The Reality of Applying Knowledge Management in Algerian Economic Institutions: Case Study of a Group of Institutions in the City of Setif

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Abstract :

This study aims to determine the set of factors that affect the process of applying knowledge management in the economic institutions in the city of Setif through choosing a sample of (25) institution. The study indicates that the level of the application of the concept of knowledge management differs according to the different nature of the institution, the size of the institution, as well as the gender and age of the directors. The results of the study show the most important factors impeding the application of knowledge management in the economic institutions.

Key words: knowledge, knowledge management, knowledge management processes, knowledge management obstacles.

Jel classification:M1,M15,D83.

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1. Introduction:

Contemporary organizations face a wave of rapid transformations and changes sweeping the world today, foremost of which is the information and technical revolution. This revolution relies on knowledge that has become one of the most important criteria that determines the degree of excellence of organizations.

While the world witnesses rapid changes and intense competition, knowledge and its management constitutes an important element in societies and organizations in light of the growing knowledge economy, which considers knowledge the latest production factor that depend on it in creating a competitive advantage. Given the important role that knowledge management plays, it is of vital importance for organizations to find the best way to implement it.

Algerian organizations, like other organizations in the advanced economies, need to use their knowledge resources to improve their overall performance, achieve competitive gains in light of the openness of the national economy, and move towards strengthening their capabilities in foreign markets.

From this basis, the problem of this research centers on the following question: **What is the reality of knowledge management in Algerian economic organizations?**

The problem of this research is analyzed by answering the following sub-questions:

- What is the level of application of knowledge management in Algerian economic organizations?
- What is the nature of the limited factors that affect the application of knowledge management in Algerian economic organizations?

The problematic:

Research hypotheses: To answer the problem posed, the following hypotheses are put in place:

- The level of knowledge management's application in the organizations being studied varies according to the different organizational factors (size, activity, age) as well as personal factors including (gender, age, experience, and educational level);
- There is a correlation and a statistical significance between the application of knowledge management in the institutions being studied and a set of obstacles (administrative, financial, and cultural).

Research objectives:

This study aims to achieve the following objectives:

- The theoretical concepts of knowledge management and its processes as well as its benefits in the organization;
- Statement of the most important obstacles to the application of knowledge management at the organizations being studied;
- The extent to which the organizations being studied apply knowledge management;
- Find results and suggest solutions to reduce the obstacles of knowledge management in the Algerian economic organizations.

Research approach:

The study relies on the descriptive analytical approach, in terms of collecting and analyzing data, with the survey method. The study is conducted in several economic institutions, through forms that address study variables, and use statistical tools in testing hypotheses.

2.General concepts of knowledge

Because of the economic development that the world witnesses and the great role that knowledge plays in all fields, organizations are forced to adopt knowledge to ensure their survival and continuity in a highly competitive environment and to be distinguished and unique.

2.1 Knowledge

Before giving the definition of knowledge, it is first necessary to distinguish between data, information and knowledge. These concepts may be used sometimes to signify the same meaning; however, there is a difference between each one of them.

- **Data:** comprise facts, observations, or perceptions (which may or may not be correct). (Becerra, Fernendez, & Sabherwal, 2010, p. 17), and they are a set of symbols, it can be qualitative or quantitative used to be kept or communicated. (Ben Chouikha, 2016, p. 19)
- **Information:** is a subset of data, only including those data that possess context, relevance, and purpose. Information typically involves the manipulation of raw data to obtain a more meaningful indication of trends or patterns in the data. (Becerra, Fernendez, & Sabherwal, 2010, p. 18)
- **Knowledge:** has been distinguished from data and information in two different ways. A more simplistic view considers knowledge as being at the highest level in a hierarchy with information at the middle level and data at the lowest level. According to this view,

knowledge refers to information that enables action and decisions or information with direction. (Becerra, Fernendez, & Sabherwal, 2010, p. 18), this action will be understood here in the sense of problem solving. (Claire, 2003, p. 30)

Hence, knowledge is intrinsically similar to information and data, although it is the richest and deepest of the three, and is consequently the most valuable. Based on this view, data refers to bare facts void of context, Information is data in context, Knowledge is information that facilitates action. (Becerra, Fernendez, & Sabherwal, 2010, p. 18).

In addition, it has been described in the modern context as 'information combined with experience, context, interpretation and reflection (Griffiths & Koukpaki, 2012, p. 2), and Popular theorists in the KM field argue there to be two fundamental types of knowledge, tacit and explicit . Explicit knowledge being described as 'knowing that', it is a clear knowledge that can be taught to others and can be easily accessed and transmitted from person to person orally or in writing, and tacit knowledge as 'knowing how'; knowledge that exists within the mind of the individual or group collective therefore and is difficult to articulate or extract. (Griffiths & Koukpaki, 2012, p. 2) and (Waltz, 2003, p. 64).

2.2. Characteristics of knowledge

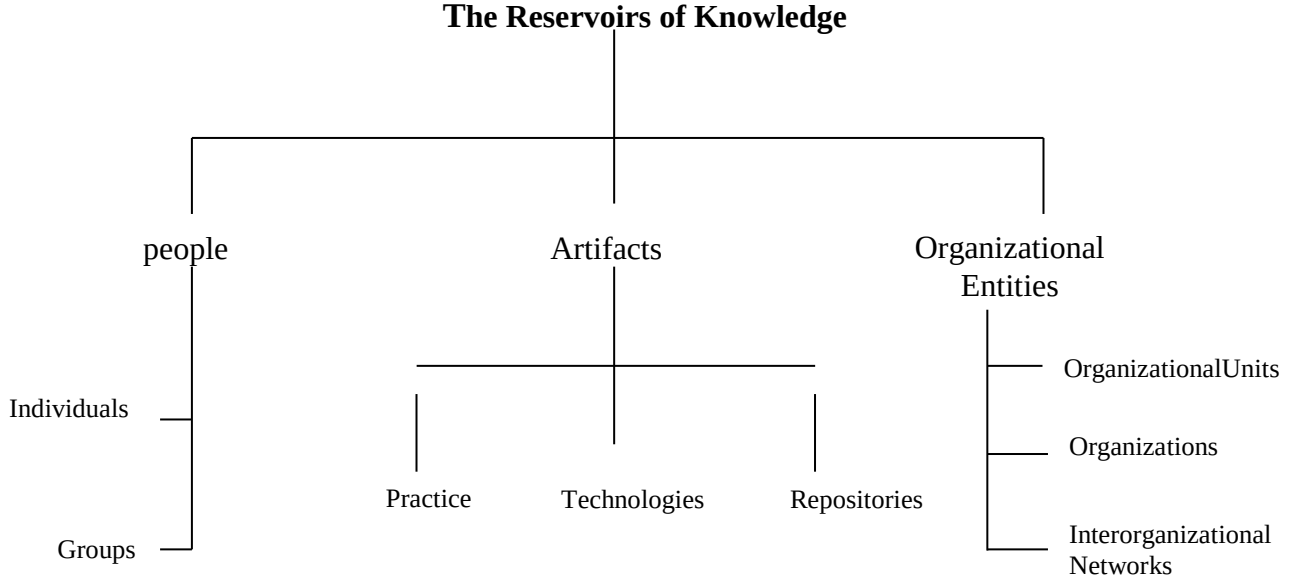
The following taxonomy of knowledge has been expressed in the Knowledge Management literature: (Ameur & Seraa, 2019, p. 289)

- Knowledge cannot easily be stored : Knowledge is something that resides in people's minds rather than in computers. Unlike raw material, knowledge usually is not coded, audited, inventoried, and stacked in a warehouse for employees to use as needed. It is scattered, messy, and easy to lose;
- To use the flow of data/information we must develop effective ways to make the input of and access to information easy and to sort the useful from the useless. We must develop systems where people are able to "navigate" effectively. This can be made by storing the information in different data bases and make it possible for people to cross-reference and link documents speedily and easily;
- Information has little value and will not become knowledge until it is processed by the human mind. Knowledge involves the processing, creation, or use of information in the mind of the individual. Although information is not knowledge, it is an important aspect of knowledge. The process begins with facts and data, which are organized and structured to produce general information. The next stage involves organizing and filtering this information to meet the requirements of a specific community of users, producing contextual information. Next, individuals assimilate the contextual information and transform it into knowledge. This transformation process is affected by individuals' experiences, attitudes, and the context in which they work. The final stage is behavior, unless information and knowledge lead to an informed decision or action, the whole process becomes invalidated;
- Knowledge becomes meaningful when it is seen in the larger context of our culture, which evolves out of our beliefs and philosophy.
-

2.3. Locations of knowledge

Knowledge resides in several different locations or reservoirs, which are summarized in Figure (01). These reservoirs consist of people, including individuals and groups; artifacts, including practices, technologies, and repositories; and organizational entities, including organizational units, organizations, and interorganizational networks. It is explained in details in the next paragraph: (Becerra, Fernendez, & Sabherwal, 2010, p. 31)

Figure (01) :The Reservoirs of Knowledge



Source: Irma Becerra and others **, Knowledge Management systems and processes**, ME sharpe, Inc, New york, 2010, p32.

2.3.1. Knowledge in people

- **Knowledge stored in individuals**: This is the knowledge that an individual possesses. The knowledge stored in individuals is the reason why several companies continually seek ways to retain knowledge that might be lost because of individuals retiring or otherwise leaving the organization;
- **Knowledge stored in groups:** knowledge resides within groups because of the relationships among the members of the group. When three individuals have worked together for a long time, they instinctively know each other's strengths and weaknesses and understand the other's approach. The knowledge stored in groups is not equal to the sum of knowledge gatheredat the individual level, but rather is the result of that interaction and solidarity.

2.3.2 Knowledge in artifacts

- **Practices**: knowledge is stored in practices, organizational routines, and sequential patterns of interaction. In this case, knowledge is embedded in procedures, rules, and norms that are developed through experience over time and guide future behavior;
- **Technologies**: information technologies and computer-based information systems can store knowledge in raw form (data and information) and even relationships (delivery times);

- **Knowledge repositories**: Knowledge repositories could either be paper based such as books, papers, and other documents, or electronics.

2.3.3. Knowledge in organizational entities

- **Organizations:** The norms, values, practices, and culture within the organization, and across its organizational units, contain knowledge that is not stored within the mind of any one individual. The way in which the organization responds to environmental events is dependent, therefore, not only upon the knowledge stored in individuals and organizational units but also in the overall organizational knowledge that has developed through positive and negative experiences over time.
- **Interorganizational relationship:** organizations often learn from their customers' experience with products about how these can be improved. They can also learn about new products that might be appealing to customers;
- **Organizational unit:** Here knowledge is formed by informal relationships and this unit over time forms its own knowledge shaped by that interaction.

3.General Concepts of knowledge management

According to the great role that knowledge plays, its good management is more than important for organizations so that they can take advantage of available opportunities and face various threats of the external environment.

3.1. Knowledge management

It is defined as a set of processes, principles, and techniques allowing the creation, organization, dissemination, use and exploitation of the company's knowledge. (Barbaroux, Attour, & Schenk, 2017, p. 17). It is also a systemic management approach for the knowledge, know-how and skills, collecting and organizing explicit and tacit knowledge in order to create value and helps the company to achieve its objectives of growth. (Balmisse, 2005, p. 4)

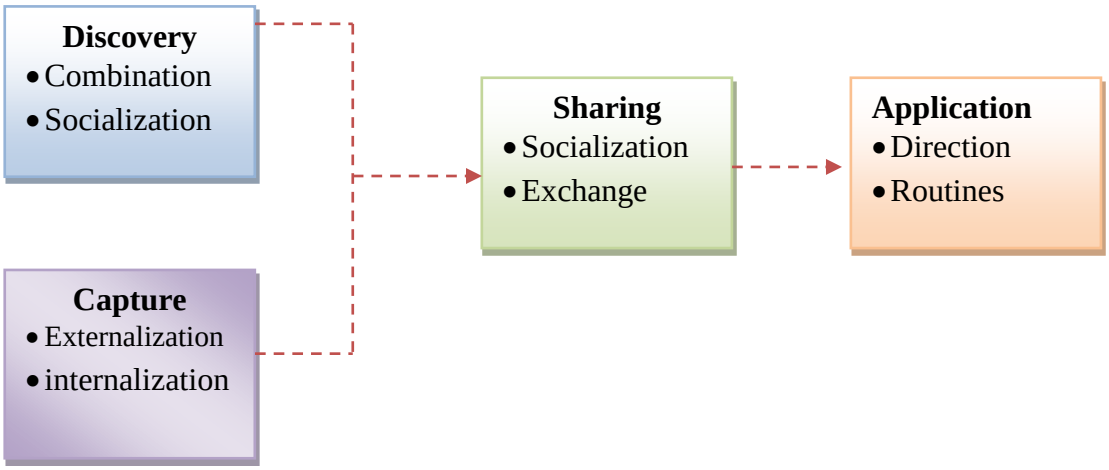
It is also defined as performing the activities involved in discovering, capturing, sharing, and applying knowledge to enhance, in a cost-effective fashion, the impact of knowledge on the unit's goal achievement. (Becerra, (Becerra, Fernendez, & Sabherwal, 2010, p. 56)

As summary, we can say that knowledge management is the process of collecting and organizing explicit and tacit knowledge, and working on building new knowledge through disseminating, distributing, sharing and applying it in administrative activities to achieve an additional value.

3.2. Knowledge management processes

Knowledge management relies on four main kinds of KM processes. As shown in Figure(02), these include the processes through which knowledge is discovered or captured. It also includes the processes through which this knowledge is shared and applied. It is well explained in the next paragraph (Becerra, Fernendez, & Sabherwal, 2010, p. 56)

Figure (02): knowledge management processes



Source: Irma Becerra and others, **Knowledge Management systems and processes**, ME Sharpe, Inc. New York, 2010 ,p57.

3.2.1. **Knowledge discovery:** defined as the development of new tacit or explicit knowledge from data and information or from the synthesis of prior knowledge. The discovery of new explicit knowledge relies most directly on combination, whereas the discovery of new tacit knowledge relies most directly on socialization.

- **Combination**: Through integration of multiple streams of explicit knowledge, new explicit knowledge is created either incrementally or radically.
- **Socialization:** it is the creation of new tacit knowledge and the synthesis of tacit knowledge across individuals, usually through joint activities rather than written or verbal instructions.

3.2.2. Knowledge Capture: the process of retrieving either explicit or tacit knowledge that resides within people, artifacts, or organizational entities. Furthermore, the knowledge being captured might reside outside the organizational boundaries including consultants, competitors, customers, suppliers, and prior employers of the organization's new employees and through Nonaka externalization and internalization help capture the tacit knowledge and explicit knowledge respectively.

- **Externalization:** involves converting tacit knowledge into explicit forms such as words, concepts, visuals, or figurative language. It helps translate individuals' tacit knowledge into explicit forms that can be more easily understood by the rest of their group.This is a difficult process because tacit knowledge is often difficult to articulate.
- **Internalization:** is the conversion of explicit knowledge into tacit knowledge. It represents the traditional notion of learning. The explicit knowledge may be embodied in action and practice so that the individual acquiring the knowledge can re-experience what others have gone through.

3.2.3. Knowledge sharing: is the process through which explicit or tacit knowledge is communicated to other individuals. Moreover, it means effective transfer, so that the recipient of knowledge can understand it well enough to act on it.

- **Socialization:** The same process of knowledge discovery occurs in the case of new knowledge, or already existing knowledge. The difference lies in the way it is used.

- **Exchange:** It is used to communicate or transfer explicit knowledge among individuals, groups, and organizations.

3.2.4. Knowledge application: Knowledge contributes most directly to organizational performance when it is used to make decisions and perform tasks. It depends on the processes of knowledge discovery, capture, and sharing, as shown in Figure (02)for effective application in decision-making, and task performance. In applying knowledge, the party that makes use of it does not necessarily need to comprehend it. All that is needed is that somehow the knowledge be used to guide decisions and actions. Therefore, knowledge utilization benefits from two processes routines and direction that do not involve the actual transfer or exchange of knowledge between the concerned individuals but only the transfer of the recommendations that is applicable in a specific context.

- **Direction**: refers to the process through which the individual possessing the knowledge directs the action of another individual without transferring this knowledge. Direction involves the transfer of instructions or decisions and not the transfer of the knowledge required to make those decisions. This preserves the advantages of specialization and avoids the difficulties inherent in the transfer of tacit knowledge.
- **Routines:** involves the utilization of knowledge embedded in procedures, rules, and norms that guide future behavior. It takes time to form and it depends on the process of repetition and practice.

3.3. The importance of KM today

The major businesses drivers behind today's increased interest in and application of KM lie in four key areas: (Kimiz, 2005, p. 18)

- **Globalization of business**: Organizations today are more global multisite, multilingual, and multicultural in nature;
- **Leaner organizations:** We are doing more and we are doing it faster, but we also need to work smarter as knowledge workers, adopting an increased pace and workload;
- **Corporate amnesia:** We are more mobile as a workforce, which creates problems of knowledge continuity for the organization and places continuous learning demands on the knowledge worker. We no longer expect to spend our entire work life with the same organization;
- **Technological advances**: we are more connected. Advances in information technology not only have made connectivity ubiquitous but also have radically changed expectations. We are expected to be "on" at all times, and the turnaround time in responding is now measured in minutes, not weeks.

Therefore, it is necessary for organizations to recognize that knowledge management and creative processes are the means of having a strong competitive position under harsh, difficult and rapidly changing of the environment.

3.4. The benefits of knowledge management

Knowledge management provides benefits to individual employees, to communities of practice, and to the organization itself. The following three-tiered views of KM help emphasize why KM is important today.

Table(01): The benefits of knowledge management

For the individual	For the community of practice	For the organization
- Helps people do their jobs and save time through better decision-making and problem solving. - Builds a sense of community bonds within the organization. - Helps people to keep up to date. - Provides challenges and opportunitiesto contribute.	- Develops professional skills. - Promotes peer-to-peer mentoring. - Facilitates more effective networking and collaboration. - Develops a professional code of ethics that members can follow. - Develops a common langage.	- Helps drive strategy. - Solves problems quickly. - Diffuses best practices. - Improves knowledge embedded in products and services. - Cross-fertilizes ideas and increases opportunities for innovation. - Enables organizations to stay ahead of the competition better. - Builds organizational memory.

Source : Kimiz Dalkir, **Knowledge Management in Theory and Practice,** Elsevier Inc, London, 2005,p20.

3.5. Obstacles of knowledge management

There are several factors impeding the application of knowledge management in organizations that can lead to knowledge management failure: (Arqawi, Al hila, Samy, & Al Shobaki, 2018, p. 4)and (Arqawi, Al hila, Abu Naser, & Al Shobaki, 2018, p. 35)

- The absolute perception of knowledge as being outside the minds of individuals, while most implicit knowledge lies in their minds;
- Lack of awareness of the importance and role of implicit knowledge and discouraging its manifestation;
- Relying on knowledge stored in knowledge bases, and not paying attention to the flow of knowledge and the new knowledge;
- Intense centralism and fear of a job by a centralized management approach may not help to transfer and share knowledge among the staff of the organization and the source of such centralization is sometimes a fear of a job;
- Knowledge management is not included in the organization's strategic plans, which reduces its ability to recognize the value of knowledge management and the need to provide a system for it;
- Low level of participation of decision-making;
- The existence of negative organizational conflicts;
- Weak documentation of implicit knowledge (experiences, skills and creations) and discouragement to show them;
- Lack of qualified human resources to perform knowledge management tasks;
- Lack of support from senior management.

More over, there is another classification of these obstacles into Internal and External obstacles:

Internal obstacles: (Zyngier, 2002, p. 925)

The greatest obstacle in moving forward with a knowledge use strategy is the management **culture of the organization:**

- Organizations that have a current culture of believing that they are already good at sharing knowledge;
- Maintenance of organizational power associated with keeping knowledge to oneself (knowledge storage);
- The co-operative cultural aspects of a KM strategy require a strategy to change management where it is used as a remedy for the cultural obstacles.

Another obstacle associated with **the structure of management** in an organization that inhibit the progress of a KM strategy is:

- Traditional hierarchical organization of a few main people, who have the knowledge but will not share, disseminate or delegate it.

Additional obstacles to be mentioned:

- The philosophy of KM not being well understood;
- The need for the development of criterion for KM;
- Organizational leadership that is not prepared to s KM;
- Difficulties of quantifying the outputs of a KM strategy as ROI;
- Limited time available for planning and implementation;
- Limited technology available for implementation.

Externally Derived Obstacles :

Other obstacles are those factors that are outside the immediate control of the organization itself, so that they are externally derived. Other surveys have not revealed or discussed these factors, which are:

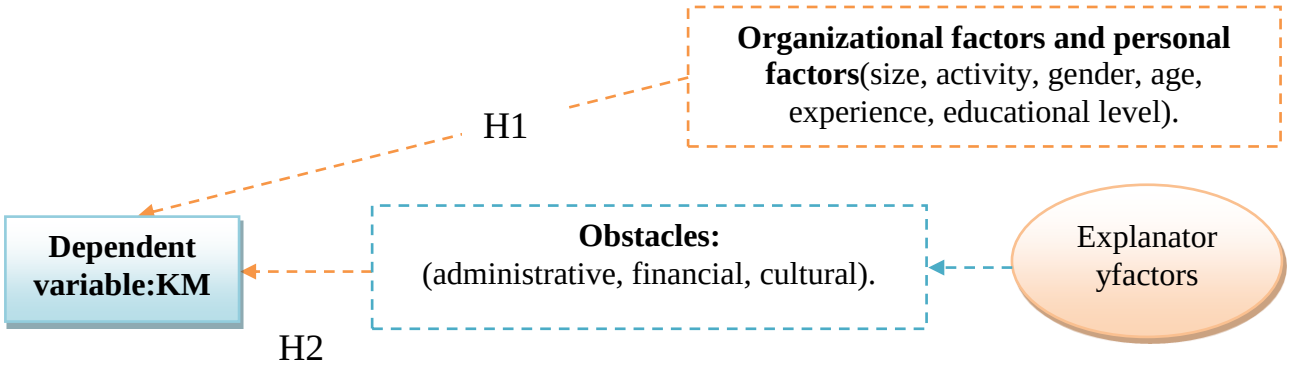
- Distant or foreign control of the organization that dictates functions.
- The impact of the economy or political and socio-cultural environment.

4. Methodological Procedures for the Study

4.1.Determining the population, sample, and explaining the study model:

The study population is represented in a group of industrial and service institutions in Setif where a sample of (**25**) institution is chosen. The sample is a set of managers and frameworks of the chosen institutions. The study model is as showing Figure (03):

Figure (03): study model



Source: The study model was prepared based on the theoretical background of the topic and the hypotheses developed.

According to figure (03), the study variables are determined by explanatory variables that include personal and institutional factors as well as factors that hinder the success of applying knowledge management (dependent variable).

4.2.Data Collection Tool

In order to collect data, a questionnaire was designed and it consists of two parts. The first part is for general data, and the second part includes a group of sections; the first section assesses the level of knowledge management application in the organization, while the second section is dedicated to identify obstacles of applying knowledge management.

The questionnaire is distributed to a group of managers operating in some industrial and service establishments in the city of Setif. 80 questionnaires are distributed, and 72 questionnaires are retrieved and are relied upon in the process of statistical analysis.

4.3. Validity and Reliability of the study tool

To ensure the reliability and validity of the instrument used in the measurement, the Alpha Cronbach coefficient was relied upon as it measures the internal consistency of the questionnaire paragraphs, and indicates the strength of the link between the questionnaire paragraphs and their validity. The following table summarizes what is mentioned before:

Table (02): coefficients of the reliability of the study tool

The study Sections	The number of paragraphs	Alpha cronbach
The first section: the level of knowledge management application	21	0.907
The second section: obstacles to applying knowledge management	15	0.895
Total reliability of the study tool	**36**	**0.816**

Source: realized by the researchers on the basis of the SPSS-V23 results.

Through Table (02), we note that the coefficient of reliability and validity of Alpha Cronbach from the total of the study tool is almost(0.816); the last is considered a good and large stability coefficient, which is greater than the normal rate of 60%. For instance, from the coefficients of sections, it is concluded that the study tool is good as a whole and is characterized by stability and credibility and it gives reliable results that can be used to conduct the study.

4.4. The basis for analysis:

The sample answers of each of the study sections are analyzed depending on the weighted average of the Lekart five-point scale. The length of each category is the quotient of the length of the ladder (range 5 - 1 = 4) by the number of options available. According to the five-step scale, the category lengthis 4/5 = 0.80. Thus, the distribution of approval degree is as follows:

Table(03): how to determine the degree of approval

Weighted average	Degree of approval
From 1.00 to 1.80	Very low
From 1.81 to 2.60	Low
From 2.61 to 3.40	Medium
From 3.41 to 4.20	High
From 4.21 to 5.00	Very high

Source: Prepared by researchers.

4.5. Analysis of data related to the questionnaire

4.5.1. Evaluating the spread level of the concept of knowledge management in economic institutions in Setif

Table (04) shows respondents' views about of the importance of knowledge management in economic institutions, by calculating the average of their answers on the phrases related to the first section as well as the standard deviation, and thus determining the degree of approval.

Table (04): Statistical analysis to assess the spread level of the concept of knowledge management

N°	Paragraph	The ArithmeticalAverages	The standard diviations	Estimation degree
Knowledge discovery		**3.85**	**0.78**	**High**
01	The organization supports research and development programs with the aim of discovering new knowledge and information.	3.80	0.78	High
02	The organization organizes discussion sessions and consultations among its workers to get the most ideas possible.	3.88	0.73	High
03	The organization collects information from related parties, such as customers.	4.01	0.54	High
04	The organization sometimes creates task forces from various levels and divisions in order to discover new knowledge.	3.54	0.93	High
05	The organization provides the right atmosphere to find solutions to the problems raised.	4.01	0.90	High
Knowledge capture		**3.67**	**0.56**	**High**
06	The organization sometimes uses specialists outside the organization to transfer their experience to workers.	3.86	0.86	High
07	The organization works to hold seminars that contribute to obtaining knowledge.	3.84	0.88	High
08	The organization works to employ qualified people and able to give more.	4.09	0.77	High
09	The organization has its own patents.	2.81	1.11	High
10	The organization works on data processing obtained from multiple sources.	3.72	0.74	High
Knowledge sharing		**3.92**	**0.53**	**High**
11	The organization has a flexible organizational structure that facilitates knowledge sharing among employees.	3.76	0.83	High
12	The organization uses modern means of communication such as the internet to distribute the available knowledge to all employees.	4.23	0.66	Very High
13	The organization exports documents to spread the new knowledge.	3.84	0.79	High
14	Employees are interested in exchanging knowledge among themselves regardless of their organizational levels.	3.85	0.78	High
15	Publishing the organization's previous successful experiences.	3.85	0.88	High
16	Working to develop the workers' knowledge continuously through the training programs carried out by the organization.	4.00	0.83	High
Knowledge Application		**3.90**	**0.58**	**High**
17	The organization encourages workers to apply new ideas to work through guidance.	3.85	0.85	High
18	The organization is keen to provide new products / services.	4.06	0.67	High
19	The organization provides the necessary means to implement	3.87	0.75	High

	new ideas.			
20	Organizational culture supports the application of knowledge.	3.84	0.68	High
21	The organization is keen to periodically monitor the workers' application of the trained work methods.	3.88	0.80	High
The Total ArithmeticalAverage		**3.84**	**0.47**	**High**

Source: realized by the researchers on the basis of the SPSS-V23 results.

As it is shown in the table above, it can be said that the degree of the sample items' approval is high for each section statements as the arithmetic mean for all phrases exceeds (3.40). The minimum approval score is high which reflects the expansion of the concept of knowledge management in the institutions being studied. In addition, the general arithmetic average is (3.83) with a general standard deviation of (0.47), therefore, there is a high level of awareness within the studied economic institutions about the concept of knowledge management.

4.5.2. Analyzing the limiting factors for applying knowledge management in the studied economic institutions.

Table (05) includes the answers of the sample vocabulary of the second section on the factors impeding the application of knowledge management in the institutions under study.

Table(05): Statistical analysis of the limiting factors for applying knowledge management

N°	Paragraph	The ArithmeticalAverages	The standard diviations	Estimation degree
Administrative obstacles		**2.88**	**0.82**	**Medium**
01	The administrative method used in the institution is centralized (power is concentrated in the hands of one person).	3.09	1.26	Medium
02	Weak training related to knowledge management in the institution under study.	2.88	1.09	Medium
03	The lack of qualified staff to carry out knowledge management tasks in the institution under study.	2.89	1.15	Medium
04	Failure to integrate knowledge management into the organization's strategic plans.	2.68	1.05	Medium
05	The presence of organizational conflicts within the institution.	2.86	1.26	Medium
06	Lack of support from senior management to apply knowledge management.	2.88	1.26	Medium
Cultural obstacles		**2.90**	**0.90**	**Medium**
07	The possibility of losing knowledge and this is through the exit of the Foundation's workers to retire.	3.15	1.22	Medium
08	Fears that knowledge holders may share their knowledge and that, for them, poses a threat, they lose their authority.	3.05	1.20	Medium
09	The administration is not convinced of the necessity to change the way the organization operates.	2.94	1.09	Medium
10	The managers are not aware of the importance of knowledge management in improving the performance of workers in the organization.	2.71	1.30	Medium
11	The worker fears that the change will happen in the organization.	2.68	1.26	Medium
Financial obstacles		**2.87**	**0.91**	**Medium**

12	Insufficient resources to implement knowledge management in the organization.	2.91	1.14	Medium
13	The Focus of the financial resources of the institution on the areas of production and sale only.	3.07	1.24	Medium
14	Lack of adequate IT infrastructure.	2.65	1.14	Medium
15	Difficulty in determining the return on the institution when applying knowledge management.	2.85	1.08	Medium
	The Total Arithmetical Average	**2.89**	**0.76**	**Medium**

Source: realized by the researchers on the basis of the SPSS-V23 results.

According to the data of the table above, it is observed that the degree of approval of most of the section statements is medium where the overall rating average is (2.89) with a deviation of (0.76). These results indicate that the sample items confirm that there are no factors impeding the success of applying knowledge management in economic institutions in Setif. In other words, the data reflects that the environment of the studied institutions may be appropriate to apply the concept of knowledge management.

4.6. Hypotheses test

4.6.1. The first Hypothesis: The level of application of knowledge management in the organizations under study varies according to the different organizational factors (size, activity, age), and personal factors (gender, age, experience, educational level). This hypothesis can be subdivided into the following sub-hypotheses:

- **Sub-Hypothesis01**: The level of knowledge management application varies according to the nature of the activity variable.
- **Sub-Hypothesis02**: The level of knowledge management application varies according to the nature of the age of the institution variable.
- **Sub-Hypothesis03**: The level of knowledge management application varies according to the size variable.
- **Sub-Hypothesis04**: The level of knowledge management application varies according to the gender variable.
- **Sub-Hypothesis05**: The level of knowledge management application varies according to the age variable.
- **Sub-Hypothesis06**: The level of knowledge management application varies according to the educational level variable.
- **Sub-Hypothesis07**: The level of knowledge management application varies according to the experience variable.

To test these hypotheses, ONE-WAY ANOVA variance analysis is used at a significance level of 5%, depending on the calculated value of F and its significance level SIG.

Table (06): Results of statistical analysis of the level of application of knowledge management in the institutions under study

Variable	Degree of freedom	Calculated F value	Indication sig
Nature of the activity	71	11.543	0.001
Age of the institution	71	0.813	0.491

The size	71	4.410	0.016
Gender	71	4.743	0.033
Age	71	2.889	0.029
Educational level	71	2.578	0.082
Experience	71	0.267	0.849

Source: realized by the researchers on the basis of the SPSS-V23 results.

According to the data of Table (06), explanatory variables are determined according to the different level of applying the concept of knowledge management in the economic institutions under study. Depending on the level of significance, Where it is clear that the variables of the institution's age, educational level, and experience do not affect the dependent variable as well as the level of application of knowledge management in the institutions being studied. The corresponding statistical value of F is not statistically significant (its significance level is greater than 0.05). As for the variables of: the nature of the activity, size, gender, age, are factors that explain the level of application of knowledge management from one institution to another. However, the corresponding statistical value of F is a statistical function (its level of significance is less than 0.05). Basing on this, sub-hypotheses 02, 06 and 07 are rejected, and Sub-assumptions 01, 03, 04, 05 are accepted.

4.6.2. The second Hypothesis: There is a correlation and a statistical significance between the application of knowledge management in the institutions under study and a set of obstacles (administrative, financial, and cultural).

To test this hypothesis, Pearson correlation coefficients are used where: the dependent variable is a knowledge management application, and the independent variables are the limiting factors as it is shown in the following table.

Table (07): Results of the simple correlation analysis between the independent variables (the limiting factors) and the dependent variable

N°	Paragraph	Correlation coefficient	Sig
01	The administrative method used in the institution is centralized (power is concentrated in the hands of one person).	-0.219	0.064
02	Weak training related to knowledge management in the institution under study.	-0.203	0.087
03	The lack of qualified staff to carry out knowledge management tasks in the institution under study.	-0.122	0.30
04	Failure to integrate knowledge management into the organization's strategic plans.	-0.053	0.65
05	The presence of organizational conflicts within the institution.	-0.212	0.074
06	Lack of support from senior management to apply knowledge management.	-0.294	0.012
07	The possibility of losing knowledge and this is through the exit of the Foundation's workers to retire.	-0.108	0.36
08	Fears that knowledge holders may share their knowledge and that, for them, poses a threat, they lose their authority.	-0.255	0.031
09	The administration is not convinced of the necessity to change the way the organization operates.	-0.257	0.02
10	The managers are not aware of the importance of knowledge management in improving the performance of workers in the organization.	-0.126	0.292

11	The worker fears that the change will happen in the organization	-0.037	0.761
12	Insufficient resources to implement knowledge management in the organization.	-0.088	0.462
13	The focus of the financial resources of the institution on the areas of production and sale only.	-0.208	0.08
14	Lack of adequate IT infrastructure.	-0.239	0.043
15	Difficulty in determining the return on the institution when applying knowledge management.	-0.139	0.243

Source: realized by the researchers on the basis of the SPSS-V23 results.

It is clear from Table (07) that correlation between the statements, 06, 08, 09 are statistically significant at the significance level of 0.05 (strong correlation coefficients and significant level less than 5%) and the dependent variable represented in the application of knowledge management. In other words, these independent factors have an effect on applying the concept of knowledge management in the institutions under study. Thus, it is possible to know the effect of these factors together by calculating the multiple correlation coefficient as shown in the following table:

Table (08): Multiple correlation analysis of combined independent variables (constraints) and dependent variable

General correlation coefficient R	R Square	Value of F	Sig
0.340	0.116	2.967	0.038

Source: realized by the researchers on the basis of the SPSS-V23 results.

Table (08) confirms that the obstacles under study have an impact on the process of applying knowledge management in the institutions being studied, whether they are combined or individually. Accordingly, it can be said that the second hypothesis is fulfilled.

5. Conclusion

The study of the subject of knowledge management in the Algerian business environment, and its application to local institutions in Setif, represents a step to improve the performance of Algerian institutions towards better levels; and through our study, a set of results is reached and will be summarized in the following points:

- There is a high level of Awareness of the studied economic institutions about the concept of knowledge management;
- The percentage of approval of the constraints of the application of knowledge management in the institutions being studied for most section statements is medium, as the overall rating average is (2.89)with a deviation of (0.76);
- The level of knowledge management application varies according to the: Nature of the activity, the size, gender and age of The managers;
- The level of knowledge management application doesn't vary according to the: Age of the institution, Educational level, Experience;
- There is a correlation and a statistical significance between the application of knowledge management in the institutions under study and a set of obstacles (administrative, financial, and cultural).

In light of the previous findings of the study, the researchers recommend the following:

- It should be a strong support from our institutions and senior management to apply knowledge management;
- Eliminate the fear of sharing knowledge with knowledge holders through material and moral stimulation in addition to the rewards offered to them to facilitate the spread of knowledge;
- Management should be convinced to change the way it works, because change is natural, necessary and needed for improving the institutional performance;
- The necessity of providing the appropriate IT infrastructure for applying knowledge management;
- Provide a flexible organizational structure for the institutions in question that encourages the transfer of knowledge, and its sharing among workers;
- Creativity stimulation within the organization through encouraging knowledge sharing, such as holding brainstorming sessions to generate the largest possible number of ideas, and motivating individuals to transfer them;
- Institutions should work to instil the spirit of teamwork, which has a great role in exchanging and conveying ideas to solve various problems;
- The culture of the institution itself should encourage the application of knowledge management.

6.Bibliographie

Ameur, B., & Seraa, T. (2019, june). The Importance of Knowledge Management in Higher Education Organizations. (L. University, Éd.) DIRASSAT _Economic Issue , 10 (02).

Arqawi, S., Al hila, A., Abu Naser, S., & Al Shobaki, M. (2018, October). The Impact of Obstacles to the Application of Knowledge Management to Performance Excellence. International Journal of Engineering and Information Systems , 02 (10).

Arqawi, S., Al hila, A., Samy, A. N., & Al Shobaki, M. (2018, september). Obstacles to the Application of Knowledge Management from the Point of View of the Employees at the Technical University of Palestine (Kadoorei). International Journal of Academic Information Systems Research (IJAISR) , 02 (09).

Balmisse, G. (2005). Guide des outils du knowledge management. Paris: VUIBERT.

Barbaroux, P., Attour, A., & Schenk, E. (2017). Gestion des connaissaces et innovation. Great Britain: ISTE.

Becerra, I., Fernendez, & Sabherwal, R. (2010). Knowledge management: systems and processes. United states of America: M.E. sharpe.

Ben Chouikha, M. (2016). Design organisationnel pour le management des connaissances. Great Britain: ISTE.

Claire, B. (2003). Manager les connaissances. paris: LIAISONS.

Griffiths, D., & Koukpaki, S. (2012). Are We Stuck With Knowledge Management?A Case for Strategic Knowledge Resource Development. (I. global, Ed.) Business science , 1 (1).

Kimiz, D. (2005). Knowledge Management in Theory and Practice. London: Elsevier Inc.

Waltz, E. (2003). Knowledge Management in the Intelligence Enterprise. United States of America: ARTECH HOUSE, INC.

Zyngier, S. (2002). knowledge Management Obstacles in Australia. In M. University (Ed.), European Conference on Information Systems. Australia.