulates others to respond efficiently and effectively.
- 2- Bringing about changes in the market structure and work by adopting organizational creativity and modern technology.
- 3- It is one of the inputs to the decision-making process related to the use of available resources to launch the product or service, as well as access to new methods and methods of operations.
- 4- Be responsible for stimulating and encouraging creativity within the organization by exploiting and implementing new opportunities and exploiting and acquiring resources in order to produce new goods and services.

### 2.2.3 Stages of entrepreneurial orientation

There are many measures that entrepreneurial organizations must take, which are often called the stages of entrepreneurial organizations, the most important of which can be explained as follows: (Al-Ajili, 2012, 37)

- 1- Identifying and evaluating the opportunity: After identifying and evaluating opportunities is a difficult task, the success of many entrepreneurial organizations did not come as a surprise in terms of identifying opportunities, but rather through observations.

Continuous monitoring of the needs and desires of customers in markets, business communities, and distribution channel systems, some of which take ideas through discussion with sellers or factory representatives.

- 2- Business plan development: At this stage, the main framework of the business plan is developed, including all activities and plans related to it, including production, marketing, financial, administrative, and other activities.

- 3- Determining the required resources: In this stage, all the resources required to achieve the organization's goals are known and identified, including human, financial, material, and other resources.

- 4- Project management mechanism: At this stage, the model by which the project is managed is known, as well as the process of monitoring and implementing, and developing the necessary plans and programs to achieve the successes required to reach the goals.

### 2.2.4 Dimensions of entrepreneurial orientation

Many researchers and scholars have addressed the dimensions of entrepreneurial leadership, as both (Shuaib, 2011, 45) and (Al-Nawfal et al., 2011, 36) indicated that the dimensions of entrepreneurial orientation are represented in the following:

- 1- Creativity and innovation: Creativity complements the entrepreneur with uniqueness in organizing and managing the resources available in the project and using them in an optimal way, which leads to developing a new idea and transforming it into something useful on which a new demand is built. Creativity is a special case of innovation when the new thing is new. Since innovation is linked to precedence and coming up with something new, everyone who creates something before others is an innovator, and creativity is presenting a new idea that did not exist previously or making changes and improvements to previous ideas and presenting these ideas in an advanced manner.
- 2- Reactiveness or initiative: Initiative is defined as the organization's ability to study market opportunities and identify them before others, as well as obtain information about the current and future situation of the market to excel in providing unique goods or services, which requires entrepreneurial leaders to develop their strategic vision and define paths. Working to link the organization's capabilities and resources to achieve optimal investment of opportunities
- 3- Risk: This means the ability of administrative leaders in organizations to bear the consequences resulting from any behavioral practices in the field of work. To a large extent, it is considered a step towards taking risks in the organization's resources, provided that it is in accordance with sound planning and organization in project management as a result of the dynamic and complex business environment that it follows. In most administrative, economic, service, and other work environments, risk tolerance refers to the ability to calculate the risks that may occur confront the psychological and economic ones, and then make the appropriate decision to overcome them.

## 3. The practical aspect

### 3.1 Description of the research community and its sample

This section presents a description of the research community and its sample in light of two aspects:

**First:** A description of the Faculty of Administration and Economics studied and the justifications for its selection

Determining the location in which the research is conducted is of great importance, as the variables and objectives of the research become clear in light of the correct identification of the location of the study community. The choice was made for the following justifications:

- 1- The importance of the role played by the college in economic and social construction, as it is one of the important pillars.
- 2- The college's great and long-standing status among Iraqi colleges and the scientific expertise and high qualifications it possesses, allowed the current research to be conducted.
- 3- The diversity of services it provides to the community, as well as the availability of data about its activities.

**Second:** Description of the research sample

A number of teachers in the College of Administration and Economics were selected as a sample from the research community. The researcher distributed (25) questionnaire forms to the individuals surveyed at their work sites. Table (1) shows the most important features and characteristics of the study sample members in terms of gender, age group, number of years of service, and academic achievement.

**Table (1) Description of the study sample members**

Table (1) Description of the study sample members													
Age group													
25 - 30		31 - 35		36 - 40		41 - 45		or more46					
.Ne	ratio	.Ne	ratio	.Ne	ratio	.Ne	ratio	.Ne	ratio	.Ne	ratio		
14	56	8	32	3	12	-	-	-	-	-	-		
Sex													
male						feminine							
Ne		ratio		.Ne		ratio		.Ne		ratio			
17		68		8		32							
Academic achievement													
Ph.D		Master's		Higher Diploma		Bachelor's		Technical Diploma		Preparatory school and below			
.Ne	ratio	.Ne	ratio	.Ne	ratio	.Ne	ratio	.Ne	ratio	.Ne	ratio	.Ne	ratio
1	4	5	20	3	12	16	64	-	-	-	-	-	-
Number of years of service													
1 - 5		6- 10		15-11		16 - 20		21 - 25		26 - 30		31 or more	
.Ne	ratio	.Ne	ratio	Ne	ratio	Ne	ratio	Ne	ratio	.Ne	ratio	.Ne	ratio
14	56	6	24	5	20	-	-	-	-	-	-	-	-

Regarding age, the majority of the respondents are from the age group (25-30) and their percentage reached (56%). This indicates the maturity of the sample and is logical evidence of the sample's experience in administrative work, as experience and skill are often linked to the accumulation of knowledge resulting from human aging. .

As for gender, it appeared that the majority of the respondents were male, as their percentage reached (68%). This is an indicator that reflects the nature of Iraqi society, in which leadership positions are often male.

Regarding academic achievement, the highest percentage of the surveyed managers is in the category of those holding a bachelor's degree, which reached (64%).

Regarding the number of years of service, the highest percentage among the respondents is concentrated in the category (1-5), whose percentage reached (56%).

### 3.2 Description and diagnosis of research variables

#### 3.2.1 Knowledge management processes

##### 1- Generating knowledge

Table (2) shows the arithmetic means, standard deviations, and relative frequency distributions of the subvariables indicating knowledge generation, expressed in symbols (X1-X4). The data in Table (2) indicate that (56%) of the individuals surveyed said that knowledge is generated in the college by relying on research departments, as the arithmetic mean for this reached (3.44) with a standard deviation of (1.08) for the variable (X1).

(56%) of the individuals surveyed believe that the college will obtain knowledge by controlling its accumulated experience in the knowledge bases and the minds of its individuals and applying it, as the arithmetic mean of the variable (X2) was (3.44) and the standard deviation was (1.08). (84%) of the individuals surveyed for the variable (3X) believe that the college gains knowledge through its expertise and experiences with other companies.

The work and its development into results with an arithmetic mean of (4.28) and a standard deviation of (0.93). (68%) of the individuals surveyed believe that the process of generating knowledge in college occurs by enhancing individuals' ability to confront and solve their problems and urging them to distribute their ideas within the college, with a mean of (3.80) and a standard deviation of the variable (4X) of (0.76).

**Table (2) Frequency distributions, percentages, arithmetic means, and standard deviations for the knowledge generation variable**

	Strongly agree		I agree		neutral		I do not agree		I strongly disagree		Arithmetic mean	standard deviation
Variables	-5		-4		-3		-2		-1			
	.Ne	%	.Ne	%	.Ne	%	.Ne	%	.Ne	%		
X1	3	12	11	44	7	28	2	8	2	8	3.44	1.08
X2	4	16	10	40	4	16	7	28	-	-	3.44	1.08
X3	13	52	8	32	2	8	2	8	-	-	4.28	0.93
X4	4	16	13	52	7	28	1	4	-	-	3.8	0.76

## 2- Store knowledge

Table (3) shows the arithmetic means, standard deviations, and relative frequency distributions of the subvariables indicating knowledge storage, expressed in symbols (X5-X8). The data in Table (3) indicate that (64%) of the individuals surveyed for the variable (X5) agree that the college should study the knowledge that must be stored based on an analysis of its benefit and the costs of storing it, with an arithmetic mean of (3.60) and a standard deviation of (0.95). (80%) of the individuals surveyed indicate for the variable (6X) that the method of storing knowledge in college includes collecting, classifying, and arranging knowledge in its own knowledge bases, with a mean of (3.88) and a standard deviation of (0.78).

Also, (64%) of the individuals surveyed for the variable (X7) agreed that the college should follow modern methods based on electronic computers in storing its knowledge, as the arithmetic mean reached (3.72) and the standard deviation (0.84). (88%) of the individuals surveyed indicate that our company resorts to storing knowledge with the aim of providing it in a timely manner and with summary reports, which reduces the effort of searching for it, with a mean of (4.20) and a standard deviation of (0.76) regarding the variable (X8).

**Table (3) Frequency distributions, percentages, arithmetic means, and standard deviations for the knowledge sadness variable**

	Strongly agree		I agree		neutral		I do not agree		I strongly disagree		Arithmetic mean	standard deviation
Variables	-5		-4		-3		-2		-1			
	.Ne	%	.Ne	%	.Ne	%	.Ne	%	.Ne	%		
X5	3	12	13	52	6	24	2	8	1	4	3.6	0.95
X6	4	16	16	64	3	12	2	8	-	-	3.88	0.78
X7	4	16	12	48	7	28	2	8	-	-	3.72	0.84
X8	9	36	13	52	2	8	1	4	-	-	4.2	0.76

## 3- Distribution of knowledge

Table (4) shows the arithmetic means, standard deviations, and relative frequency distributions of the subvariables indicating the distribution of knowledge, which are expressed in symbols (X9-X12). The data in Table (4) and with regard to the variable (X9) indicate that (84%) of the respondents' answers indicate that our company disseminates, shares, and transfers knowledge to where it can be benefited from, with a mean of (4.20) and a standard deviation of (0.70). (52%) of the individuals surveyed agree that disseminating knowledge in our company will lead to providing individuals' expertise and experiences to others so that they can benefit from them in performing their work. The respondents' answers to the variable (X10) came with an arithmetic mean of (3.68) and a standard deviation of (0.94).

(84%) of the individuals surveyed agree that the process of disseminating knowledge in our company leads to raising individuals' personal knowledge, skills, and experience, as the arithmetic mean and standard deviation of the variable (11X) reached (4.12) and (0.66), respectively. While (76%) of the individuals surveyed believe that the process of disseminating knowledge in the college is carried out efficiently by training individuals at the hands of specialists with a knowledge background, as the arithmetic mean and standard deviation of the variable (X12) reached (3.96) (0.97), respectively.

**Table (4) Frequency distributions, percentages, arithmetic means, and standard deviations for the k**

	Strongly agree		I agree		neutral		I do not agree		I strongly disagree		Arithmetic mean	standard deviation
Variables	-5		-4		-3		-2		-1			
	.Ne	%	.Ne	%	.Ne	%	.Ne	%	.Ne	%		
X9	9	36	12	48	4	16	-	-	-	-	4.2	0.7
X10	6	24	7	28	10	40	2	8	-	-	3.68	0.94
X11	7	28	14	56	4	16	-	-	-	-	4.12	0.66
X12	8	32	11	44	3	12	3	12	-	-	3.96	0.97

knowledge distribution variable

#### 4- Application of knowledge

Table (5) shows the arithmetic means, standard deviations, and relative frequency distributions of the sub-variables indicating the application of knowledge, which are expressed in symbols (X13-X16). The data in Table (5) indicate that with regard to the variable (X13), (44%) of the individuals surveyed agreed that the efficient and effective application of knowledge depends on the size of the contribution by college officials, with a mean of (3.44) and a standard deviation of (0.76). Also, (56%) of the individuals surveyed agreed regarding the variable (X14) that the process of applying knowledge in college allows individual and group learning processes to create new knowledge and greater opportunities for learning. This came with an arithmetic mean and standard deviation of (3.40) and (0.95), respectively. (68%) of the individuals surveyed agree with the variable ((X15), as they believe that the college uses methods to apply knowledge, such as internal teams with multiple experiences and training by experienced experts, with a mean of (3.56) and a standard deviation of (0.96).

(48%) of the individuals surveyed agree that the college relies on applying knowledge at the appropriate time in order to gain a competitive advantage, as the arithmetic mean and standard deviation of the variable (X16) reached (3.32) (1.24), respectively.

**Table (5): Frequency distributions, percentages, arithmetic means, and standard deviations for the application of knowledge variable**

	Strongly agree		I agree		neutral		I do not agree		I strongly disagree		Arithmetic mean	standard deviation
Variables	-5		-4		-3		-2		-1			
	.Ne	%	.Ne	%	.Ne	%	.Ne	%	.Ne	%		
X13	2	8	9	36	12	48	2	8	-	-	3.44	0.76
X14	2	8	12	48	5	20	6	24	-	-	3.4	0.95
X15	2	8	15	60	4	16	3	12	1	4	3.56	0.96
X16	5	20	7	28	6	24	5	20	2	8	3.32	1.24

#### 3.2.2 Entrepreneurial orientation

Table (6) shows the arithmetic means, standard deviations, and relative frequency distributions of the sub-variables indicating entrepreneurial orientation, expressed with symbols (X17-X26). The data in Table (6) indicate that (84%) of the individuals surveyed agree regarding the variable (X17) that the college is making distinguished efforts to create new opportunities, with a mean of (4.40) and a standard deviation of (0.76). (80%) of the individuals surveyed also indicate their agreement regarding the variable (18 (X19) That the college innovates exceptional solutions to new problems, with an arithmetic mean of (3.04) and a standard deviation of (1.27). (88%) of the individuals surveyed regarding the variable (X20) agree that the college adopts the principle of rewards and motivation to support outstanding ideas, and this came with an arithmetic mean and standard deviation of (4.20) (0.64), respectively.

(80%) of the individuals surveyed for the variable (21X) provided that the college works to spread creative awareness among individuals, units, and departments, with a mean of (3.88) and a standard deviation of (0.78).

Also, (64%) of the individuals surveyed for the variable (X22) agree that the college is constantly keen to introduce new services and technologies compared to other colleges, as the arithmetic mean was (3.72) and the standard deviation was (0.84).

(88%) of the individuals surveyed indicate that our college has the ability to reach out to the community and deliver its services, with a mean of (4.20) and a standard deviation of (0.76) regarding the variable (X23). Regarding the variable (X24), (84%) of the respondents' answers indicate that a teacher provides new administrative services or methods, with a mean of (4.20) and a standard deviation of (0.70). (52%) of the individuals surveyed agree that the college should accomplish new work or find exceptional solutions, as the respondents' answers to the variable (X25) came with an arithmetic mean of (3.68) and a standard deviation of (0.94). When (76%) of the individuals surveyed believe that our college has the desire to work



independently to deliver the vision, the arithmetic mean and standard deviation of the variable (X26) reached (3.96) (0.97), respectively.

**Table (6) Frequency distributions, percentages, arithmetic means, and standard deviations for the entrepreneurial orientation variable**

	<b>Strongly agree</b>		<b>I agree</b>		<b>neutral</b>		<b>I do not agree</b>		<b>I strongly disagree</b>		<b>Arithmetic mean</b>	<b>standard deviation</b>
<b>Variables</b>	<b>-5</b>		<b>-4</b>		<b>-3</b>		<b>-2</b>		<b>-1</b>			
	<b>.Ne</b>	<b>%</b>	<b>.Ne</b>	<b>%</b>	<b>.Ne</b>	<b>%</b>	<b>.Ne</b>	<b>%</b>	<b>.Ne</b>	<b>%</b>		
<b>X17</b>	14	56	7	28	4	16	-	-	-	-	4.4	0.76
<b>X18</b>	7	28	13	52	4	16	1	4	-	-	4.04	0.78
<b>X19</b>	3	12	9	36	1	4	10	40	2	8	3.04	1.27
<b>X20</b>	8	32	14	56	3	12	-	-	-	-	4.2	0.64
<b>X21</b>	4	16	16	64	3	12	2	8	-	-	3.88	0.78
<b>X22</b>	4	16	12	48	7	28	2	8	-	-	3.72	0.84
<b>X23</b>	9	36	13	52	2	8	1	4	-	-	4.2	0.76
<b>X24</b>	9	36	12	48	4	16	-	-	-	-	4.2	0.7
<b>X25</b>	6	24	7	28	10	40	2	8	-	-	3.68	0.94
<b>X26</b>	8	32	11	44	3	12	3	12	-	-	3.96	0.97

#### 4. Conclusions and suggestions

##### 4.1 conclusions

- 1- The topic of leadership is considered one of the modern and important topics in the business world today.
- 2- Knowledge management contributes to employing the unemployed workforce, alleviating poverty and unemployment in rural and urban areas, and encouraging incomes for the largest number of the population.
- 3- Despite the many and diverse forms of leadership, it aims to strengthen the innovative capacity of knowledge management by increasing its initiative and willingness to embrace risks, to provide outstanding performance.
- 4- Knowledge management has a positive impact on entrepreneurial orientation, as it contributes to increasing the growth of projects to become medium and large projects in the future.

##### 1.2 Proposals

- 1- The necessity of adopting leadership by the Iraqi government and educational institutions in all its dimensions, contents, and directions in Iraqi organizations in general and industrial organizations in particular because of its developmental, economic, and social impact on the country.
- 2- The possibility of adopting the concepts, principles, and foundations of entrepreneurship in small and medium-sized businesses and working to activate them by entrepreneurs, business owners, and new and innovative projects in order to achieve the goals of development, sustainability, and creating wealth at the level of the individual, society and the state as a whole.
- 3- Benefiting from international and Arab experiences, models, and practices in establishing and operating business incubators of all types and forms, aiming to activate the entrepreneurial environment for businesses and projects at their various levels, forms, and sectors.
- 4- The necessity of legislating and issuing government policies and programs that support small enterprise entrepreneurship in the country by the Economic Committee based on scientific, methodological and practical foundations in formulation and implementation.

#### References:

1. Hanna, Rasha Duraid, 2011, Using information and communications technology in knowledge flow applications, unpublished master's thesis, College of Administration and Economics, University of Mosul.
2. Al-Hafiz, Ali Abdel-Sattar Abdel-Jabbar, 2010, Some requirements for knowledge management processes, an analytical study in the criminal and misdemeanor courts at the Presidency of the Nineveh Federal Court of Appeal (proposed program), unpublished doctoral thesis, College of Administration and Economics, University of Mosul.
3. Al-Zatma, Nazal Muhammad, 2011, Knowledge management and its impact on performance excellence, an applied study on intermediate technical colleges and institutes operating in the Gaza Strip, unpublished master's thesis, College of Commerce, Islamic University, Gaza.

4. Salman, Qais Hamad, 2010, comprehensive knowledge management and its impact on organizational effectiveness according to the intellectual capital approach, unpublished doctoral thesis, College of Administration and Economics, University of Baghdad.
5. Al-Safoor, Nour Diya Aziz Fathi, 2010, A proposal to design an expert system to support knowledge management strategies by application to the General Company for the Manufacture of Pharmaceuticals and Medical Supplies in Nineveh, unpublished master's thesis, College of Administration and Economics, University of Mosul.
6. Al-Khairo, Qutaiba Subhi Ahmed, and Jalal Sahar, 2010, The impact of knowledge management components on administrative leadership processes: An analytical study of the opinions of a sample of administrative leaders at Al-Mansour General Company for Construction Contracting, Fourth Scientific Conference, Al-Zaytoonah Private University of Jordan.
7. Al-Rifai, Ghaleb Awad and Yassin, Saad Ghaleb, 2010, The role of knowledge management in reducing credit risks: a field study, Fourth Annual Scientific Conference, Al-Zaytoonah Private University of Jordan.
8. Al-Shammari, Intezar Ahmed Jassim, and Al-Douri Moataz Suleiman Abdel-Razzaq, 2011, Knowledge management and its role in enhancing the strategic decision-making process: An exploratory study of the opinions of a sample of managers of industrial companies in Baghdad, Fourth Annual Scientific Conference, Al-Zaytoonah Private University of Jordan.
9. Al-Obaidi, Raafat Assi, and Al-Jarrah, Adwaa Kamal, 2012, The role of knowledge management processes as an introduction to achieving outstanding performance, Fourth Scientific Conference (Creativity and Outstanding Performance), University of Applied Sciences.
10. Titi, Khader Misbah Ismail, 2010, Knowledge Management Challenges, Techniques and Solutions, first edition, Dar Al-Hamid for Publishing and Distribution, Amman.
11. Al-Ali, Abdel Sattar, Qandalji, Amer, and Al-Omari, Ghassan, 2012, Introduction to Knowledge Management, third edition, Dar Al-Masirah for Publishing, Distribution and Printing, Amman.
12. Al-Maliki, Majbal Lazem Muslim, 2010, Knowledge Engineering and Management in the Digital Environment, first edition, Al-Raq Publishing and Distribution Foundation, Amman.
13. Al-Qahtani, Salem bin Saeed, 2009, Knowledge Management and its Applications in the Real and Aspirational Saudi Public Sector, International Conference on Administrative Development, Institute of Public Administration.
14. Titi, Khader Misbah Ismail, 2010, Knowledge Management "Challenges, Technologies and Solutions", first edition, Dar Al-Hamid for Publishing and Distribution, Amman.
15. Al-Zaghir, Reham Muhammad, Rashid Salman, 2014, The impact of knowledge management on the relationship between business intelligence and organizational performance, an applied study in the Jordanian commercial banking sector, unpublished master's thesis, College of Business, Middle East University.
16. Danuk, Ahmed Abdullah, 2020, The joint impact of academic knowledge companies' strategy and knowledge marketing tools in building a smart university, a case study at the University of Mosul, unpublished doctoral thesis, College of Administration and Economics, University of Mosul.
17. Abdullah, Hatem Ali, and Ramadan, Abdel Fattah Hassan, 2019, The impact of knowledge management capabilities in reducing the causes of organizational silence, an analytical study of the opinions of a sample of Tikrit University teachers, Tikrit Journal of Administrative and Economic Sciences, Volume 15, Issue 46.
18. Al-Bahadli, Salman Saddam Muhammad, 2014, The role of entrepreneurial leadership in the process of investing in human resources, an analytical study in the formations of the Iraqi Ministry of Transport, Master's thesis in Business Administration, College of Administration and Economics, Al-Mustansiriya University.
19. Khalaf, Hassan, Saeed, 2010, The relationship of entrepreneurial leadership to administrative creativity among academic department heads at the Islamic University of Gaza, Master's thesis in Business Administration, College of Commerce, Islamic University, Gaza.
20. Al-Sharif, Talal Abdul Malik 2004, Leadership styles and their relationship to job performance from the point of view of employees in the Emirate of Mecca, Master's thesis (unpublished), College of Graduate Studies, Naif Arab University.
21. Abdullah, Nahida Ismail and Abdul Razzaq, Omar Muhammad Sobhi, 2009, "The Impact of Leadership Styles on Building the Organization's Strategic Capabilities: An Analytical Study of the Opinions of Managers in a Sample of Industrial Organizations in Nineveh Governorate," Tanmiya Al-Rafidain Magazine, Volume (31), University of Mosul.
22. Al-Otaibi, Nawaf bin Safar bin Mufleh, 2008, Leadership styles and personal characteristics of school principals and their relationship to the morale of teachers in the Taif Educational Governorate: An analytical field study. Master's thesis (unpublished), College of Education, Umm Al-Qura University.
23. Al-Ajili, Muthanna Zahim Faisal, 2012, The impact of business incubators in achieving the entrepreneurship requirements of small and medium enterprises: applied research, Master's thesis, College of Administration and Economics, University of Baghdad.

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24. Al-Zoubi, Ali Falah, 2011, Factors affecting creativity as an entrepreneurial approach in light of the knowledge economy: a comparative study between Algeria and Jordan, Zarqa University of Jordan, Journal of Economic and Administrative Research, Issue (10).
  25. Al-Nawfal, Sultan Ahmed and Al-Murad, Nibal Younis and Najeeb, Saba Muhammad 2011, The extent of the availability of entrepreneurial characteristics (a study of the opinions of a sample of heads of scientific departments at the University of Mosul), Future Research Journal, Al-Hadba University College, Volume (4), Issue (33-34).
  26. Abu Fara, Youssef, 2010, Entrepreneurial Marketing in Business Organizations, The Tenth Annual International Scientific Conference, Entrepreneurship in the Knowledge Society, Al-Zaytooniyah University of Jordan, Faculty of Economics and Administrative Sciences, Amman.
  27. Shuaib, Bonwa and Awatif Khalout, 2011, The impact of applying information technology in achieving leadership in modern organizations, Faculty of Economics, Management Sciences and Commercial Sciences, Abu Bakr Belkaid University, Tlemcen.