

# Impact of Knowledge Management Processes on Organizational Performance: An Empirical Study in Institute of Technical Learning –Iraq

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## Abstract

Even though knowledge in itself is nothing new, but how to effectively management it is a concern of all organizations, inclusive of university. In Iraq, there is concern by universities to manage knowledge scientifically in order to keep pace with scientific development and to reduce the gap between Iraq's universities and those of developed countries. Knowledge is considered the main distinguishing factor of organization success and is seen as the foundation of competitive advantage. In fact, despite the wide literature on knowledge management processes in western organizations, empirical studies are so rare in relation to Iraqi universities. From this point comes this research to deal directly with the knowledge management relationships with performance of colleges in the Institute of Technical Learning. To achieve this, a sample of 33 department's chairs was chosen. The study found significant correlations between knowledge management processes and organizational performance indicators.

Survey findings highlight the following points: The surveyed departments' chairs show practical interest toward knowledge management processes. This is apparent through considerable attention to scientific research, creativity and innovation, and retain knowledge and retrieval it at the appropriate time.

Findings also disclosed a significant impact of knowledge management operations on the indicators of organizational performance. Finally, research concluded with necessary suggestions that emphasize the importance of having research and development units in the colleges studied to generate new knowledge that can be used in enhancing organizational performance.

**Keywords:** knowledge management processes, organizational performance, departments' chairs, Institute of Technical Learning

## 1. Introduction

Good implementation of knowledge management's processes is considered one of the basic requirements for effective organizational performance. Despite the fact that knowledge has become a valuable resource and asset in all organizations, inclusive of university, studies on knowledge management processes and their impact on organizational performance are limited in Iraq. Hence, this research is a good venue to study this theme. Knowledge management, when appropriately functional, plays an important role in achieving organizational goals. This research tries to investigate the attitudes of 33 departments' chairs working in the colleges of the Institute of Technical Learning (ITL) in Nineveh City – Iraq, toward the implementation of knowledge management processes and their impact on college performance.

The paper is organized into five sections. Following this introduction, a literature review on knowledge management processes (section 2) and organizational performance (section 3) is provided. Section 4 describes the methodology used is detailed in section 5. Conclusions and recommendations are outlined in section 7. The main findings emerging from the empirical survey are presented in section 6.

## 2. Literature Review

### 2.1. Knowledge Management Processes

Nowadays economic survival is vital. For that organizations need to have one of three assets: knowledge, cheap labor, natural resources. Out of these three, knowledge is the only one that can be maintained in the long run. (Neumann, and Tomé, 2011). Knowledge is not only an important resource for an organization, but also it serves as a basic source of competitive advantage. Thus, knowledge management (KM) is a natural function in human organizations. It is a system that integrates people, processes and technology to achieve sustainable results by increasing performance through learning (Tan and Nasurdin, 2011). With effective and efficient KM process, most companies claims it will be helpful to organizational performance. Researchers have identified many aspects to knowledge management process: acquire, collaborate, integrate, experiment (Leonard, 1995); capture,

transfer, and use (DeLong, 1997); Bennett and Gabriel (1999) viewed KM as a process that involves the capture, storage, dissemination, and use of knowledge. Cui et al. (2005) also mention that knowledge management capabilities consist of three: knowledge acquisition, knowledge conversion, and knowledge application. More recently, Seleim and Khalil (2007) classify KM processes into five dimensions; knowledge acquisition, knowledge creation, knowledge transfer and knowledge application. An examination of these various characteristics in the light of college requirements enables us to group knowledge management processes into four interrelated processes; Generation Process, Storage Process, Publication Process, and Application Processes, (Gold et al., 2001).

### **2.1.1. Knowledge Generating (KG)**

All healthy organizations generate knowledge. While interacting with other environments and organizations they absorb information, combine it with their experience, values and internal rules, turning into knowledge, and take actions based on it (Zaim, 2006). KG includes all activities which bring to light knowledge which is new, whether to the individual, to the group, or to the world. Knowledge codification is the capture and representation of knowledge so that it can be re-used either by an individual or by an organization. Knowledge KG activities in an academic department come within the scientific research, creativity and innovation. According to Bhatt, (2000) the knowledge generation process does not necessitate new knowledge generation. In many circumstances, organizations may prefer to acquire knowledge from other sources and adopt it for their own use. Organizations acquire knowledge in several ways. Imitation, benchmarking, replication, substitution, purchasing, outsourcing and discovering are some of the various methods of knowledge acquisition.

### **2.1.2 Knowledge Storage (KS)**

KS processes include retention of knowledge and conservation and sustain, organize, and facilitate access to and retrieval. This process represents organizational memory of the organization. According to Warren and Davies, (2000: 13), Knowledge should be available in the proper time and brief reports, written in a language understood by workers in order to be more valuable and reduce the effort to search for.

There are three major ways by which organizational knowledge can be storage

(Almaadida, 2005: 64); First, selection of valuable knowledge that worthy of conservation. Second, store of knowledge through conservation, documentation and archiving. Third, reload this memory from time to time.

Storage and codification of knowledge is not only important for an effective use of knowledge but also it is important for re-using it when needed so that the knowledge in question is going to belong to the organization rather than the knower (Nemati, 2002).

### **2.1.3. Knowledge publishing (KP)**

Knowledge is increasingly seen as the most valuable asset of the modern organization

A key challenge that is emerging for such organizations is how to encourage KP. Sharing knowledge is about communicating knowledge within a group of people. What is important in KP is to ensure that information reached the individual who is looking for it (in our case, the researcher) in the right time. According to (Stair & Reynolds, 2003: 208), the goal of knowledge management is to make people register and then share their knowledge with the rest of the members. The underlying purpose is to utilize available knowledge to improve the group's performance. The sharing process consists of collecting, organizing and conversing knowledge from one to another.

Despite the large number of techniques that support the dissemination process, the knowledge management working to change the behavior of individuals by making their expertise and experience available for others to make use of it. Dissemination is only achievable and successful in organization if there is a shared vision and common understanding among the members of what it is one wants to disseminate together with a way of describing that to those who stand to benefit from it (Friesl, et, al.2011).

### **2.1.4. Knowledge Application (KA)**

It is the final process in the knowledge management processes, and considered the most important one among these processes. Without application, KA is useless. The value of knowledge expanded when it is shared. KA refers to the actual use of knowledge that has been captured or created. Sufficient care is necessary to achieve efficient application of knowledge by making it available to those who need it. Moreover, application of knowledge should aim to achieve organization's goals which actualize the growth and adaptation for it.

## **2.2. Organizational Performance (OP)**

Organizational performance has become the basic concepts of all organizations, because of its gross effects (positive and negative) on the survival and growth of the organization and enhances its competitiveness. That OP is a measure of long-term goals of the organization, which is to survive and adapt and grow in order to maintain a competitive advantage. In fact organizational performance is the result of all activities that are expected to meet pre-set targets (March & Sutton, 1997:698).

The importance of performance for the business organizations can be seen through the following points (Deisler, 2007: 36): First; successful organizations are characterized by their ability to enhance the elements of OP, Ingredients, as this often stems from the knowledge processes that reflect the nature of leadership and the values of diversity and continued development. Second; the survival of organizations in a particular market is linked to the level of performance and therefore, interest organizations and focus on the issue of performance will remain constant as long as you want to stay active in the business environment.

### **2.2.1. Dimensions of Organizational Performance**

A careful examination of many studies dealt with organizational performance measureable revealed that researchers have used different indicators in measuring organization output. Some of these indicators are financial and other behavior. Taking the nature of educational organizations into our account, this research adopts the following specific dimensions for measuring organizational performance of colleges in the institution of technical education: personal behavior, scientific performance, social responsibility, job relations. Let us examine each one of them here;

#### **2.2.1.1. Personal Behavior**

It is the natural conduct of a person while s/he interacts with others. It represents the output of a group of deeply rooted features inside the person .Different factors are forming this behavior; generic, social, cultural and environmental. (Gibson, 2009: 321). This group of factors defines the similarities and differences in the behavior of the person. This means that the person has a group of psychological physical traits that determines his identity through personal behavior. According to (Davis, 1977 : 225) personal behavior includes the natural and acquired characters from the motives, tendencies, passions, models, performance, beliefs and habits as the person relations became obvious with its social situation, while the researcher sees that the personal features differentiate from one to another in which the motives, tendencies values, trends and the person's personality develops and reconstructs through social reaction and adept with the environment which enhance his performance inside the organization.

#### **2.2.1.2. Scientific Performance**

Field evidence suggests that the success of educational organizations is closely tied to key performance reflects the outcome of the scientific achievements carried out by faculty in their respective fields. This outcome reflects the natural efforts of individual and group or team, within the organization. Researchers such as (Tom & Mary, 1999:13) confirm that the scientific performance has varied trends of both research studies or in writing, translation and access to participate in conferences and scientific symposia and extension courses set up ways to communicate with civil society organizations, as well as to supervise graduate and contribute to the development strategies for the future.

#### **2.2.1.3. Social Responsibility**

Social responsibility is the obligation of an organization's management toward the welfare and interest of the community in which it operates .It is the ethical behavior of organization towards the society .Thus it represents how an organization interacts between with society. Organizations can contribute in the development of society in a wide range of social activities such as fighting corruption, improving education, creating jobs and other (Holmes, 1985: 435). The success of organizations in the exercise of social responsibility depends on its continuous commitment to three criteria:

First, organization should respect its employees (internal environment) and their contribution to satisfying the needs and wishes of the members of the community (external environment). Second, community supports and backing of the organization. Third, protect the environment by providing products that serve the community and address various environmental problems.

#### **2.2.1.4. Functional Relations**

Functional relations (horizontal and vertical) reflect the level of interaction between management and employees to work towards common goals. The strength of work relationships enable the organization to cope with the burden and contain the challenges and thus achieve a good cohesion and to promoting confidence. In the case of fluctuation of the functional relationships it takes negative and the curve shows the amount of ill will between the parties to work. The continued success of the functional relations depends on factors such as these; First, the

size of the functional relations. Second, Characteristics of employees involved in these relations. Third, level of ties and relations between these employees. Fourth, environmental conditions that surrounding employees.

### **2.3. Knowledge Management Processes and Organizational Performance**

Contribution of knowledge management in the final results of the organizational performance cannot be overlooked. There is no doubt that the knowledge generation, storage and retrieval capability for Distribution, and thus applied in the organization to develop the skills of individuals to do business better. Certainly, this requires building functional relationships that reflect effective communication and persuasion among employees in a manner reveals a degree of bids knowledge that could be an attempt to draw the paths that lead to better organizational performance. Such behaviors reflect the personal responses toward situations laid down by the process of knowledge generating. While giving performance practical visualization about the possibility of applying knowledge, it also shows that the functional relations roles performed by the variables of knowledge management entirely in the activation of interaction and dialogue. Absence of ties produces low levels of dialogue and debate. Finally, the impact of knowledge management processes upon social responsibility is profound.

## **3. Research Methodology**

### **3.1 Research Problem**

The problem to be tackled in this research can be framed in the following questions:

- 1- To what extent does the knowledge management processes contribute in supporting and enhancing the organizational performance of the department chairs in ITL.
- 2- Do the knowledge management processes' dimensions form an entrance to make real conceptions to deal with organizational performance indexes of the department heads in ITL.

### **3.2 Research Objectives**

This research attempts to specify and diagnose the relationship and the effect between the knowledge management processes and organizational performance through concentrating on the followings:

- 1- Revealing the dimensions of knowledge management processes in ITL.
- 2- Exploring levels of organizational performance according to the attitudes of the departments' chairs in ITL.
- 3- Defining the relation, and the effect, between knowledge management processes the organizational performance of the department's heads.

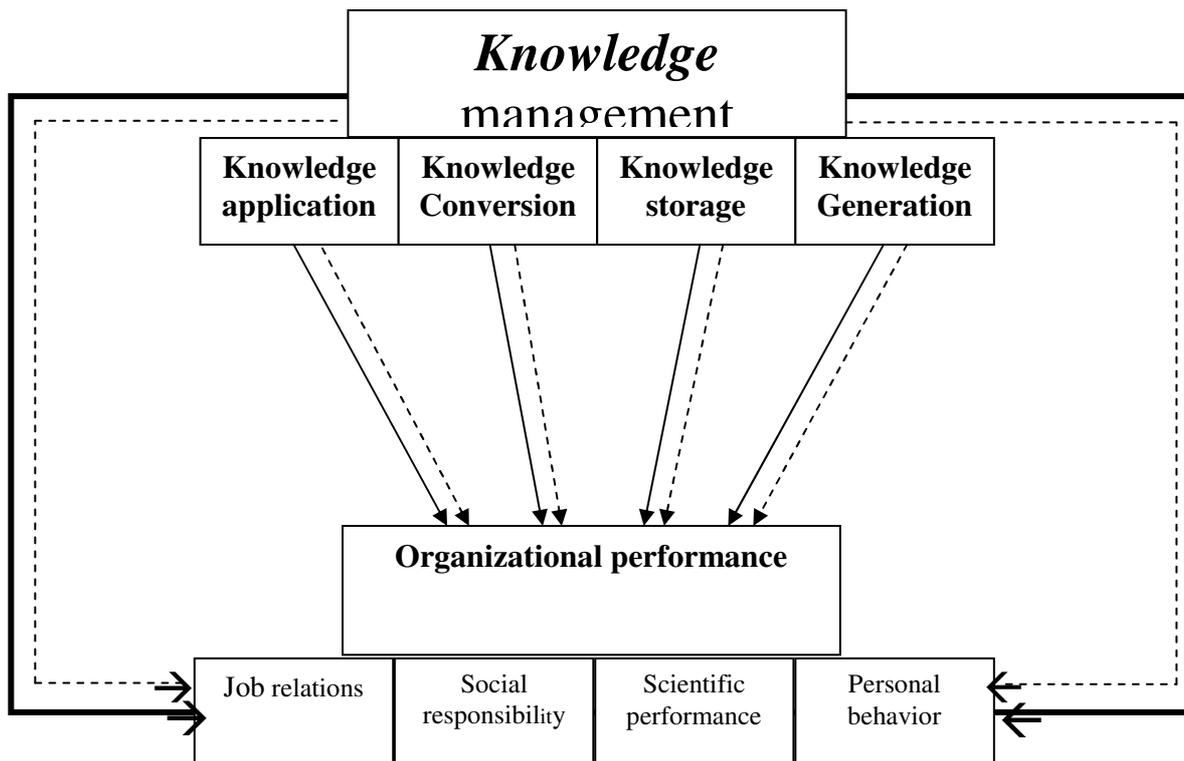
### **3.3 Research Hypotheses:**

This research has two main hypotheses;

- 1- There is a significant relationship between knowledge management processes and organizational performance.
- 2- Knowledge management processes are significantly affect organizational performance of the colleges investigated in this research.

### **3.4 Research Model**

Based on literature review and hypotheses developed, a model, to guide the study was developed as in figure (1):



### 3.5 Data Collection;

After careful review of the relevant researches and in the light of the basic objectives of the current study, the researchers developed a questionnaire to collect data from the departments' chairs in the institution. The questionnaire included two parts: the first one deals with knowledge management processes dimensions represented in (generated, saving, publishing, application). The second part tackles the organizational performance indexes which represented in (personal behavior, scientific performance, social responsibility, and functional relations). The participants are asked to choose their answers from Likert scale including five statements between "5: strongly agree" and "1: strongly Disagree". The questionnaire was distributed to (33) departments chairs working in (technical, engineering and management colleges) in the Institute of Technical Learning in Nineveh Governorate. Table (1) shows the Demographic characteristics of these department chairs;

As seen from the Table 1, males are more than females and accounted for approximately (78.8%) of the total sample. The age group (45 and over) is the highest percentage (78.8%). Again, (69.6%) of the departments chairs have a Masters degree; this reflects the extent of benefit from the knowledge management processes to enhance their performance.

The academic rank of instructors formed the highest category (42.4%), and this reflects their ability to generate knowledge and then storing, dissemination and application in organizational performance. Nearly (91%) of the research sampled have formed (15 years and over), and this is further proof on the experience and skill. With regard to the number of conferences, seminars, the table shows that (45.5%) of the Heads of have receded posts in the category of class (1-4), the highest ratio, followed by class (5-8) as formed (30.3%). This good ability to participate in conferences and seminars indicates their ability to effectively manage knowledge and then to utilize them in the organizational performance.

**Table (1); Demographic characteristics of Departments chairs**

	Personal characteristics	Number	%
<b>1</b>	Gender;		
	<b>Male:</b>	<b>26</b>	<b>78.8</b>
	<b>Female:</b>	<b>7</b>	<b>21.2</b>
<b>2</b>	Educational Level;		
	<b>Bachelor;</b>	<b>--</b>	
	<b>Higher Diploma;</b>	<b>1</b>	<b>3.1</b>
	<b>Master;</b>	<b>23</b>	<b>69.6</b>
	<b>PhD;</b>	<b>9</b>	<b>27.3</b>
<b>3</b>	Academic Rank;		
	<b>Assistant Instructor:</b>	<b>10</b>	<b>30.3</b>
	<b>Instructor:</b>	<b>14</b>	<b>40.4</b>
	<b>Assistant Professor:</b>	<b>9</b>	<b>27.3</b>
	<b>Professor</b>	<b>--</b>	<b>---</b>
<b>4</b>	Years of service;		
	<b>1-5</b>	<b>--</b>	<b>---</b>
	<b>6-10</b>	<b>1</b>	<b>3.1</b>
	<b>11-15</b>	<b>2</b>	<b>6.1</b>
	<b>16-20</b>	<b>30</b>	<b>90.8</b>
<b>5</b>	Number of conferences and seminars;		
	<b>1-4:</b>	<b>15</b>	<b>45.5</b>
	<b>5-8:</b>	<b>10</b>	<b>30.3</b>
	<b>9-12:</b>	<b>3</b>	<b>9.1</b>
	<b>13 and more:</b>	<b>5</b>	<b>15.1</b>

#### 4. Descriptive Analysis of Research Variables

##### 4.1 Analysis of Knowledge Management Processes (generation, storage, dissemination and application)

Analysis showed that most of the department chairs have positive attitudes towards knowledge management processes. The calculated mean (M) pending between (4.36 and 3.99). Note that the proposed mean is (3.00) and standard deviation (SD) between (0.77 and 0.59). This shows high levels of agreements among the heads of departments of the colleges to which they belong are keen on knowledge generation, storage, distribution and application. In the area of knowledge generation analysis showed that (84%) agreed with the indicators of this variable (items 1-5), with M= 4.15 and SD= 0.77. Among the most prominent items that contributed to the enrichment of this approach is the question number (4) which states that the colleges included in this research depend on training programs to enhance the experience and knowledge of the faculty, M= 4.30 and SD= 0.68. In addition, the question number (2) stipulates that colleges get the knowledge to enhance the experience accumulated in the knowledge bases, minds of its faculty members, and application. When we move to another process, namely the storage process, we discover that (80%) of the Heads departments see that the storage of knowledge enable colleges to benefit from it. This is reinforced by M= 3.99, and SD= 0.74. The variable number (7) of the most important variables that enriched this approach as states that the organization adopts the methods of modern technology at the store of knowledge and agreement (93.9%), and is supported by M= 4.27 and SD= 0.57.

In the area of knowledge dissemination (items 11-15), we find that (93.4%) of the Departments chairs convinced of the possibility of transferring knowledge between faculty members to help them in completing their work and achieve college goals, M= 4.29 and SD= 0.59. Embodies this variable number (11), which is the most prominent question that promotes this approach. Most of the Heads departments agreed that this approach helps individuals achieve their college goals, M= 4.39 and SD= 0.49.

Question No. (14) comes in second place and by the consent of (97%), which states that training is one of the most effective means of disseminating knowledge in the organization, M= 4.48, and SD=0.56. Finally, the application of knowledge is the ultimate goal of KM as of no value to knowledge without proper application in the workplace. This is true in our case, where we found M= 4.36 and SD = 0.60.

is higher than the

proposed mean (3.00) and standard deviation (0.69). When we examine the coefficient of variation we discover it is around (16.58%), it indicates that the majority of the department chairs have positive and clear attitude toward KM, as shown in the Table (2):

**Table (2): Results of Descriptive Analysis of Knowledge Management Processes**

Variables	Mean M	Standard Deviation SD	Coefficient of Variance CV
Knowledge generation (Items :1-5)	4.03	0.77	19.10
Storage of knowledge (Items:6-10)	3.99	0.74	18.54
Distribution of knowledge (Items :11-15)	4.29	0.59	13.75
Application of knowledge (Items :16-20)	4.36	0.60	15.60
Knowledge Management Processes	4.16	0.69	16.58

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**Indicators**

As illustrated formerly, the organizational performance is the ability of an organization to achieve its goals through the behaviors of employees, their functional relations, scientific achievements as well as their contribution in the welfare of the society. In this research we collected data on organizational performance at the college level for the dimensions of the personal conduct, performance of scientific, social responsibility and the functional relations by(20) items of the questionnaire. The results were as follows:

**4.2.1 . Personal Conduct (Items: 21-25)**

This dimension reflects the personal behavior exercised by the Departments Heads to achieve the paramount performance of the College. To understand this conduct we devoted (5) items. The analysis in Table (3) showed that the mean of this dimension is (4.59) with SD= 0.63 .This indicates constructive agreement of the Heads of Departments. The members investigated have positive commitment to realize the requirements of their jobs. They accept their bosses advices and authentic to their colleges. It is worth mentioning that the coefficient of variation did not exceed (13.73%). The most important variable that enriched this constructive situation is item (25), which explains that the department heads trusting their competencies and have high confidence in their faculty members. This is supported by the M= 4.69, and SD= 0.46.

**4.2.2. Scientific Performance (Items :26-30)**

As for research activities that are embodied in the participation of Departments chairs in conferences and seminars and the use of modern technologies in teaching .We have been allocated five items to such activities (26 -30). The analysis in table (3) indicated positive trends of the respondents regarding these items, M= 4.39, and the SD= 0.64, with CV= 14.57%.

**4.2.3 . Social Responsibility (Items: 31-35)**

Paragraphs of this axis explain that the Heads of Departments have positive attitudes towards the community in which they are operating. Respondents are vividly contributing to range of activities including consultancy, lectures, employment contracts, and the continuing quest to find out the needs of the community. The average mean of items is (4.10) and SD= 0.57, with CV % 13.90. The most important question that contributed to enriching this axis is the question (34) which states that the Head of the Department provide all s/he knows of

scientific knowledge to serve the community as the percentage of agreement between the Heads of Departments was (97%), M = 4.54, and SD= 0.65 .

#### 4.2.4. Functional Relations (Items: 36-40)

Positive interaction between the heads of departments and their faculty members through a genuine group relations and make them feel they are a vital part in the organization led to improve organizational performance. The respondents hold most positive trends in this area, where the mean of the paragraphs of this axis (4.51) and a SD =0.54, and CV not to exceed (11.97%). The best item that reinforced this positive approach is item (40), which indicates that heads of departments feel happy when working with staff members. The percentage of agreement was (96.9%) and the mean (4.60) and SD =0.55. Then came the item (38) to suggest that (94%) of the department heads doing their best to accomplish the needs of their colleagues at work. M= 4.48 and SD= 0.71. This is a positive sign to expand the communication with employees and provide opportunities for them and tell them they comprise critical element in achieving the goals required of them.

Taken as a whole, as indicated in Table (3) that the majority of Heads of Departments trends were positive toward the dimensions of organizational performance, where all means were greater than the proposed mean (3.00). And even standard deviations were all low and did not exceed (0.63). It is understood that there is a common position between the heads on the performance of the college .It represents the direct result of their daily behavior scientific achievements and interactions with faculty members in addition to their sense of responsibility and moral obligation to serve the community.

Variables	Mean M	Standard Deviation SD	Coefficient of Variance CV
Personal conduct (Items :21-25)	4.59	0.63	13.73
Scientific Achievement (Items:26-30)	4.39	0.76	14.57
Social Responsibility (Items :31-35)	4.10	0.57	13.90
Functional Relations (Items :36-40)	4.51	0.54	11.97
Dimensions of Organizational Performance	4.40	0.59	13.40

**Table (3): Results of descriptive analysis of the dimensions of organizational performance in colleges**

#### 5. Testing hypotheses:

Complement the operations of the descriptive and diagnostic-based data analysis and description of the variables of knowledge management (generation, storage, distribution and application) as independent variable and the dimensions of organizational performance (personal behavior, scientific performance, social responsibility, and the functional relations) as dependent variable, we formulated research hypotheses and show the following:

***Hypothesis 1: There is significant correlation between the variables of knowledge management and organizational performance variables.***

Figures in Table (4) indicate overall significant correlations between the processes of knowledge management and indicators of organizational performance. Correlation values ranged between (0.32) and (0.46). There are significant relations among the generation of knowledge and indicators of organizational performance, except the index of personal conduct, have shown a relationship is a significant value (0.18). This explains to us that the generation of knowledge is the outcome of overlapping range of subjective factors and external factors. Needless to say that the impact of external ones might be more closely associated with them compared to subjective factors and that in itself a reflection of the nature of behaviors practiced by the departments' chairs.

Looking again to figures of the same table we discover a significant correlation between knowledge storage and all indicators of organizational performance and these correlations ranged between (0.33) and (0.42). This relationship showed that the storage of knowledge is an organizational memory of the organization.

also there are significant correlations between the dimensions of the dissemination of knowledge, social responsibility and the functional relations, noting that it was less relevant and insignificant on indicators (personal behavior, performance, scientific accomplishment), as were the correlations (0.22), (0.28), respectively. This explains that the process of dissemination of knowledge in the studied colleges is related to the

decisions of the administration rather than to the academic chairs so that the personal conduct did not take the extent of the actual impact of the correlation. The same is also true in respect to the scientific achievements, since this performance is a reflection of the communication of individual and in a manner reveals the efforts, It is not hard to have a relationship between the nature of scientific performance and the dissemination of knowledge, because the impression provided by the non- scientific performance does not explain what is really happening in the dissemination of knowledge about the process, so the relationship was not significant.

It is also clear from Table (4) that there are significant correlation between knowledge application and indicators of organizational performance. All this explains the importance of the application process to enhance organizational performance through its indicators using the learning processes of individual and group participation in training courses inside and outside these colleges and paying interest in scientific research, community service and interaction with others. Based on the above results of correlations we accept this hypothesis in the studied colleges.

Dimensions of Organizational Performance	Knowledge Management Processes				Total Dimension
	Generation	Storage	Publication	Application	
Personal Conduct	0.18	0.33*	0.22	0.69*	0.36*
Scientific Performance	0.39*	0.42*	0.28	0.33*	0.32*
Social Responsibility	0.57*	0.37*	0.48*	0.41*	0.46*

**Table (4) Results of Correlations between Knowledge Management processes and Organizational Performance Dimensions**

DF. (4.28) P \* 0.05 N = 33

**Hypothesis 2: Knowledge management processes are significantly affect organizational performance of the colleges investigated in this research.**

The figures in the table (5) show significant effect of knowledge management processes on all indicators of organizational performance. These operations are significantly affecting the personal conduct of the departments' heads; calculated  $F= 3.14$ , is greater than the value of scheduled. It is explained by  $R^2 = 0.33$ . The results of multiple regression also reveal significant effect of knowledge management processes in social responsibility; calculated  $F=2.90$ , with  $R^2= 0.62$ , the largest value. Table (5) also shows the ability of department heads in interacting with their colleagues at work for the generation, storage, dissemination and application of knowledge. In terms of  $R^2$ , 0.93 of the influence belongs to knowledge management processes. Based on the above results of multiple regressions between independent variables and dependent, the researchers accept the second hypothesis which states: There is an effect between the dimensions of knowledge management processes and indicators of organizational performance.

**Table (5) Effect of knowledge management processes on organizational performance indicators**

Organizational Performance Dimensions <i>Dependent variables</i>	Knowledge Management Processes <i>Independent variables</i>				R <sup>2</sup>	F calculated	F scheduled
	Generating	Saving	Publishing	Applying			
Personal behavior	4.25	4.55	4.28	4.98	0.33	3.14*	2.69
Scientific performance	5.19	4.20	4.65	4.58	0.59	2.93*	2.69
Social responsibility	4.55	4.88	4.56	5.07	0.62	2.90*	2.69
Functional relations	4.29	5.21	4.14	4.02	0.93	3.31*	2.69

DF = (4.28) P\* 0.05 N = 33

## 6. Conclusions and Recommendations

This paper attempts to explore KM processes and their impacts on organizational performance through an empirical investigation carried out in the colleges of Institutes of Technical Learning located in Nineveh governorate in Iraq. The main preliminary findings of the survey indicate significant interest by the Heads of Departments toward knowledge management processes (generation, storage, dissemination and application), this is apparent through considerable attention to scientific research, creativity and innovation, and retain knowledge and retrieval it at the appropriate time. Our findings also reveal significant correlations between the variables of knowledge management processes and performance indicators, which discloses to what extensions the effects of knowledge management are in organizational performance. Field results analysis also disclose a significant impact of knowledge management operations on the indicators of organizational performance, which encourages the heads of departments to enhance their performance and develop a spirit of cooperation, to build a solid base of knowledge on which to base the process of storage, distribution and application efficient.

On the basis of the above findings, it is possible to outline some recommendations for top management of this institution;

Since there is a significant level of knowledge management activities in every university, then these activities must be identified accurately and integrated with college's main goals in order to be a springboard for better performance. Opportunities should be prearranged to heads of departments to contribute to the identification of criteria and indicators of organizational performance. This would give them considerable motivation to achieve it.

Moreover, heads of departments should also be encouraged to overcome the weaknesses in their performance and enhance the strengths by urging the Institute to encourage their participation in conferences, seminars and training programs to develop their skills and improve their performance.

Finally, initiating research and development units in educational organizations is quite demanding to provide new employees with the knowledge and information that can be used to enhance organizational performance.

## References

- Almaadida, Mohamed and Essam Ahmed. (2005) "The impact of work ethic in the promotion of knowledge management," a study of the opinions of a sample of faculty members, Mosul University, unpublished Master Thesis, Faculty of Business and Economics, University of Mosul.
- Bennett, R. and Gabriel, H. (1999) "Organizational Factors and Knowledge Management within large marketing departments: an empirical study", Journal of Knowledge Management, Vol. 3 Iss: 3, pp.212 - 225
- Bhatt, Ganesh D., (2000) "Organizing knowledge in the knowledge development cycle", Journal of Knowledge Management, Vol. 4 Iss: 1, pp.15 - 26
- Davis, K. (2009), Human Behavior at Work, New York: McGraw- Hill.

- Delong, D. (1997) "Building the knowledge-based organization: How culture drives knowledge behaviors," Working Paper, Ernst & Young's Center for Business
- Dessler, Gary. (2010), "Human Resource Management", New Jersey, Prentice-Hall,
- Friessl, Martin., Sonja A. Sackmann, Sebastian Kremser, (2011) "Knowledge sharing in new organizational entities: The impact of hierarchy, organizational context, micro-politics and suspicion", Cross Cultural Management: An International Journal, Vol. 18 Iss: 1, pp.71 – 86
- Gibson, James. (1994), Organization: Behavior, Structure, Processes, Boston: Irwin.
- Gold, Andrew H.; Malhotra, Arvind and Segars, Albert H. (2001), "Knowledge Management: an organizational capabilities perspective", Journal of Management information systems, Vol. 18, Issue 1, PP. 185-215
- Holmes, sundral.( 1985)."Corporate social, performance and present Areas of commitment" academy of Management Journal vol.20,
- Kubaisi, Salah al-Din. (2005), knowledge management, Cairo: Arab Organization for Administrative Development.
- March, James G & Sutton, Robert I.(1997), Organizational performance as A dependent Variable, Organization Science, Vol.(8), No .(6), November-December
- Nemati, H. (2002) "Global Knowledge Management: Exploring a Framework for Research." Journal of Global Information Technology Management, Vol. 5, Issue 3, pp. 1-11.
- Neumann, G and Tomé, E. (2011). "The Changing Role of Knowledge in Companies: How to Improve Business Performance through Knowledge" The Electronic Journal of Knowledge Management Volume 9 Issue 1 (pp57-72),
- Seleim, A. and Khalil, O.(2007), Knowledge Management and Organizational Performance in the Egyptian Software Industry, International Journal of Knowledge Management, Vol.3, No.4.
- Tan, C, L and Nasurdin, A, M. (2011) , Human Resource Management Practices and Organizational Innovation: Assessing the Mediating Role of Knowledge Management Effectiveness| The Electronic Journal of Knowledge Management Volume 9 Issue 2 (pp155-167)
- Tom Coens & Mary Jonkins. (1999)"Abolishing performance appraisal, Berret\_Koehler publishers, Inc.
- Zaim, Halil.(2006), Knowledge Management Implementation in IZGAZ, Journal of Economic and Social Research, Vol.8, No.2, pp.1-25.

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