

# **The Impact of Knowledge Management in Developing Administrative Creativity through the Role of Mediator for Information Technology: An Exploratory Study of the Opinions of a Sample of Administrative Leaders and Teachers of the Oil Training Institute / Basra**

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## **Abstract**

The subject of knowledge and its impact on managerial creativity is of particular importance to administrative researchers due to its great importance in today's business organizations that live in knowledge economies and an unstable competitive environment. This study is an attempt to test the effect of knowledge management as an independent variable in developing administrative creativity (the dependent variable), in addition to determining whether information technology has a mediating role in that relationship. A questionnaire was designed to collect the primary data, as (220) questionnaires were distributed, (212) questionnaires were retrieved, and (206) questionnaires were valid for statistical analysis. The research was based on the SPSS program.

The study reached several results, the most important of which are:

- There is a significant and statistically significant effect of knowledge management in developing administrative creativity.
- There is a significant statistically significant effect of information technology on achieving administrative creativity.
- Information technology partially mediates the relationship between knowledge management and administrative creativity.

Based on the results of the study, the researcher made a number of recommendations, the most important of which are:

- Working to support and disseminate knowledge at all levels of the Oil Training Institute / Basra.
- Attention to administrative creativity and its development and the need to pay attention to information technology because of its clear effects on the administrative creativity of organizations.
- Continuous updating of technology and taking advantage of the information revolution in the speed and accuracy of the required tasks.

**Keywords:** Knowledge Management, Administrative Creativity, Information Technology.

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## **Introduction**

The global economy has recently witnessed substantial movements toward a knowledge-based economy as a result of ongoing and significant changes in the economic and social reality of the world. Knowledge is a critical strategic and competitive resource in today's global economy. Knowledge is one of the most important organizational resources right now for achieving a sustainable competitive advantage, and these problems have forced organizations to concentrate more on preserving it. Knowledge-based organizations are characterized by a professional and intellectual approach that emphasizes mental and intellectual abilities rather than physical strength and conventional skills. This made knowledge important because it is a strategic asset that enables a corporation to provide services.

An information and technological revolution is affecting both commercial and academic institutions. This revolution is dependent on cutting-edge scientific understanding and effective information technology application. Knowledge is therefore regarded as the most precious resource for enterprises in the present day, when educational institutions must raise the bar of their performance in order to keep up with advancements Quick. This study is based on identifying the effects of knowledge management and demonstrating how knowledge management affects the administrative creativity of the teachers at the Basra Oil Training Institute, one of the divisions of the Ministry of Oil, and how these practices have a significant influence on the successful progress of the educational process. This achievement plays a crucial part in developing the middle-rank skilled oil cadre that promotes the oil sector, the mainstay of the nation's economy.

## **The Scientific Methodology of Research**

This part focuses on the analysis of the research's methodological framework, the identification of the issues it addresses, the definition of its goals, the presentation of its hypothesis, and the statistical and mathematical techniques it employs to get its conclusions.

### **1. The Problem of the Study**

#### **1) Cognitive Problem**

Organizations have dominated the feature of switching from traditional business to digital business and the transformation of the industrial economy into a knowledge economy since the start of the new millennium. Investing money and brainpower in initiatives that support their continued growth and survival while gaining superior positions in the marketplace. Knowledge management in particular has come under scrutiny in educational institutions.

#### **2) Field Problem**

Educational institutions are an important source of knowledge, as they are more suitable for adopting knowledge management strategies, and if implemented effectively, they will inevitably improve the ability of educational institutions to provide better academic and administrative services. One of the tributaries that provide the oil sector with intermediate technical cadres by receiving science and knowledge for its students for a period of two calendar years, including the teaching staff of the Institute with scientific and administrative qualifications. The task is to improve the level of performance and be able to achieve higher levels of growth and progress. From here, the main research problem is embodied in the following question:

To what extent does (information technology) affect the relationship between (knowledge management) and (management creativity) in the Oil Training Institute / Basra?.

Then go to the following sub-questions:

- 1) What is the level of (knowledge management) and its impact on (developing administrative creativity) at the Basra Oil Training Institute, and which of the dimensions receives the highest attention?.
- 2) Is there a relationship between the process of (knowledge management) with its different dimensions and (information technology) with its different dimensions in the Basra Oil Training Institute?.
- 3) Does (information technology) mediate the relationship between (knowledge management) and (administrative creativity) at the Oil Training Institute / Basra.

### **2. The Hypothetical Study Plan and Its Variables**

The literature review on knowledge management, administrative creativity and information technology contributed to the design of a hypothetical scheme that clarifies the variables of the study and expresses the form, content and

logicality of the relationship between the variables of the study based on previous studies as shown in Figure (1), which clearly shows the relationships between the research variables as follows:

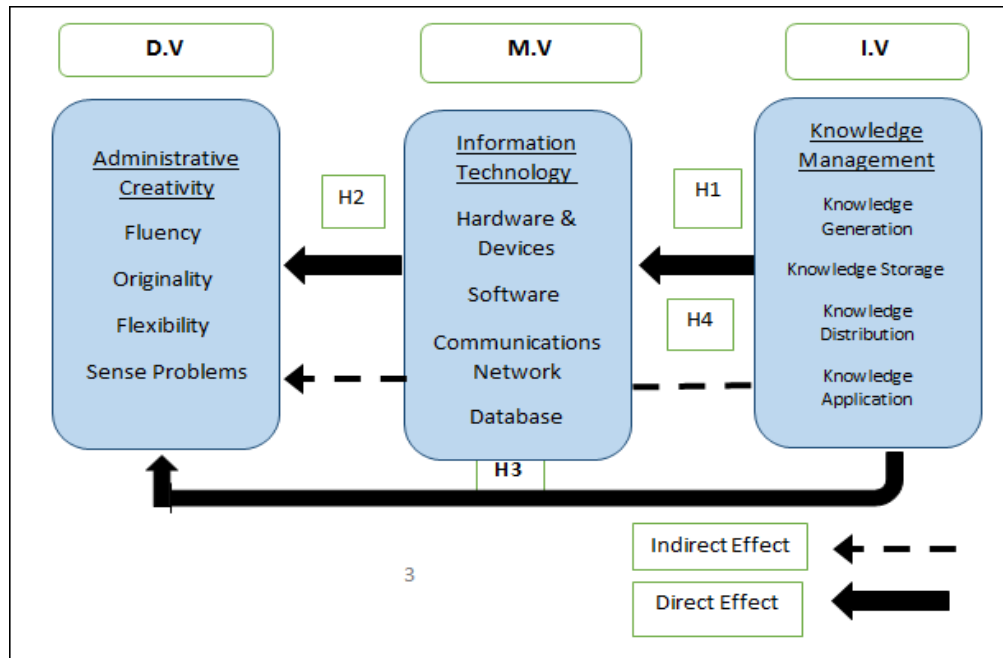


**Figure 1: The Hypothesis of the Study**

### 3. Hypotheses of the Study

Relying on the hypothesis of the research, a set of main hypotheses and sub-hypotheses were developed as following:

#### 1) The first main hypothesis

H1: There is a statistically significant impact relationship between (knowledge management) and (information technology).

#### Sub Hypotheses

H1a: There is a statistically significant and significant impact relationship between (knowledge generation) and (information technology).

H1b: There is a statistically significant and moral impact relationship between (knowledge storage) and (information technology).

H1c: There is a statistically significant and significant impact relationship between (knowledge distribution) and (information technology).

H1d: There is a statistically significant and moral impact relationship between (knowledge application) and (information technology).

#### 2) The Second Main Hypothesis

H2: There is a statistically significant effect relationship between (information technology) and (administrative creativity) at the significance level of 0.05.

#### Sub Hypotheses

H2a: There is a statistically significant and significant effect relationship between the dimension (devices and equipment) and the dependent variable (administrative creativity) at the level of significant significance 0.05.

H2b: There is a statistically significant and significant effect relationship between the dimension (communication networks) and the dependent variable (administrative creativity) at the level of significant significance 0.05.

H2c: There is a statistically significant and significant effect relationship between the dimension (software) and the dependent variable (administrative creativity) at the level of significant significance 0.05.

H2d: There is a statistically and morally significant effect relationship between the dimension (databases) and the dependent variable (administrative creativity) at the level of significant significance 0.05.

### **3) The Third Main Hypothesis**

H3: There is a statistically significant and significant effect relationship between (knowledge management) and (administrative creativity) at the level of significant significance 0.05.

#### **Sub Hypotheses**

H3a: There is a statistically significant effect relationship between the dimension (knowledge generation) and (administrative creativity) at the level of significant significance 0.05.

H3b: There is a statistically significant effect relationship between the dimension (storage of knowledge) and (administrative creativity) at the level of significant significance 0.05.

H3c: There is a statistically significant effect relationship between the dimension (distribution of knowledge) and (administrative creativity) at the level of significant significance 0.05.

H3d: There is a statistically significant effect relationship between the dimension (application of knowledge) and (administrative creativity) at the level of significant significance 0.05.

### **4) The Fourth Main Hypothesis**

H4: There is an indirect influence relationship with statistical and moral significance between (knowledge management) and (administrative creativity) in terms of the mediating variable (information technology).

## **4. The Study Population and Sample**

The study community includes the Oil Training Institute / Basra and is located in the province of Basra. The importance of the institute in the Iraqi environment is due to the rehabilitation and preparation of intermediate oil cadres in the oil specialties and granting them a technical diploma in oil specialties to meet the oil sector's need from these Specializations, as well as the establishment of rehabilitation and development courses for various levels and specializations for the owners of the oil sector. In order to accurately represent the study population, the researcher adopted the intentional sampling method and chose the teachers and administrative leaders in the institute. A questionnaire was designed to collect the primary data and (220) questionnaires were distributed and retrieved (212) questionnaires and (206) questionnaires that were valid for statistical analysis.

## **Knowledge Management**

### **1. Introduction**

The globalization of markets, the transition to a knowledge economy, and the widespread adoption of information and communication technology are all causing changes and developments in organizations that make it challenging for these businesses to maintain their competitive advantage. To outperform its rivals, enhance performance, boost productivity, enhance decision-making processes, boost efficiency, and increase effectiveness through the development of a knowledge base for it through the orientation of organizations towards acquiring and disseminating knowledge at all levels and developing investment in owning new knowledge (Jaber, 2019).

### **2. Knowledge Management**

The researchers dealt with the concept of knowledge management from different approaches, which led to the emergence of many definitions of this concept, which differ according to the researcher's specialization, scientific and practical background, and his point of view.

**The First Reason:** The field of knowledge management is very broad.

**The Second Reason:** The dynamics of the subject of knowledge management because of its rapid changes in the areas covered by the knowledge itself.

According to the researcher, "knowledge management" is a broad term for a variety of coordinated series of processes that are represented in gathering knowledge from both internal and external sources (employees, customers, suppliers, and competitors), storing it, and then disseminating it among all levels of the organization and the relevant departments so that everyone can benefit from and apply it.

### **3. The Importance of Knowledge Management**

Given the innovative role knowledge management has played in training and educating the human element and obtaining the skills necessary to tackle future difficulties, which forces businesses to adapt advancements and challenges to confront the quick changes. To assess the significance of the following knowledge (Marwani, 2021).

1. Improving the quality of managerial decision-making
2. Providing information
3. Increasing effectiveness in implementing decisions
4. Building a learning environment in the organization
5. Stimulating cultural change and innovation

### **4. Knowledge Management Goals**

The shift in interest in knowledge management was not an abstract intellectual luxury, but rather was a response to a variety of demands and internal and external environmental influences trying to introduce a change in the direction of achieving some kind of adaptation to these demands.

(Al Kubaisi, 2018) outlined the objectives of knowledge management as follows:-

1. Obtaining valuable information from its sources, collecting it, providing it in the appropriate form and speed, and reusing it in a timely manner.
2. Spreading a culture of knowledge by facilitating the exchange and sharing of knowledge and raising the level of knowledge of others.
3. Transforming tacit knowledge into explicit knowledge and maximizing returns from intellectual property.
4. Knowledge management seeks to attract the intellectual capital represented by the knowledge, experiences and achievements owned by all or some of the members of the organization that enable them to contribute to the development of performance and give it a competitive advantage that is not available to others.
5. Develop the skills of workers in the field of knowledge by exchanging expertise and experiences and supporting continuous learning and development.
6. Keeping abreast of the continuous and rapid developments in information systems.
7. The transformation of organizations from the traditional economy to the knowledge economy by shifting towards wide economic networks, commerce and electronic marketing.

## **Administrative Creativity**

### **1. Introduction**

Administrative creativity plays an important role in administrative work because of its beneficial results for both organizations and employees in determining the type of solutions and getting rid of ordinary thinking and producing the largest possible number of ideas with the least amount of time and effort and improving the general climate for decision-making. (Al-Sudi, 2016).

Many authors and researchers have focused on the issue of administrative creativity and have advocated for further research and scientific studies on the subject, particularly in light of globalization and other economic, cultural, and technological developments that call for the renewal and constant evolution of administrative creativity. Therefore, promoting creativity should be a policy that all organizations adopt. And to care for the creators in order to keep pace with the development and civilisation the world is experiencing right now. Any organization's ability to stand out from the competition can be attributed to its creativity.

### **2. Administrative Creativity**

The foundation of administrative job is creativity, and without creativity, a person cannot improve themselves. Therefore, in order to keep up with the demands of the times, administrative work must develop and advance. Despite the literature on modern management's growing interest in administrative innovation, there is currently no agreed-upon definition. For administrative innovation that writers and scholars have concurred upon.

According to the researcher, creativity is a flexible, non-rigid way of thinking that promotes growth and the capacity to come up with original, excellent answers to issues as well as to create new ideas and successfully put them into practice.

### **3. The Importance of Administrative Creativity**

Creativity is one of the important and modern parts in administrative sciences. It has become one of the most important components of development and improvement for individuals and organizations and has a major role in

the existence and progress of organizations, as the organization that does not innovate and does not develop quickly disappears, and creativity helps organizations adapt to subsequent changes and face various challenges to achieve excellence. And that creativity can support the strength of any organization by distinguishing it from other organizations, while organizations are trying to grow in competitive environments, creativity becomes increasingly important for most organizations to deal with the intangible economy that depends on the information economy, which in turn depends on (speed, flexibility, innovation, creativity (Mahdi et al, 2021).

According to the study, creativity is crucial for both individuals and organizations. Administrative creativity assists people in developing the abilities they need to keep up with the quick-moving changes while also fostering the growth of their intellectual and personal qualities. In terms of the organization, administrative creativity is a crucial component for long-term success through its contribution to discovering answers to the organization's difficult-to-solve challenges. However, when creativity is joined with focus, effort, and collaboration, it is possible to produce fresh and insightful solutions to any problem.

## **Information Technology**

### **1. Introduction**

The world has experienced, and continues to experience, a technological revolution that is accelerating and undergoing constant development. This has called attention to information technology and the degree to which it keeps up with technological advancements to give organizations and businesses that depend on information technology to achieve their objectives a competitive advantage.

Organizational administrative structures have changed as a result of information technology. These changes have led to numerous rehabilitation processes, the creation of employee training programs, and the transition of jobs from being dependent on outdated systems to more contemporary ones that heavily rely on information technology. Work and improved problem-solving and internal communication skills (Nabhan, 2020).

### **2. Information Technology Concept**

The concept of information technology can be viewed from two perspectives (Al-Taai, 2021).

#### **First Perspective**

It relates to information within the broad context where the idea of information technology is defined as the human intellectual product that is included in various types of information sources or messages sent from one party to another using various methods of communication or ideas and concepts broadcast directly to the audience.

The data that has been processed, analyzed, sorted, organized, and categorised using both automated and manual methods is what is referred to as the information framework

#### **Second Perspective**

The second perspective of the concept of information technology is related to the technology that is used in processing, transmission and broadcasting, as the information contained in this concept was subjected to a number of operations before being entered into computers or messages sent using communication techniques or directed using broadcasting techniques. Therefore, it differs from the concept of data that is commonly it is used by specialists in the field of computers to describe all the facts, concepts, symbols and primary numbers that are computer inputs and equipped to perform processing operations on them to be output later in the form of information.

### **3. Dimension of Information Technology**

Many researchers agreed on a set of basic components of information technology that can be summarized as follows.

**Table 1: Information Technology Dimensions**

| Usability | HR  | Database | Communications Network | Software | Hardware and Devices | Dimensions researcher   | Seq |
|-----------|-----|----------|------------------------|----------|----------------------|-------------------------|-----|
|           | *   | *        |                        | *        | *                    | Norouzi & Navabi 2018   | 1   |
|           | *   | *        | *                      | *        | *                    | Al Rashidi 2019         | 2   |
| *         |     |          | *                      | *        | *                    | Allahawiah et al 2013   | 3   |
|           |     | *        | *                      | *        | *                    | Asruf 2015              | 4   |
|           |     | *        | *                      | *        | *                    | Kouachi 2014            | 5   |
|           | *   | *        | *                      | *        | *                    | Abu Saymeh 2014         | 6   |
|           | *   | *        | *                      | *        | *                    | Deeb and Bahloul 2017   | 7   |
|           |     | *        | *                      | *        | *                    | Edmondson & Harvey 2018 | 8   |
|           | *   | *        | *                      | *        | *                    | Jaber 2019              | 9   |
|           |     | *        | *                      | *        | *                    | Caliph 2020             | 10  |
| 1         | 5   | 9        | 9                      | 10       | 10                   | <b>total</b>            |     |
| %10       | %50 | %90      | %90                    | %100     | %100                 | percentage              |     |

Prepared by the researcher based on the sources contained there in.

We note that there are four basic dimensions that formed the proportions of agreement among researchers.

#### **1). Hardware and Devices**

It is the physical part of information technology represented by computers and devices attached to it (such as disks, ATMs, and telephones..) where they are used to make decisions and carry out the required tasks. Hardware represents all the physical components that are used in the processes of input and processing of information, which together make up a computer system. This dimension was used as it reflects the organization's interest in using computers in all procedures instead of manual (Mabrouka and Hafiza, 2020).

#### **2). Software**

They are programs that help to preserve information in the system and are considered a link between the user and the machine. They are a set of sequential instructions written in specialized programming languages that direct the hardware components of the computer to work in a specific way for the purpose of obtaining the required results.

#### **3). Communications Network**

It is a group of computers connected to each other in different ways that provide the sharing and exchange of information among themselves in the form of small packets with high accuracy and great speed through a group of programs specialized in network work, which are called computer networking software, and they are programs that work within the computer network and include communication control software Between the host computer and the peripheral computers, in addition to monitoring software and routing data across network lines (Al-Hadrawi, 2010).

#### **4). Database**

Databases have become an essential part of our daily life, and we face many activities that involve interacting with databases on a daily basis and defined (Elmasri & Navatha, 2016) as a set of relevant data, this data means known facts that can be recorded and that have Implicit meaning, and can be defined as an organized set of related data stored for a specific purpose.

Databases play an important role in almost all fields in which computers are used, including business, e-commerce, social media, engineering, medicine, genetics, law and library science.

#### **Field Part**

The purpose of (the field side of the study) is to try to solve the problem of the study through the questions and hypotheses of the study that was built and to answer the main questions of the study.

### Testing the Impact Hypotheses of the Study

This analysis will include a number of indicators, including the regression coefficients B, the calculated F value, and the coefficient of determination (interpretation) R<sup>2</sup>, for the calculated (T) and (F) values, the statistical program (SPSS) will compare them directly with their tabular values to make sure of the issue of statistical significance, which will be clarified by virtue of The (\*) sign that will appear on the values of the parameters (T) and (F) as shown in the following table.

#### First Major Hypothesis Test

H1: There is a statistically and morally significant impact relationship between (knowledge management) and information technology.

**Table 2**

| Model                                         | Unstandardized Coefficients |            | Standardized Coefficients | R <sup>2</sup> | F       | t      | Sig. |
|-----------------------------------------------|-----------------------------|------------|---------------------------|----------------|---------|--------|------|
|                                               | B                           | Std. Error | Beta(β)                   |                |         |        |      |
| <b>Knowledge Management</b>                   | .630                        | .062       | .586                      | .344.          | 103.626 | 10.180 | .000 |
| a. Predictors: (Constant), iv                 |                             |            |                           |                |         |        |      |
| b. Dependent Variable: Information Technology |                             |            |                           |                |         |        |      |

SPSS.V.25: Source

It is clear from the above table that the calculated t-value amounted to (10.180), which is greater than the t-value in the tables (1.96), which indicates that there is an effect of the independent variable on the dependent variable and that the value of (F) is high and the level of significance ( $p < 0.05$ ) and this It indicates the effect of the total variable of knowledge management in information technology, thus accepting the first main hypothesis. We also note that the regression coefficient (β) between (knowledge management) and (information technology) reached a value of (.586), which means that the increase by one unit in the management Knowledge leads to an increase in information technology by (58%) As for the degree of the coefficient of determination 2R, which is a descriptive measure used to explain the usefulness of the regression equation in estimating values, and when using the regression equation, it represents the percentage of decrease in errors, it was (.34), which means that (Knowledge management) explains (34%) of the variance in (information technology) and that (66%) is a variance explained by factors that were not included in the regression model.

#### Second Major Hypothesis Test

H2: There is a statistically significant and significant effect relationship between information technology and administrative creativity at the level of significance 0.005.

**Table 3: The Results of the Second Main Hypothesis Test**

| Model                                         | Unstandardized Coefficients |            | Standardized Coefficients | R <sup>2</sup> | F       | t      | Sig. |
|-----------------------------------------------|-----------------------------|------------|---------------------------|----------------|---------|--------|------|
|                                               | B                           | Std. Error | Beta                      |                |         |        |      |
| <b>Information Technology</b>                 | .645                        | .050       | .674                      | .454           | 164.492 | 12.825 | .000 |
| Dependent Variable: Administration Creativity |                             |            |                           |                |         |        |      |

The above table indicates that the calculated t-value amounted to (12,825) which is greater than the tabulated t-value (1.96), which indicates that there is a significant effect of the independent variable on the dependent variable and that the value of (F) is very large and the level of significance ( $p < 0.05$ ) This indicates the impact of the total information technology variable on managerial creativity, and thus the second main hypothesis is Accepted.

#### Test the Third Main Hypothesis

H3: There is a statistically significant and significant effect relationship between Knowledge Management practices and Administrative Creativity at the level of significant significance 0.005.

**Table 4: Test the Third Main Hypothesis**

| Model                                           | Unstandardized Coefficients |            | Standardized Coefficients | R <sup>2</sup> | F       | t      | Sig. |
|-------------------------------------------------|-----------------------------|------------|---------------------------|----------------|---------|--------|------|
|                                                 | B                           | Std. Error | Beta                      |                |         |        |      |
| <b>Knowledge Management</b>                     | .775                        | .048       | .753                      | .554           | 259.464 | 16.108 | .000 |
| a. Dependent Variable Administrative Creativity |                             |            |                           |                |         |        |      |

It is clear from the above table that the calculated(  $t$  ) value reached (16.108) and is (greater) than the value of ( $t$ ) in the tables (1.96), meaning that it indicates the presence of a significant effect (of the independent variable) on (the dependent variable) and that the value of (the dependent variable) ( $F$ ) Very high and the level of significance ( $p < 0.05$ ) and this indicates that there is an effect of the total knowledge management variable on administrative creativity and for this the third main hypothesis is accepted We see that the regression coefficient ( $\beta$ ) between (knowledge management) and the dependent variable (administrative creativity) The value of (.753) means that an increase of one unit in knowledge management leads to the development of administrative creativity by (75%), while the value of the coefficient of determination ( $R^2$ ), which is a descriptive measure used to explain the usefulness of the regression equation in estimating values The percentage of decrease in errors when using the regression equation was (.554), which means that (knowledge) explains (55%) of the variance occurring in (administrative creativity) and that (45%) is the interpretation of the variance by factors that were not included in the regression model.

#### **Examination the Fourth Main Hypothesis**

There is an indirect effect of statistical and moral significance between Knowledge Management and Administrative Creativity in terms of the Mediating Variable Information Technology.

The (Baron & Kenny) method is a method commonly used in the social sciences and business administration to test and quantify direct and indirect effects. It is concerned with testing the mediation model. Its main objective is to clarify whether there is an intermediate variable in the influence relationship between the independent and dependent variable.

In order to test the mediating role of the Information Technology variable between knowledge Management and Administrative Creativity, the researcher relied on the method (Barron & Keenny, 1986), which is one of the very well-known methods at the level of foreign studies. It includes the following steps:-

**The First Step:** There is a significant effect relationship between the independent variable and the mediating variable.

**The Second Step:** There is a significant effect relationship between the independent variable and the dependent variable.

**The Third Step:** There is a significant effect relationship between the mediating variable and the dependent variable within the third regression analysis equation and with the presence of the independent variable as a (Control Variable).

The third step includes two aspects:

A: If the value of the impact factor in the third equation is lower than its value in the second equation, this means that there is a partial mediating role between the independent variable and the dependent variable.

B: If the value of the impact factor is zero (Zero-effect) in the third equation than its value in the second equation, this means that there is a complete mediating role between the independent variable and the dependent variable.

Through the results of the previous analysis, it is clear that the first and second conditions were met. Also, Table (5) shows the fulfillment of the third condition from the results of the mediator variable test (Mediator Variable) Baron & Kenny, 1986. It is noted that there is a significant effect relationship between information technology and administrative creativity in the presence of knowledge management as a control variable (Control Variable) with an effect ratio ( $\beta=.354, p<0.005$ ).

We conclude that the regression path fulfilled the first, second, and third conditions, which is the path from the Knowledge Management variable to Information Technology to Administrative Creativity, and accordingly we move to note the value of the influence factor between the independent and dependent variable. If the value of the influence factor in equation (3) decreases from its value in equation (2), this indicates Information Technology mediates the relationship between Knowledge Management and Administrative Creativity in part (Partial Mediation), but if the value of the impact factor turns zero.

(Zero-effect) in the third equation about its value in the second equation. This means that there is a complete mediating role between the independent variable and the dependent variable.

This means that Information Technology mediates the relationship in part because the influence relationship between the independent and dependent variable with the presence of the mediating variable decreased from the

influence relationship between the independent and directly dependent variable (Beta = 0.753, P <.001 to (Beta = 0.546, P <.001).

Noting that the calculated (F) value was greater than its tabular value, which is significant at a significance level of less than 0.05, which means to the statistical power in the table below.

**Table 5: Results of the Median Variable Test**

| Model                  | Unstandardized Coefficients |            | Standardized Coefficients | R <sup>2</sup> | F       | t      | Sig. |
|------------------------|-----------------------------|------------|---------------------------|----------------|---------|--------|------|
|                        | B                           | Std. Error | Beta                      |                |         |        |      |
| Information Technology | .339                        | .050       | .354                      | 0.649          | 182.380 | 6.793  | .000 |
| Knowledge Management   | .562                        | .054       | .546                      |                |         | 10.481 | .000 |

a. **Dependent** Variable: Administration Creativity

## Conclusions

1. There is a statistically and morally significant impact relationship (for knowledge management) and (information technology) in the Oil Training Institute / Basra.
2. Information technology is linked to a statistically and morally significant impact relationship with administrative innovation in the Oil Training Institute / Basra.
3. There is a statistically and morally significant impact relationship (for knowledge management) in the development of (administrative creativity) Oil Training Institute / Basra.
4. There is an indirect influence relationship with statistical and moral significance between knowledge management and administrative creativity in terms of information technology (the relationship is partially mediated).

## References

- Al-Hadrawi, Hamid Karim (2010), *The impact of the information technology strategy on the knowledge economy, PhD thesis in future studies*, College of Management and Economics, Al-Mustansiriya University.
- Al-Kubaisi, Salah Al-Din (2005) *Knowledge Management / Publications of the Arab Administrative Development Organization*.
- Al-Kubaisi, Salah Al-Din (2018) *Knowledge Management, Part One - Third Edition - Publisher: Al-Dhad Library for Printing and Publishing*.
- Al-Sudi, Sana Raji (2016) The degree of administrative creativity management and its relationship to administrative performance in public schools in the northern West Bank governorates from the point of view of male and female teachers, a master's thesis in Educational Administration at the Faculty of Graduate Studies at An-Najah National University in Nablus, Palestine.
- Al-Taai, Suaad Hadi (2022), Information Technology: A Study of its Concept and Importance in Educational Institutions, *Webology*, Volume 19, Number 1, January, 2022.
- Elmasri, Ramez & Navatha, Shamkant (2016) *Fundamentals of Database system*, Seventh edition.
- Gaber, Zaid (2018/2019), Knowledge management and information technology in achieving a competitive advantage, a case study of some Biskra bank agencies, a PhD thesis in management sciences within the framework of the doctoral school in applied economics and management of organizations, specializing in economics and knowledge and knowledge management.
- Mabrouka, Bakhbou and Hafida, Qabal (2020) The Role of Information and Communication Technology in Achieving Agile Management Requirements, Case Study of the Cement Factory Sidi Moussa Adrar, a thesis that falls within the requirements for obtaining an academic master's degree in Business Administration, University of Colonel Ahmed Deraya Adrar, Faculty of Economics, Commercial and Sciences Management, Faculty of Management Sciences.
- Mahdi, Dalal & AHMED, Mezher & RASHEED, Firas (2021), The Role of Job Satisfaction in Developing Administrative Performance and Creativity: An Empirical Study in Iraq, *Journal of Asian Finance, Economics and Business* Vol. 8, No. 6 (2021) 0465–0473.

- Marwani, Huda (2021), *The role of knowledge management in the development of organizational creativity, a field study at the Sonelgaz Foundation - Oum El Bouaghi branch*, A supplementary note to obtaining a master's degree in management sciences specializing in business administration.
- Nabhan, Sadiq Hussein (2020), *The effect of using information technology in achieving the quality of accounting information - an applied study in the Oil Products Company, Maysan Branch / Al-Kut University College Journal*, Volume 5, Issue 2, Fifth Year 2020.