
AN EFFECTIVE STUDY AND ANALYZE OF THE KNOWLEDGE MANAGEMENT EFFECT ON EDUCATIONAL SERVICES QUALITY-A FIELD STUDY ON THE AL-IRAQIA UNIVERSITY - POSTGRADUATE STUDIES DEPARTMENT

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Abstract

Knowledge management is one of the basic pillars on which human resources are based, especially in academic institutions. Many researches and studies have been reviewed that are related to knowledge management in academic institutions around the world. Therefore, this article was written with the aim of studying and analyzing knowledge management and the main effect(s) on educational service(s) quality at Al-Iraqia University, Postgraduate Studies Department. In this study, there are six dimensions for knowledge management as follow: knowledge generation, storage, and distribution. Also, quality of educational services. The study community in this article included 40 faculty members at the university - Postgraduate Studies Department. An effective questionnaire is prepared and then it is distributed to the sample members. The number of returned-back questionnaires was 30. For analytical and statistical purposes, the descriptive analytical approach was used with the help of the Statistical Package for Social Sciences (SPSS) program to derive results. These results showed that there is a very clear moral effect with statistical significance, especially in knowledge management and its dimensions. This article also provides some interest recommendations, also adopting plans to develop and highlight the skills and capabilities of faculty members, as well as increasing interest in the quality of educational services by offering student support services by activating the Academic Guidance Committee for Students as well as the Student Activities Committee.

Keywords: Knowledge Management, Quality of Educational Services, SPSS, Human Resources.

Introduction

Researchers have addressed the concept of knowledge management from several angles. Some have addressed it from a technical perspective, while others have addressed it from a cultural or social perspective, each according to his own opinion and orientation. Some have defined it as “the embodiment of an organizational process that explores the process of combining the ability of information technologies to process data and the ability to deposit and innovate for people” [1 ,2].

Knowledge management has also been defined as “the collection processes carried out by business institutions for information and data with the aim of organizing and applying them to their operations in an effective manner that contributes to enhancing their competitive position in the market” [3 – 5].

Modern institutions, departments and companies of some types are directly facing a large-wave of the rapid transformation(s) and comprehensive change(s) which is sweeping the today worlds’, the interesting notably the information and the related revolution of the recent technologies, which depends on knowledge and the optimal use of flowing information, resulting from the great progress in computer technology and the global communications network [6 – 8].

Knowledge management is a factor in which both the individual and the institution in the long term, as knowledge has become a substitute for the factors of production, and the intangible assets of knowledge make the success of institutions lie in their ability to diagnose knowledge, generate it, store it, distribute it and apply it in a way that achieves added value for them and gives them the ability to keep up with what is happening in a competitive environment that focuses on the continuous renewal of information and knowledge, and this is through the production of high-quality goods and services [9 – 11].

This leads us to talk about the main quality of the educational service(s) in higher education institutions, as education is one of the main needs of all human societies, and interest in the issue of the quality of higher education has become a challenge in the high competition between higher education organizations as a result of globalization, and accordingly, educational institutions must take it into account and include it in their programs, and adopt it to improve educational policies in the rapid revolutions of knowledge, and Al-Iraqia University, like other universities, has become required to pay attention to the quality of education and training in order to rise to the top, and to be classified in advanced ranks according to international standards. Therefore, this article attempts to shed light from the point of view of faculty members on the impact of knowledge management and its dimensions (knowledge generation, knowledge storage, knowledge distribution) on the quality of educational services and to study and analyze those effects to know how to raise the level and quality of educational services.

In relation to the study problem in this article, the objectives of this study are summarized as follows: addressing the theoretical concepts related to knowledge management and the education quality, identifying the application stage(s), testing the relationship and impact between knowledge management and enhance the education quality, presenting some relevant recommendations in order to provide supporting for improving the quality of higher education services through the position of knowledge management, and finally focusing on the most important concepts related to knowledge management and performance in the quality of higher education [12 – 16].

Knowledge management processes are the primary source of data and information for the organization, which it relies on to make decisions, solve problems, and distinguish itself from other organizations in the competitive market [17, 18].

1. LITURATURE REVIEW

Al-Ababneh et al. studied and analyzed the hypotheses about the necessity of using the latest methods to carry out the task of education management [19]. They concluded that it is the engine the main growth in the society.

Al-Dmour et al. reviewed a study on an important aspect of knowledge management for the purpose of developing the process of knowledge transfer and management in one of the educational institutions affiliated with the State of Jordan [20]. The most prominent objectives were investigated, which are the role of accounting information quality (AIQ).

Adhikari et al. explored the initiatives the achievement(s) of knowledge management for SDGs [21]. In addition to investigating the enabling factors and analyzing and studying the obstacles that hinder the work of integrating knowledge management to enable higher education institutions to achieve the SDGs. As a final important point, this study provides a clear practical perspective for knowledge management initiatives in higher education institutions to achieve the SDGs.

Mansoor et al. reviewed analytical studies to investigate, analyze and study the importance of the impact of leadership towards knowledge for the purpose of analyzing the sustainable service quality of institutions and universities affiliated with higher education [22].

Budur et al. proposed cognitive approaches to propose an effective relationship among some main parameters which are: knowledge-sharing (KS), innovative-culture (IC), quality of work-life (QWL), and innovative-behaviors (IB) in universities and higher education institution(s) in Erbil, Sulaymaniyah, and Duhok, Iraq [23].

2. STUDY METHODOLOGY

Figure (1) shows the main procedure and steps of the proposed knowledge management processes.

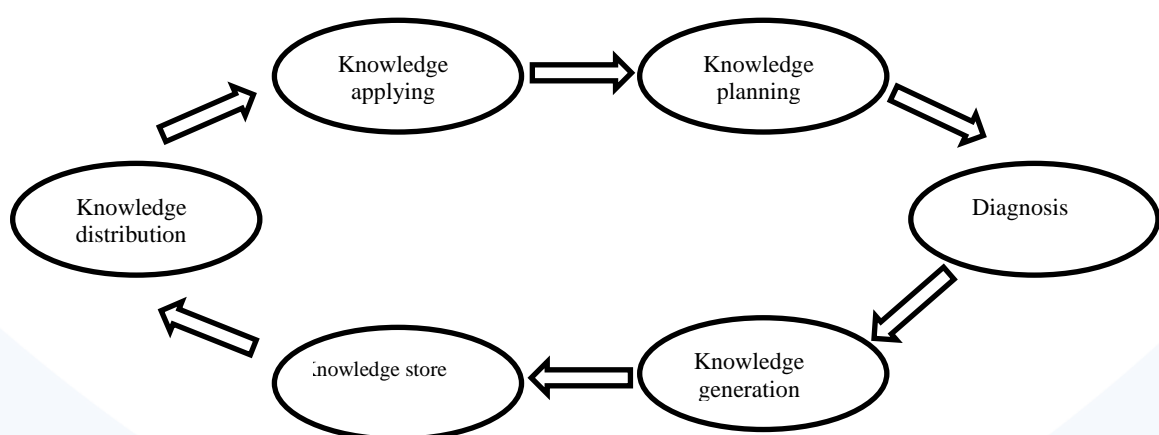


Figure 1: The proposed knowledge management processes.

Based on figure (1) and the study problem in this article, the most important hypothesis is shown as follows:

No any effect of statistical-significant at the significance-level ($0.05 \geq \alpha$) for knowledge management on the quality of educational services

Below some sub-hypotheses from this main hypothesis:

1. No effect of statistical-significant at the significance-level ($0.05 \geq \alpha$) for knowledge generation.
2. No effect of statistical-significant at the significance-level ($0.05 \geq \alpha$) for knowledge storage.
3. No effect of statistical-significant at the significance-level ($0.05 \geq \alpha$) for knowledge distribution.
4. No effect of statistically significant at the significance-level ($0.05 \geq \alpha$) for knowledge application.

The study in this article based on describing the phenomenon under study with an accurate description, which helps in understanding the relationships between the main variables of the study, analyzing them, and testing their hypotheses. The descriptive analytical approach is also the most widely used in administrative studies and research. In terms of community and sample, the study community and sample in this article are included the following:

1. The study community contain 40 members (teaching staff at Al-Iraqia University – Baghdad).
2. The study sample: contain 40 questionnaires which are distributed to 40 members of teaching staff present at Al-Iraqia University – Baghdad during the period of preparing the study.

Table (1) contain the questionnaires distributed and valid for study individuals.

Table (1): Questionnaires distributed and valid for study individuals.

Distributed Questionnaires	Returned Questionnaires	Valid Questionnaires
40	10	30

The main study variables are divided into two main groups as follow:

1. Independent variables: which are related to knowledge management (knowledge generation, knowledge storage, knowledge distribution).
2. Dependent variable: which is consists of only one variable (quality of educational services).

2.1 The study tools

The study tool consisted of a questionnaire that included “The effects of knowledge management, and included (40) statements. The effective validity of scale was verified and also there was an appropriate degree of internal consistency between the items included in all its aspects. We will discuss each of these steps in some detail.

A- Construct validity of the questionnaire axes: It is standard deviation between: the total-score of all the axes and the total-score of all the axes as shown in Table (2).

Table (2): Correlation-coefficients between: sub-score of each dimension and the total score of all dimensions

The dimension	The dimension content	Relational factor
First	knowledge generation	0.860**
Second	knowledge storage	0.875**
Third	knowledge distribution	0.780**
Fourth	quality of educational services	0.955**

** Correlation coefficient(s): It is statistical-significant at a significance level of (0.1)

* Correlation coefficient(s): It is statistical-significant at a significance level of (0.05)

When reviewing the main output results of internal consistency for all dimensions in Table (1), we find that the cases of correlation of dimensions with the total score for all dimensions are generally high, and that the correlation coefficient(s) were important at the significance-level of (0.01). This result means that the sub-axes have common elements that make them more homogeneous, which is an indication of the strength of the structural validity of the questionnaire.

B- Cronbach's Alpha Coefficient

To analyze and calculate the reliability coefficient of the questionnaire. The Cronbach's Alpha coefficient is calculated. Table (3) shows the reliability results.

Table (3): Correlation coefficients between the sub-score of each dimension and the total score of all dimensions

The dimension	The dimension content	No. of phrases	Alpha factor
First	knowledge generation	7	0.870
Second	knowledge storage	7	0.825
Third	knowledge distribution	7	0.880
Fourth	quality of educational services	15	0.955
General stability		36	0.975

From above table, we find which the alpha (value) of the questionnaire axes reached (0.975), which indicates that the degree of stability between the answers was very high and statistically acceptable. Consequently, it is possible to rely on the entire group without deleting any of the items to reach useful results in this study.

3. RESULTS

This section is divided into two main sub-sections as follows:

3.1.1 Studied variable result

The main results of study variables are divided into two main groups as independent variables results and dependent variables results as follow:

3.1.1.1 Independent variables result

which are related to the knowledge-management (knowledge generation, storage, and distribution). To clarify the independent variable (knowledge management), we use the studied fix dimensions one by one. For each dimension we use the own knowledge variable related to its dimension and its special prepared questionnaire statements and effective related phrases. We used the arithmetic mean and standard deviation by calculating the average of the answers to each of the questionnaire statements, as shown in following tables based on the studied dimensions as follow:

A) Knowledge generation variable

Table (4): Descriptive statistics for knowledge generation variable.

#	Phrases	Mean	Standard Deviation	Result
1	The university attracts creative talents and energies	3.85	0.890	Agree
2	The university encourages faculty members to continue education and develop skills	3.65	0.925	Agree
3	The university is keen to conduct research on an ongoing basis	3.65	1.150	Agree
4	The university works to transform knowledge at the individual level to the collective level	3.50	0.770	Agree
Results		3.65	0.807	Agree

The results in Table (4) showed that: the arithmetic-mean exceeded three (3), that means there is a positive trend towards this variable.

B) Knowledge storage variable

Table (5): Descriptive statistics related to the knowledge storage variable.

#	Phrases	Mean	Standard Deviation	Result
1	The university has an electronic infrastructure for storing knowledge	2.90	1.130	Neutral
2	Information at the university is classified and documented in a way that makes it easy to access	3.10	0.998	Neutral
3	The university relies on the capabilities of its faculty and staff to store knowledge	3.50	1.047	Agree
4	The university has systems that help to retrieve stored knowledge easily	3.22	1.260	Neutral
Results		3.18	0.975	Neutral

The results in Table (5) showed that the arithmetic-mean exceeded the value three (3), that mean there is a positive trend towards this variable.

3.1.1.2 Knowledge distribution variable

Table (6): Descriptive statistics related to the knowledge distribution variable.

#	Phrases	Mean	Standard Deviation	Result
1	The university is keen to hold workshops and seminars to transfer knowledge internally and externally	3.60	0.974	Agree
2	The university encourages experienced and competent faculty members to transfer knowledge to those with less experience	3.45	1.160	Agree
3	The university is keen to issue periodicals and modern publications	3.35	0.990	Neutral
4	The university has a continuous internal communication network to distribute knowledge	3.20	1.055	Neutral
Results		3.40	0.846	Neutral

The results in Table (6) showed that the arithmetic-mean exceeded the value three (3), that means there is a positive trend towards this variable.

3.1.1.3 Dependent variable result

which is consists of only one variable (quality of educational services).

Table (7): Descriptive statistics related to the variable of quality of educational services.

#	Phrases	Mean	Standard Deviation	Result
1	The university follows a fair mechanism in testing the teaching staff	3.60	1.214	Agree
2	The university adopts plans to develop faculty members	3.38	1.226	Agree
3	The university has easy-to-use mechanisms for students to communicate with the teaching staff	3.61	1.123	Agree
4	The university has clear mechanisms that enable new students to learn about the nature of the university	3.37	1.165	Agree
5	The university has mechanisms for documenting and ensuring the integrity of data	3.40	1.145	Neutral
6	The university has a mechanism for providing students with an introductory brochure about student support services	3.58	1.100	Neutral
7	The university has effective mechanisms for updating data electronically on a regular basis	3.70	1.215	Neutral
8	The activities are supervised by an experienced and competent official	3.28	1.095	Agree
Results		3.49	0.979	Agree

The results in Table (7) showed that the arithmetic mean of this variable exceeded the value three (3), which means that there is a positive trend towards this variable from the point of view of the sample individuals.

3.1.2 Hypothesis test and discussion results

To test the study hypotheses, the correlation coefficient (Pearson) and the regression coefficient were used to make testing emanating from it, and the following decision rule was followed:

- Null hypothesis is accepted if the significant-value greater than the value of (0.05).
- Null hypothesis is rejected if the significant-value less than the value (0.05).
- **Main hypothesis:** No statistical-significantly impacted a significance-level ($\alpha \geq 0.05$).
- **Null hypothesis H0:** No statistical-significantly impacted a significance-level ($0.05 \geq \alpha$).
- **Alternative hypothesis H1:** The statistical-significantly impacted a significance-level ($0.05 \geq \alpha$).

Conclusions

The results show that Al-Iraqia University is interested in generating knowledge through attracting human competencies and creative energies, in addition to its continuous encouragement of faculty members to develop their skills and abilities, and contribute to conducting research on an ongoing basis.

Again, the results show that knowledge storage achieved lower rates than the rest of the dimensions of knowledge management, due to the university's heavy reliance on the minds of faculty members in storing knowledge, in addition to the weakness of the electronic systems and infrastructure that help in storing knowledge and retrieving it easily.

Also, the results show that the educational service(s) quality is high, through the academy's adoption of clear and transparent mechanisms in selecting faculty members in addition to the mechanisms that enable communication between students and faculty members and provide academic guidance.

Finally, the results show the existence of a significant impact of knowledge management in its studied dimensions on the quality of educational services, as the greatest impact was for knowledge application.

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