IJTIHAD Journal On Legal and Economic Studies ISSN: 2335-1039
Volume: 13 / Number: 02 Year 2024 P 424 - 446

Received: 27/05/2022 Accepted: 26/01/2024

The role of knowledge management in developing intellectual capital
Case study of the University of Tamanrasset

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Abstract:

This study aimed to know the attitudes of the respondents at the University of Tamanrasset, about the role of knowledge management in the development of intellectual capital. sample total.

For data analysis, descriptive statistical analysis, regression analysis of variance, simple regression analysis, and one of the most important results was the existence of a statistically significant relationship between knowledge management and intellectual capital.

The study found the extent to which Tamanrasset University is committed to the dimensions of knowledge management and can be arranged according to their relative importance as follows: knowledge application, knowledge storage, knowledge sharing, knowledge generation. It also found a statistically significant relationship at the significance level of 5% between knowledge management and the level of capital. Intellectual at the University of Tamanrasset.

Keywords: intellectual capital, intangible capital, knowledge management, knowledge application, knowledge storage.

JEL Classification: J24, E22, M15.

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INTRODUCTION

Knowledge management is one of the most appropriate modern approaches to the rapid changes in the business world, and its role has increased after it became mainly dependent on intellectual assets, specifically knowledge assets, which resulted in an increase in the value and importance of intellectual assets.

Intellectual assets have become one of the main pillars for organizations, as they seek to invest in them and apply them in a way that achieves an added value for them.

Therefore, the formation and development of intellectual capital is a civilizational necessity imposed by the requirements of the times. It is not possible to imagine a society that is advanced in its productive capabilities and is poor in the efficiency of its intellectual assets.

Based on the foregoing, this study attempted to highlight the great role that good management of knowledge management can play within organizations in developing their intellectual capital. Economic and social, which requires organizations to pay attention to their knowledge resources and work on developing them. Based on the foregoing, the problem of our research came as follows:

What is the role of knowledge management in developing intellectual capital at the University of Tamanrasset?

Hypotheses:

This research is based on the following hypotheses:

The first main hypothesis: There is no statistically significant relationship between the following dimensions of knowledge management (knowledge generation, knowledge storage, knowledge distribution, knowledge application) and the level of intellectual capital in the institution under study at the significance level of 5%

The first sub-hypothesis: There is no statistically significant relationship between knowledge generation and the level of intellectual capital at the University of Tamanrasset at the significance level of 5%.

Second sub-hypothesis: There is no statistically significant relationship between knowledge storage and the level of intellectual capital at the University of Tamanrasset at the significance level of 5%.

The third sub-hypothesis: There is no statistically significant relationship between knowledge sharing and the level of intellectual capital at the University of Tamanrasset at the significance level of 5%.

Fourth sub-hypothesis: There is no statistically significant relationship between the application of knowledge and the level of intellectual capital at the University of Tamanrasset at the significance level of 5%.

I. The theoretical side

1.1 The concept of knowledge management:

The definition of knowledge management varies with the different approaches to the concept, as well as with the different specializations and backgrounds of researchers and writers in the field of this concept.

A- A management process that has inputs and outputs and operates within the framework of a specific external environment that affects it and its interactions, and is divided into multiple consecutive and interrelated steps (such as creating, collecting, storing, distributing and using knowledge), the aim of which is to share knowledge in the most efficient way, to obtain the greatest value for the organization.[1]

b- Processes that help organizations to generate, obtain, select, organize, use and disseminate information and transfer important information and experiences that are necessary for various administrative activities such as decision-making, problem-solving and strategic planning.[2]

1-2 knowledge management processes

Knowledge management is a continuous and interactive process that takes place through several stages represented in the acquisition, creation, storage, transfer and application of knowledge.

A - Acquisition of knowledge: Acquisition of knowledge means obtaining it from various sources (experts, specialists, competitors, clients and databases, or through the archives of the organization).[3]

B - Knowledge storage: After knowledge is acquired in an organized and positive way, it is analyzed and purified, then it is arranged, coordinated and fragmented, to be stored in the best form, taking into account that it is easily circulated, published and extracted accurately and easily by the members of the organization.

C - Transfer of knowledge: Transfer of knowledge is the third link in knowledge management circles, and depends on the existence of formal mechanisms and methods represented in reports, letters, correspondence, conferences and internal seminars of the organization, periodic briefings on the situation in the organization, and internal publications.[4]

D - Knowledge application: The application of knowledge is the primary objective of the knowledge management process, and this application requires organizing knowledge (through classification, indexing or appropriate tabulation of knowledge), and retrieval of knowledge (by enabling employees in the organization to access it easily and in the shortest time), and making The knowledge is ready for use (eliminating some inconsistent parts, re-correcting and checking the knowledge constantly, introducing the appropriate new, and eliminating the obsolete.

2 - What is intellectual capital?

Intellectual capital is one of the contemporary administrative issues, as organizations have realized that the real value they possess is their intellectual capital, which is more important than their physical capital, as it is the main engine in directing the organization's resources, and one of the effective means that responds to the requirements of the era of knowledge, and thanks to it, it has been able to overcome the difficulties And that is through the innovative and creative energies that it possesses, so it strives to discover, invest in and

maintain it in order to gain competitive capabilities on the one hand and continuity in its activity on the other hand.

2-1 The concept of intellectual capital

Intellectual capital is one of the important concepts that organizations have begun to pay attention to. Definitions have varied according to different views of it, and some of them can be addressed as follows:

Intellectual capital is defined as: "the intangible assets that can be used as a competitive weapon by the organization in the creative and strategic development process that depends on innovation, creativity and renewal, which is the primary means for the survival and continuity of the organization in the rapidly changing work environment."[5]

It is also defined as: "the distinct capabilities enjoyed by a limited number of individuals working in the organization, which enable them to make intellectual contributions that enable the organization to increase its productivity and achieve high levels of performance compared to similar organizations."[6]

It is clear from the definitions presented that intellectual capital is represented in both the intellectual and knowledge assets represented in the organization's core capabilities, which achieve for organizations excellence and competitive advantage in light of environmental changes.

3 - Knowledge management and intellectual capital development

The real capital of organizations at the present time is their intellectual capital, which enables them to face competitors and maintain their market position. Therefore, organizations face the challenge of maintaining their intellectual capital and ways to develop it. An organization can only benefit from it if it has a good knowledge management system to ensure continuous development of its intellectual capital.

3-1 The role of knowledge generation in the development of intellectual capital

The process of generating knowledge is of great importance in the development of intellectual capital in organizations where:

• The process of generating knowledge makes workers more flexible and able to respond to the new circumstances and situations they are exposed to. This means helping employees build their capacity to learn to solve and address the various problems facing the organization in the business world. [7]

• Workers tend to look for new ways and methods to work more proficiently, and they tend to work harder, and the organization's ability to satisfy customers becomes better by offering higher quality products, services, and responses.[8]

3-2 The role of knowledge storage in the development of intellectual capital

The process of storing knowledge is of great importance for organizations, as it facilitates the reference to data when needed, and thus individuals access it and use it when needed, which leads to their possession of new knowledge and information. This role is represented in the following points:

• The process of storing knowledge works to collect knowledge in an organized manner, which allows dealing with data in a holistic manner that meets the different needs of the beneficiaries and decision makers.[9]

• The storage of good and useful knowledge facilitates work within the organization, and leads to reduce the total costs of work.[10]

Thus, the process of storing knowledge is an important issue in the development of intellectual capital in knowledge organizations in order to keep them strong and modern.

3-3 The role of knowledge sharing in developing intellectual capital

The adoption of the knowledge management methodology requires, in the first place, opening channels and outlets of communication within the organization and providing opportunities for communication and social interaction between the members of the organization and those who deal with them from external parties to circulate, deepen and develop that knowledge through use and application. Intellectual capital through:

• Knowledge sharing facilitates the process of interpersonal learning, developing collaborative skills, and making them socially interactive and involved in applications.

• Knowledge sharing leads to increased job satisfaction among employees.

• The sharing of knowledge allows greater benefit from the available mental resources, increasing interaction with the surrounding environment, and rationalizing the mental and mental behavior of employees.

3-4 The role of knowledge application in the development of intellectual capital

The use of knowledge is the most vital part of knowledge management, which helps in the development of intellectual capital in organizations by improving processes, various events, products and overall performance of organizations, and this is as follows:[11]

• The knowledge application process helps make the organization more effective in the business world by selecting and implementing the most appropriate and appropriate processes for its business.

• The process of applying knowledge contributes to providing new or improved products that bring added value to the organization, as well as services that rely in essence on knowledge.

• Improving the position and sustainable competitive advantage and improving the leadership position of the organization, which would enable it to improve its position vis-à-vis competitors in a way that ensures its continuity.

In general, the process of applying knowledge is extremely important for organizations in an environment that requires creativity and continuous renewal through its role in the development of intellectual capital in organizations.

II. The application side

1. Introduction to the University of Tamanrasset

The University of Tamanrasset is a public institution of a scientific and professional nature, enjoying legal personality and financial independence. His Excellency the President of the

Republic, Abdelaziz Bouteflika, laid the cornerstone for the completion of the university center project, an area of 15 hectares, on February 24, 2004, and on September 20 of the same year an annex was opened. The University of Algiers in Tamangust, by a decision of the Minister of Higher Education and Scientific Research, was known for many rapid transformations in its organizational and pedagogical structure, from its annex in 2004 to the University of 2020. [12]

2. Display and analysis of search results

1.2. Characteristics of the study respondents

In the following, we will discuss the characteristics of the study respondents according to personal variables

Table (1): Distribution of study sample members according to personal variables

Variables	Variable Categories	Repetition	percentage
Sex	Male	23	46%
	female	27	%54
	TOTAL	50	100%
Age	less than 30 years old	8	%16
	From 30 to less than 40 years	34	%68
	From 40 to less than 50 years	8	%16
	TOTAL	50	100%
Qualification	Senior technician	5	10%
	Engineer	10	20%
	Master's	25	50%
	Doctorate	10	20%
	TOTAL	50	100%
Years of Experience	less than 5 years	32	64%
	From 5 to less than 10 years	14	28%
	From 10 to less than 15 years	3	6%
	15 years and over	1	%1
	TOTAL	50	100 %

Source: Prepared by the researcher based on SPSS V21

Table (1) shows that almost all researchers were female, where their percentage reached (54%), while the percentage of males was (46%) of the total research sample.

As for the age variable, we find that the category (from 30 to less than 40 years) occupied the highest percentage (68%), while the percentage of respondents within the age group (less than 30 years) reached (16%), and the percentage of respondents within the age group (from 40 to less than 50 years old) (16%).

With regard to the variable of scientific qualification of the respondents, it was found that (50%) of the respondents hold a master's degree compared to (20%) of those who hold an engineer's degree, while the percentage of holders of a high-tech diploma was (10%), and the doctorate degree is (20%) of the holders, thus we conclude that the percentage of holders of a high-tech certificate is weak compared to other educational levels, and this supports the percentage of the prevailing age group, most of whom hold a master's degree.

When examining the years of experience of the respondents, we find that (64%) of them have less than 5 years of experience, and (28%) of the respondents have experience in the field (from 5 to less than 10 years), while we find that (6%) of the respondents Their experience falls within the field (from 10 to less than 15 years), as for individuals whose experience has reached (15 years or more) their percentage was determined by (1%) of the total individuals in the research sample. This means that the research sample has an average level of experience and this is consistent with the category The age in the institution under study.

2.2. Resolution Axes Analysis

In this element, we will analyze the axes of the questionnaire in order to answer the research questions, and the two tables appear (2) and (3) those results are as follows:

The first question: What is the level of knowledge management at the University of Tamanrasset?

To answer this question, it is necessary to study and analyze the results shown in Table (2).

1- Knowledge management level:

Table (2): Arithmetic averages, standard deviations, and the relative importance of the answers of the members of the search sample for the knowledge management axis phrases

No	Dimension	Arithmetic mean	Standard deviation	Relative importance	Opinion trends
	knowledge generation	3.365	0.677	4	Neutral
1	Explore diverse knowledge over the internet	3.86	1.088	2	OK
2	Reliance on external sources to gain knowledge	3.46	0.994	3	OK
3	The university attaches great importance to promoting good ideas related to improving work methods	3.92	0.396	1	OK
4	Encouraging scientific dialogue between workers and researchers to exchange ideas and proposals	3.00	1.178	6	Neutral
5	Forming specialized units and work teams for cognitive learning from within the university	3.34	1.171	4	Neutral
6	Providing mechanisms to receive opinions and suggestions among workers within the university	2.66	1.222	7	Neutral
7	Appreciating and encouraging successful initiatives	3.32	1.253	5	Neutral
	knowledge storage	3.740	0.775	2	OK
8	Individuals through stimulating methods to exchange experiences	2.98	1.097	5	Neutral
9	Databases that provide information on various cognitive topics	3.74	1.118	3	OK
10	Archive and paper documents	3.76	1.064	2	OK
11	Using modern technical tools to store special knowledge such as expert systems	3.78	1.036	1	OK
12	Continuous updating of	3.24	1.080	4	Neutral

	stored knowledge				
	Share knowledge	3.528	0.866	3	OK
13	An internal information network that helps individuals access databases	2.76	1.205	5	Neutral
14	Issuing bulletins and periodicals of various types of publications	3.48	1.074	1	OK
15	Holding internal meetings, seminars and workshops	3.42	1.144	3	OK
16	Holding internal training courses	3.44	1.106	2	OK
17	Spreading a culture of cooperation and knowledge sharing among researchers	3.40	1.252	4	OK
	Application of knowledge	3.764	0.908	1	
18	Specialized work teams from within the university	3.78	1.093	1	OK
19	Giving researchers freedom to embody knowledge	2.84	1.095	5	Neutral
20	Providing material and human knowledge materialization requirements	3.46	0.994	4	OK
21	The emergence of knowledge in the form of new research at the university	3.50	1.129	3	OK
22	Emergence of new ways of working through the application of knowledge possessed by members	3.64	1.117	2	OK
	knowledge management	3.705	0.722	-	OK

Source: Prepared by the researcher based on SPSS V21

- Knowledge application: From Table (2), we note that the dimension of "knowledge application" came in the first order in terms of the relative importance given to it by the research sample, as the arithmetic mean of the answers for this dimension was (3.764) with a standard deviation (0.908). This indicates that the university realizes the importance of applying knowledge by providing the requirements for the application of knowledge, both material and human.

- Knowledge storage: From Table (2), we note that the dimension of "Knowledge Storage" came in the second order in terms of the relative importance given to it by the research sample, as the arithmetic mean of the answers for this dimension was (3.740) with a standard deviation of (0.775). This is an indication of the university's interest in the process of storing knowledge, by relying in particular on databases that provide researchers with information on various cognitive topics, as well as on modern technical tools.

- Knowledge sharing: From Table (2), we note that the dimension of "sharing of knowledge" came in third place in terms of relative importance given to it by the research sample, as the arithmetic mean of the answers for this dimension was (3.528) with a standard deviation of (0.866). This indicates that the university emphasizes sharing knowledge through its interest in spreading a culture of cooperation and knowledge sharing among researchers in the various disciplines in it.

- Knowledge generation: From Table (2), we note that the dimension of "knowledge generation" came in the last order in terms of the relative importance given to it by the research sample, as the arithmetic mean of the answers for this dimension was (3.365) with a standard deviation of (0.677). The results obtained show the weakness of this process in the university, meaning that it does not pay attention to the process of generating knowledge, as the majority of researchers confirm that their center does not care about encouraging dialogue between researchers to exchange ideas and proposals, and does not provide opportunities for knowledge learning within the university.

2- The level of intellectual capital

The second question: What is the level of intellectual capital at the University of Tamanrasset?

To answer this question, it is necessary to study and analyze the results shown in Table (3).

Table (3): Arithmetic averages, standard deviations, and the relative importance of the answers of the individuals of the research sample to the expressions of intellectual capital

	phrases	Arithmetic mean	standard deviation	Importance Relativity	Opinion trends
	Human capital	3.536	0.889	3	OK
23	The university does its best to retain highly knowledgeable researchers	3.04	1.177	5	Neutral
24	The university is interested in encouraging distinguished researchers	3.56	1.167	2	OK
25	The university focuses on experience as the best way to acquire practical skills	3.52	1.223	3	OK
26	Researchers develop new ideas to address work problems	3.44	1.072	4	OK
27	The university gives incentives and rewards to innovative researchers	3.92	1.243	1	OK
	structural capital	3.74	0.865	2	OK
28	Everyone in the university is fully aware of the duties and tasks required of his position	3.60	1.229	1	OK
29	The university has a well-developed internal communication network	3.54	1.129	2	OK
30	The university relies on a large and diverse degree of software in its work	3.40	1.069	3	OK
31	The university relies on very tight procedures in the field of evaluating the quality of services	3.22	1.016	4	Neutral
	intellectual capital	3.67	0.722	-	OK

Source: Prepared by the researcher based on SPSS V21

- Structural capital: through Table (3), we note that the dimension of "structural capital" came in first place also in terms of the relative importance given to it by the research sample, as the arithmetic mean of the answers for this dimension was (3.740) with a standard deviation (0.865). This indicates

that the university has advanced work capabilities and suitable working conditions for workers. The researchers agreed that they are fully aware of the tasks and duties required by their position, and the university's orientation is to use information and communication technology and information systems, which allows ease of communication and easy exchange of information and ideas between researchers.

- Human capital: through Table (3), we note that the dimension of "human capital" came in the second order in terms of the relative importance given to it by the research sample, as the arithmetic mean of the answers for this dimension was (3.536) with a standard deviation (0.889), This is evidence of the university's understanding and awareness of the importance of human capital and the special value it represents for the center as it works to encourage distinguished researchers, give incentives to creators, in addition to motivating workers.

3. Hypothesis testing and interpretation of results

1.3. Testing the first main hypothesis: We will test the following hypothesis:

H0: "There is no statistically significant relationship between knowledge management and intellectual capital at the University of Tamanrasset at the significance level of 5%", where the results of the analysis of variance were used to ensure the validity of the model to test this hypothesis. The following table shows that:

Table (4): Results of the regression variance analysis to verify the validity of the model to test the first main hypothesis

Contrast source	Total squares	Degrees of Freedom	mean squares	Calculated F value	Significance level F
Regression	7.645	4	1.911	4.787	0.003
The error	17.968	45	0.399		
total summation	25.613	49			

Statistically significant at the significance level ($\alpha = 0.05$)
coefficient of determination (R^2) = 0.298
Correlation coefficient (R)=0.546

Source: Prepared by the researcher based on SPSS V21

Through the results presented in Table (4), it becomes clear to us that the validity of the model is stable to test the first main hypothesis, where the calculated (F) value reached (4.787) and the probability value (0.003) which is less than the significance level (α = 0.05), and it is clear from the same table that The independent variable in its total form, which is (knowledge management) in this model explains the amount of (30%) of the variance in the dependent variable represented in intellectual capital, which is a high explanatory power, which indicates that there is a statistically significant relationship between knowledge management and intellectual capital.

And based on the stability of the validity of the model, we can test the first main hypothesis with its various branches using simple linear regression analysis and Table (5) shows that:

Table (5): Results of simple regression analysis to test the first major hypothesis

Independent Variable (X)	regression coefficient (B)	Calculated value (T)	Significance Level (Sig)	Calculated value (F)	Correlation coefficient (R)	coefficient of determination (R^2)
knowledge management	0.369	4.243	*0.008	7.577	0.546	0.298

*Statistically significant at the significance level (α=0.05)

Source: Prepared by the researcher based on SPSS V21

Through the results shown in this table, it is clear that there is a statistically significant relationship at the significance level of 5% between the independent variable represented in knowledge management (as a group) and intellectual capital in the institution under study, as the calculated F value amounted to (7.577) as well as the calculated T value (4.243).) with a probability value (0.008), which is less than the significance level (α = 0.05), and the value of the correlation coefficient (R) indicates that the strength of the relationship between the two variables is (0.546), as the knowledge management variable

(30%) explained the variation in the level of capital Intellectual (depending on the value of (R^2)) and therefore based on all this, we reject the null hypothesis and accept the alternative hypothesis, and we will try to explain this correlation through the following sub-hypotheses:

1- Testing and interpreting the first sub-hypothesis:

01H: There is no statistically significant relationship between knowledge generation and the level of intellectual capital at the University of Tamanrasset at the significance level of 5%.

Table (6): Results of simple regression analysis to test the first sub-hypothesis

Independent Variable (X)	regression coefficient (B)	Calculated value (T)	Significance Level (Sig)	Calculated value (F)	Correlation coefficient (R)	coefficient of determination (R^2)
knowledge generation	0.198	1.956	0.168	4.03	0.198	0,039

*Statistically significant at the significance level (α=0.05)

Source: Prepared by the researcher based on SPSS V21

Through the results shown in this table, it is clear that there is no statistically significant relationship at the significance level of 5% between the independent variable represented in knowledge generation and the level of intellectual capital in the institution under study, as the calculated F value amounted to (1.956), which is less than the tabulated F value. And with a probability value of (0.168), which is greater than the significance level ($\alpha = 0.05$) and based on all this, we accept the null hypothesis and reject the alternative hypothesis.

This can be explained by the fact that the institution under study does not realize the importance of generating knowledge and does not attach great importance to it within the university. This is evidenced by the fact that the institution under study does not provide learning opportunities for researchers and does

not encourage scientific dialogue between them, meaning that it is satisfied with merely obtaining it from external sources.

2- Testing and interpreting the second sub-hypothesis:

02H: There is no statistically significant relationship between knowledge storage and the level of intellectual capital at the University of Tamanrasset at the significance level of 5%.

Table (7): Results of simple regression analysis to test the second sub-hypothesis

Independent Variable (X)	regression coefficient (B)	Calculated value (T)	Significance Level (Sig)	Calculated value (F)	Correlation coefficient (R)	coefficient of determination (R^2)
knowledge storage	0.508	16.674	*0.000	4.03	0.508	0.258

*Statistically significant at the significance level (α=0.05)

Source: Prepared by the researcher based on SPSS V21

Through the results shown in this table, it is clear that there is a statistically significant relationship at the significance level of 5% between the independent variable represented in storing knowledge and the level of intellectual capital in the institution under study, as the calculated F value amounted to (16.674) which is greater than the tabular F value (4.03).) with a probability value (0.000), which is less than the significance level (α = 0.05), and the value of the correlation coefficient (R) indicates that the strength of the relationship between the two variables is (0.508), as the knowledge storage variable explained (26%) of the variance in the level of capital Therefore, we reject the null hypothesis and accept the alternative hypothesis.

This can be explained by the fact that the university is working to provide the necessary hardware and software that works to store knowledge and that facilitates its use and retrieval, which allows researchers to develop their knowledge and develop their expertise, and makes the university possess a variety of systems and software that can be used to obtain the necessary information and knowledge and thus provide

advanced services to various dealers and manage relations with them, and all this will directly contribute to the development of the intellectual capital of the Centre.

3- Testing and interpreting the third sub-hypothesis:

03H: There is no statistically significant relationship between knowledge sharing and the level of intellectual capital at the University of Tamanrasset at the significance level of 5%.

Table (8): Results of simple regression analysis to test the third sub-hypothesis

Independent Variable (X)	regression coefficient (B)	Calculated value (T)	Significance Level (Sig)	Calculated value (F)	Correlation coefficient (R)	coefficient of determination (R^2)
Knowledge Sharing	0.327	5.728	*0.021	4.03	0.327	0.107

*Statistically significant at the significance level (α=0.05)

Source: Prepared by the researcher based on SPSS V21

Through the results shown in this table, it is clear that there is a statistically significant relationship at the significance level of 5% between the independent variable represented in knowledge sharing and the level of intellectual capital in the institution under study, as the calculated F value reached (5.728), which is greater than the tabulated F value (4.03). with a probability value of (0.021), which is less than the approved significance level of 5%, and the value of the correlation coefficient (R) indicates the strength of the relationship between the two variables is (0.327), as the knowledge-sharing variable (10.7%) explained the variation in the level of intellectual capital by relying on The value of (R^2) and therefore based on all this, we reject the null hypothesis and accept the alternative hypothesis.

This can be explained by the fact that the institution under study is working to enhance the supportive climate for knowledge exchange in an attempt to spread a culture that calls for sharing knowledge, ideas and suggestions among

researchers, which helps researchers to develop their skills and increase their knowledge, and this makes them more flexible in dealing with changes and contributes to the development of intellectual capital in the institution The place of study.

4- Testing and interpreting the fourth sub-hypothesis:

04H: There is no statistically significant relationship between the application of knowledge and the level of intellectual capital at the University of Tamanrasset at the significance level of 5%.

Table (9): Results of simple regression analysis to test the fourth sub-hypothesis

Independent Variable (X)	regression coefficient (B)	Calculated value (T)	Significance Level (Sig)	Calculated value (F)	Correlation coefficient (R)	coefficient of determination (R^2)
Application of knowledge	0.291	4.434	*0.040	4.03	0.291	0.085

*Statistically significant at the significance level (α=0.05)

Source: Prepared by the researcher based on SPSS V21

Through the results shown in this table, it is clear that there is a statistically significant relationship at the significance level of 5% between the independent variable represented in the application of knowledge and the level of intellectual capital in the institution under study, as the calculated F value amounted to (4.434), which is greater than the tabular F value (4.03).) with a probability value of (0.040), which is less than the significance level of 5%, and the value of the correlation coefficient (R) indicates that the strength of the relationship between the two variables is (0.291), as the knowledge application variable (0.85%) explained the variation in the level of intellectual capital by relying on value (R^2) and thus we reject the null hypothesis and accept the alternative hypothesis.

This can be explained by the fact that the institution under study practices the process of applying knowledge as it works to provide the requirements for the application of knowledge and

gives opportunities to apply it to researchers, whose results appear in the form of increasing the capabilities and skills of researchers, creating new methods at work or solving problems that confront their work, and helps them in Providing advanced services and new services to its customers, which leads to the development of intellectual capital in the institution under study.

CONCLUSION

Organizations today are dealing with environmental conditions characterized by competitiveness, speed and severity of change, and in the face of this changing environment, those in charge of it must adopt ways and methods that allow them to preserve intellectual capital represented mainly in intellectual wealth, skills and creative ideas, as it is considered one of the basic requirements for organizations to confront environmental threats. To maintain and develop its competitive position, and it has become one of the main challenges for all current organizations to search for these means and methods for the purpose of improvement and development in order to be able to survive and be stable in light of the competitive environment**.**

Hence, the adoption of knowledge management is one of the latest concepts and administrative means in achieving the goals of the organization and one of the important and rare resources for any organization, and considering it a strategic weapon to achieve success and excellence, and in light of the data that the environment dictates to the organization, including the growth of competition and rapid technological development, highlights the role it plays Knowledge management in the development of intellectual capital at the University of Tamanrasset, where, after our study, we reached a set of results and recommendations that can be summarized as follows**:**

1 - Results

Through this research we reached the following results**:**

- Intellectual capital has become the cornerstone of any organization at the present time in light of the challenges posed by the logic of globalization, and the realization of the importance of intellectual capital in achieving and taking a competitive position, which requires the introduction of a set of

motives to reach that. Among them are: acquiring advanced technology, nurturing talents, skills and scientific expertise**.**

- Investment in intellectual capital is an important process as it contributes to improving performance levels and enhancing its competitive advantage**.**
- The study showed that the respondents' answers were in agreement with regard to the extent of Tamanrasset University's commitment to the dimensions of knowledge management that were studied, and they can be arranged according to their relative importance as follows: knowledge application, knowledge storage, knowledge sharing, knowledge generation**.**
- The results of the first main hypothesis test showed that there is a statistically significant relationship at the significance level of 5% between knowledge management and the level of intellectual capital at the University of Tamanrasset, as we find that knowledge management explained (30%) of the discrepancy in the level of intellectual capital**.**

2 - Recommendations:

- Contemporary organizations must have a new function that adopts knowledge management**.**
- The necessity of providing a technical infrastructure that supports knowledge management processes**.**
- Increasing interest in and managing intellectual capital as any member of the organization is managed, as it is an important source of strategic direction for it.

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