

# THE ROLE OF HIGH-PERFORMANCE SYSTEMS IN THE APPLICATION OF AGILE MANAGEMENT

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## Abstract

This study aimed to clarify the role of high-performance systems in the application of agile management in Iraqi universities from the point of view of faculty members and to achieve the objectives of the study, the descriptive approach was used by preparing a questionnaire consisting of 25 items divided into five axes to clarify the role of high-performance systems in the application of agile management. The study sample consisted of 135 faculty members randomly selected from Iraqi universities, and the results showed that the role of high-performance systems in the application of agile management in all Iraqi universities came on average and came first in the field of problem solving, with a medium degree, while the field of changeability came to last place. The results showed moderately no differences in the role of high-performance systems in the application of agile management in Iraqi universities from the point of view of faculty members based on the variables of academic rank and practical experience.

**Keywords:** lean management, performance systems, Iraqi universities.

## Introduction

### Study background and importance

Since the use of agile management in various administrative processes and related tasks will help to find distinctive results for administrative work, especially with regard to solving the problems of financial waste, in addition to saving the time factor, so the use of agile management style requires the provision of many basic elements necessary for the success of the agile management style, which makes it necessary to involve all parties involved in the administrative process in addition to working to change the culture of the organization through the dissemination and use of agile management in administrative processes, which contributes to the success of this type of management .(Olivier & Chassende- Baroz, 2010)

Management is an integrated process that aims to develop administrative work in the best integrated way, and because of agile management, the nature of this department is concerned with the use of resources available in the institution, whether these resources are human or financial, and the nature of this department is concerned with the element of time and human relations as it contributes to the success of various administrative processes, and for this reason, the use of agile management and its use in administrative processes has many reasons that require it. Especially in light of the waste that occurs in the organization's resources, which requires the use of agile management to reduce this waste in its various forms, and therefore

the use of agile management in administrative processes should not contribute to creating the quality of administrative outputs. (Ahmed, 2015).

Considering agile management and the principle on which it is based, agile management appears by targeting, reducing and dealing with waste in administrative work, and therefore agile management can be defined as the method that is concerned with solving the waste problems that have arisen. In all administrative processes, through the optimal use of resources and labor, and the development for the better in all administrative processes, Ramley (2012: 44) defined the agile management style which is: a set of actions that must be performed correctly, in the right order and at the right time, to create value for a particular job, in addition to focusing on the principle of respecting procedures and working time, in order to present them as required and in a timely manner, and to obtain the required addition of the required quality. While Emmanuelle (2009, Emmanuelle) argued that one of the most important principles of agile management is that it is based on a philosophy in economics, this is the main aspect on which management processes are based while maintaining the best quality of the results of the core work, it is also believed that this method uses a minimum of resources, both material and human, to find the best management processes and excellence in the quality of achievements.

### **Principles of Lean Management**

Lean management is based on a set of principles on which it is based in the implementation of administrative processes, and these principles are highlighted by the following :(Nicoulas & Thomas, 2009)

- The need to address issues that arise directly and in a timely manner to ensure that work is not interrupted, in addition to obtaining the highest quality of administrative work results.
- Using technology in administrative work to avoid wasting various material and human resources and not making mistakes.
- The decision philosophy of any organization is based on the long-term vision and philosophy and its acceptance of short-term costs.
- Creating a realistic and practical system to deal with various problems that may arise during administrative work.
- Develop a renewable plan and a clear description of business operations and use the method of continuous development.
- Detect all errors and do not hide them, and use the best rules and methods to deal with them.
- Relying on managers who possess the skills and ability to manage administrative processes and exploit their various resources successfully.
- Forming specialized work teams in administrative work that follow the system and philosophy on which the institution is based.
- Encourage all those associated with the institution to strive to develop this institution for the better.
- Not to rush to take administrative decisions and to take into account the interests of all parties within the organization and in the light of the available factors.
- Establish a simplified democratic system with various administrative activities and processes and not hinder them.

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-Use and conduct fieldwork to detect errors and follow up administrative work step by step to fully understand the current situation.

### **Forms of waste of high-performance systems**

- There are many forms of administrative waste in various organizations, the most prominent of which are the following ((Aleksandra, 2010(
- Waiting time: Agile management deals with unjustified expected time in the field of administrative processes, this expected time can waste effort and time and can lead to low administrative efficiency as well as low level of output.
- Unnecessary operations are among the most important forms of administrative waste that can correspond to the work to be done and this leads to a low level of results and their lack of quality, and affects decision-making regarding administrative processes.
- Increased production: Agile management regulates production and its processes, and therefore excess production leads to waste in various material or human aspects within the organization.
- Unexpected errors: Some errors may occur in the context of administrative work and therefore these errors may affect the quality and results of administrative processes. From this point of view, agile management strives to remove these errors before they occur and this contributes to solving many administrative problems.
- The right time to make a decision Poor decision-making or delay in decision-making is one of the most important factors that lead to waste in administrative work, and therefore agile management works to solve this aspect.
- Preparation of administrative processes Agile management contributes to the proper preparation of administrative work, which helps to solve the problems of waste, so this section works to improve administrative processes through the use of scientific methods and methodologies in the preparation of administrative work.

### **Requirements for high performance systems in the application of agile management**

Many requirements must be met to ensure the success of this method in achieving the goals of the organization, and the most important of these requirements are:

First- Cooperation between management and employees: The agile management method aims to create an atmosphere of familiarity and cooperation between employees, which requires providing the necessary support from senior management by providing all the ingredients for the success of the method and making operations in accordance with the principle of participatory work, working in groups and making decisions collectively, staying away from routine administrative work and contributing to getting rid of waste in all its forms to ensure the quality of administrative operations and their results. (2009, Philippe & Jean) .

Second: Supporting senior management The success of the agile management style depends on the extent of support provided by senior management and the capabilities it provides, which contribute to the success of this administrative work, and this can be done through the following aspects:( Nicolas & Thomas :2009)

- Providing all material, human and financial needs in addition to organizing time in order to achieve the planned goals and the success of this administrative work.

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-Stay away from routine work and follow the philosophy of agile management style in the implementation of administrative processes, which helps to achieve the required achievement and quality.

-Spreading the spirit of creativity and initiative among all employees and applying the democratic system in administrative work, and encouraging them to express opinions and proposals that would contribute to the development of administrative work.

Third: Attention to training qualitatively and quantitatively: Be attentive to the various areas of training employees and provide them with methods and methods that contribute to the success of administrative processes, and mobilize qualified and experienced workers in a way that leads to contributing to improving administrative work, discovering errors before they occur, and providing solutions that contribute to reducing administrative waste in its various fields, in addition to ensuring the quality of administrative products, it is implemented in several stages based on objective foundations, the most important of which are the following: (Nicoulas : &Thomas, 2009)

-Relying on refresher training for all employees without exception to explain the different types of waste within the facility and the extent of its danger to the facility and how to deal with it.

-The training programs of the facility must be adapted to the content of the mechanisms used in waste disposal, such as the five centimeters method.

-Rely on joint training to save time and allow the administrative employee to perform preventive maintenance or post-maintenance operations immediately without relying on others, and allow the employee to detect quality defects without relying on quality department analysis.

### **Study problem and questions**

In light of the emergence of modern administrative tools such as agile management tools as a modern administrative philosophy that works to achieve maximum value for administrative work, the problem of the study emerges by revealing the role of high performance systems in the application of agile management at the university from the point of view of faculty members, especially in light of the rapid developments in science, knowledge and technology in the field of administrative affairs, and the development of these affairs in line with this development. The problem of the study lies in answering the following questions:

-What is the role of successful systems in the application of agile management in Iraqi universities from the point of view of teachers?

-Are there statistically significant differences in the level of significance ( $\alpha = 0.05$ ) in the respondents' answers about the role of high-performance systems in the application of agile management in Iraqi universities based on academic classification and practical experience variables?

### **Objectives of the study**

This study sought to achieve the following objectives:

-Identify the role of high performance systems in the application of agile management from the point of view of faculty members.

-Detecting differences in the view of faculty members towards the role of high performance systems in the application of agile management according to the variables of academic rank and practical experience.

### **The importance of the study**

#### **First: Theoretical importance:**

The theoretical importance of this study lies in highlighting one of the most important modern management methods, which is the agile management method, as well as in clarifying the role of agile management in increasing the efficiency of the administrative process and the quality of the results of administrative work in addition to the data that will be provided and that managers will be able to benefit from on administrative work in the various departments and faculties of the university, and the importance of theoretical study of the scarcity of studies in this field.

#### **Second: Practical Importance:**

The importance of the practical study is emphasized by clarifying the importance of using the agile management method in educational institutions to combat waste in these institutions, in addition to the importance of the practice aspect through the results of the study that can be applied to the reality of management in Iraqi universities in particular and in other universities in general, as well as the possibility of employing agile management to improve administrative work in light of the results of this study.

### **Idiomatic and procedural definitions**

The study includes a number of terms and can be defined procedurally as follows:

**Administrative performance:** It is a set of administrative functions and tasks related to administrative work tasks that are carried out by taking responsibility for ensuring the success of administrative work (Gillies). In this study, it was planned to perform administrative functions with a high degree of administrative efficiency to ensure the quality and success of administrative work.

**Agile management:** It is a set of actions that must be implemented correctly, in the right order and in a timely manner to create value for a particular job, in addition to focusing on the principle of respecting procedures and working time to present them according to what is required and in a timely manner and obtain the required addition with the required quality.) 2012 Ramly (The study planned to employ a variety of human and material resources during administrative processes in order to improve the administrative performance of Iraqi universities at the lowest possible cost and with the least possible time and effort.

**Quality of outputs:** It is a set of administrative performance results obtained from administrative processes that aim to use various elements related to material and human aspects with the least possible time and effort. (1991 Barton & Marson) .

### **Limitations of the study**

**Spatial determinant:** Iraqi universities:

**Human Determinant:** Faculty members in Iraqi universities.



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Time-bound This study was applied during the academic year 2023

Objective limits: The tool used in this study, prepared by the researcher.

### **Previous studies**

This part presents the previous studies related to the subject of the study reached by the researcher and examines them in chronological order from the oldest to the most recent, which are presented as follows :

Ramly (2012) conducted a study in the United States to reveal the degree to which agile management is applied and help desk operations are improved using agile management methodology in an educational institution. The study sample consisted of (300) employees, a questionnaire was used to collect data, and the results of the study showed that the application of agile management reached an average degree, and the results of the study showed that the application of this methodology reduced grant operations by (75%), and attributed this to improving the process by identifying problems and the best solutions, which affects the satisfaction of the main beneficiaries and the development of the future, and the results showed that there were no differences in the opinions of individuals in the study sample about the role of agile management. In the quality of administrative work, due to the variable in the practical experience of the employee.

Ismail (2012) conducted a study in Iraq to determine the feasibility of applying agile management in higher education by identifying the steps, constraints and responsibilities required for implementation. The study sample consisted of (172) administrative employees who used a questionnaire to collect data. The results of the study showed that this method is one of the modern administrative methods that simplify work procedures and improve the level of quality at the university level. The results also showed that this administrative style needs the support and participation of employees, and the results showed that the application of this administrative style came to a moderate degree.

Al-Banna's study (2014) was conducted in Egypt and aimed to identify the reasons for the interest of higher education institutions in the method of agile management, how to apply it and the determinants of its application, and the study sample consisted of (250) employees. The results of this study showed that the application of this method in higher education institutions has become necessary and necessary to achieve the efficiency of internal and external operations and thus excellence in performance, and one of the success factors for the application of this method is to support the summit. The results also showed that the most important obstacles to its implementation are the inefficiency of the information system, the lack of skills necessary for some workers in the project, the improvement and resistance of workers to change, and that its application was at a low level.

Al-Hassan (2014) conducted a study in the Kingdom of Saudi Arabia aimed at revealing the possibility of benefiting from the application of agile management mechanisms and developing the quality of educational leadership in educational supervision in Al-Ahsa Governorate, and the impact of their application in improving, correcting, improving and reducing performance issues in the management of educational support and their reflection on the beneficiary. The study sample consisted of (300) men and women. The results of the study showed that the Department of Educational Supervision was ready to overcome all obstacles and requirements

to apply this method in order to improve academic and educational outputs through performance evaluation in the Department of Educational Supervision, and the results showed a strong and positive relationship between the variables of effective commitment to senior management, organizational culture, information systems and human resources, and the possibility of using this method in the process of educational supervision and the existence of a strong and positive relationship between the possibility of applying this method in the management of educational supervision and improving the quality of implementation. In implementation of the administrative framework process .

Hess and Benjamin (2015), conducted a study in the United States aimed at identifying the historical evolution of agile management methodology and identifying opportunities for its application in universities as well as challenges for its application in higher education and culture. The changes needed to create a climate of long-term success. The study sample consisted of (350) employees. A questionnaire was used to collect data and the results of the study showed that this methodology can be applied to curriculum delivery, business services, support, admissions, registration and research management. The results also showed that there are some Barriers to implementation, but practical improvements and cultural changes deserve attention .

Benwarth and Jeba (2016) conducted a study in Algeria aimed at shedding light on one of the most important modern methods of managing the administrative process, which is the agile management method, and studying the different forms of waste that the organization may face during the production process. The study sample consisted of (205) employees who used the descriptive analytical approach in this study. The results showed that the effective role played by the agile management method in eliminating waste and losses in the organization is achieved through a set of mechanisms and tools on which this philosophy is based, through the application of the study to a sample of educational institutions and using the questionnaire tool, the extent to which the application of the agile management method was measured. The study concluded that these institutions, represented by their public administration, are firmly committed to providing all the necessary capabilities to implement this method, and that the training policy adopted there is in line to some extent with their basic needs, but the prevailing culture in these institutions, foremost of which is the absence of a spirit of cooperation between management and employees, remains the biggest obstacle to the application of this administrative philosophy .

Vijaya (2016) conducted a study in India and aims to illustrate how agile management is applied in higher education institutions by studying the case of the central library of a university in India. The study sample consisted of (150) faculty members. A questionnaire and interview were used to collect data. The results of the study showed that the role of agile management contributes to the organization of libraries positively, and identified the most important advantages of its application in higher education institutions through the activation and organization of the administrative process of the library .

Rekaj and Al-Abadla (2018) conducted a study in Palestine to reveal the availability of agile management requirements and its role in human resource development within the Ministry of Education and Higher Education. The study sample consisted of (4119) randomly selected employees. To achieve the objectives of this study, a questionnaire was used to collect data.

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The results of the study showed that the work method followed in the Ministry of National Education and Higher Education, based on continuous improvement of work through the adoption of unified standards and job rotation, makes it possible to meet the requirements of agile management by linking employment and work organization.

### **Commenting on Previous Studies**

When reviewing and analyzing previous studies related to the subject of the current study, it is noted that there is an increasing interest in addressing the agile management method in research and study, and this is evident through many studies such as Ramli (2012), where the results of these studies praised the positive role of the agile management style in the development and quality of administrative work. Some studies also dealt with the agile management style and the degree of practicing this method in administrative work, such as the study of Al-Banna (2014), where the results of these studies indicated an average degree of use of the agile management style in administrative work.

In an attempt to compare the current study with previous studies and determine the place of the current study among these studies and what distinguishes them from each other, this is evident through the variables of the current study represented in its subject, which also reveals the degree of use of agile management. The role of high-performance systems in the application of agile management, which was not addressed by research and study, especially in the Iraqi environment in particular within the limits of the researcher's knowledge.

In light of the above, it is hoped that this study will have its place among previous studies. This is a starting point for further studies in this field, and therefore the most important justification for conducting this study lies in the scarcity of studies on the use of agile management, as well as the sample of studies represented by faculty members familiar with this field.

### **Method and procedure**

#### **Study Methodology**

To achieve the objectives of this study, the descriptive approach was used to reveal the role of high-performance systems in the application of agile management in Iraqi universities from the point of view of faculty members.

#### **Study population**

The study population consisted of (50,791) faculty members from Iraqi universities for the academic year 2023, according to the official records of the Ministry of Planning and the Central Bureau of Statistics in Iraqi universities.

#### **Study Sample**

The study sample consisted of (135) faculty members randomly selected from Iraqi universities from the total study population, and Table (1) shows the distribution of members of the study sample, based on the variables of academic rank and practical experience.



**Table (1)** Distribution of study sample members according to academic rank and work experience variables

Total	More than 10 years	5-10 years	Less than 5 years	
30	5	12	33	<b>Assistant Professor</b>
65	36	17	2	<b>Associate Professor</b>
40	14	16	-	<b>professor</b>
135	55	45	35	<b>Total</b>

### Study Tool

In order to achieve the objectives of the study and clarify the role of high-performance systems in the application of agile management in Iraqi universities from the point of view of faculty members, a questionnaire was prepared for this purpose, after referring to the educational literature in this context, in addition to previous studies such as the study of Abdul Aziz (2014), bin Warith and Jaba (2016), and in light of this, the questionnaire was prepared and its initial version consisted of (30) elements, distributed over five axes, each field consists of (6) paragraphs.

### Study Procedure

To achieve the objectives of the study, the study tool was prepared in its final form, after testing the indicators of its validity and stability by applying it to an exploratory sample outside the study sample, in addition to presenting it to a panel of arbitrators and collecting their opinions and observations. The members of the study population were identified by referring to the official documents of the Department of Personnel Affairs in Iraqi universities, obtaining their official numbers and determining the number of the study sample, which included 135 randomly selected faculty members. The study tool was distributed to the study sample for data collection purposes, and the method of response to the study tool was clarified, and all relevant information was clarified, and that their responses to the study tool are used only for scientific research purposes, and the need to respond to the paragraphs of the study tool accurately. And use the statistical processing program (SPSS) to extract the results to answer the study questions.

### Study variables

The study included the following variables:

First: Independent variables: Scientific rank (assistant professor, associate professor, professor).

Work experience: (less than 5 years, 5-10 years more than 10 years).

Second: Dependent variable: the quality of administrative performance outputs.

### Statistical Treatments

-To answer the first question, the arithmetic mean and standard deviations were extracted.

-To answer the second question, arithmetic averages and standard deviations were extracted and one analysis of variance was used .

### Results

This part summarizes the results of the study according to the questions posed, which are as follows: First: Results related to the first question: What is the role of high-performance systems in the application of agile management in Iraqi universities from the point of view of faculty members themselves?

To answer the question, the arithmetic averages and standard deviations of the responses of the study sample members in each area were extracted from the role of high-performance systems in the application of agile management in Iraqi universities, and their role as shown in Table(2).

#### Arithmetic averages of the role of high-performance systems in the application of agile management in descending order

Role	Standard deviation	Arithmetic mean	Domain	Number	Rank
Medium	0.48	3.06	Problem solving	3	<b>1</b>
Medium	0.70	3.04	Encouraging creativity	4	<b>2</b>
Medium	0.69	3.02	Continuous improvement and development	2	<b>3</b>
Medium	0.57	2.85	Organization of administrative work	1	<b>4</b>
Medium	0.67	2.65	Changeability	5	<b>5</b>
Medium	0.49	2.92	<b>The role of agile management in the quality of all performance outputs</b>		

Table(2)

Table (2) shows that the role of high-performance systems in the application of agile management in Iraqi universities was average, as the arithmetic average of the role of agile management in all Iraqi universities. (2.92), also the results showed that the arithmetic averages of the respondents' answers for the sub-fields ranged between (2.65 - 3.06) to an average level for all fields, and the field of "problem solving" came in first place with an arithmetic average of (3.06), and in second place came the field of encouraging creativity with an arithmetic average (3.04), and in third place came the field of continuous improvement and development, with an arithmetic average of (3.02), and the field of "organization of administrative work" came in fourth place with an arithmetic average of (2.85), while the field of variance came in Last place, with an arithmetic average(2.65).

The arithmetic averages and standard deviations of the paragraphs of each area were calculated as follows:

First: the field of problem solving

Arithmetic averages and standard deviations of the estimates of the study sample members about the paragraphs of the field and problem solving arranged in descending order according to the arithmetic averages

Role	Standard deviation	Arithmetic mean	Domain	Number	Rank
Medium	0.63	3.16	Develop ideas and ways to avoid administrative problems.	2	1
Medium	0.43	3.09	Develop individual solutions for each management problem separately.	3	2
Medium	0.45	3.03	Develop trained work teams to solve approved administrative problems.	5	3
Medium	0.25	3.02	Develop plans to face the problems of administrative work that may occur.	1	4
Medium	0.36	2.85	Contribute to making important and correct decisions in the face of administrative problems.	4	5
Medium	0.48	3.06	<b>The field of solving all problems</b>		

Table(3)

From the data contained in Table (3), it is clear that the average estimates of the study sample for paragraphs in the field of problem solving ranged between (2.85 - 3.16) with an average degree of classification for all paragraphs, and the paragraph came first (2) and reads: Puts ideas and ways to avoid the occurrence of administrative problems, with an arithmetic average (3.16), and came in last place paragraph (4), which reads: Contributes to making important and correct decisions in the face of administrative problems with an arithmetic average of(2.85)

### Second: The field of encouraging creativity

**Arithmetic averages and standard deviations of the estimates of the study sample members on the paragraphs of the field and encouragement of creativity arranged in descending order according to the arithmetic averages**

Role	Standard deviation	Arithmetic mean	Domain	Number	Rank
Medium	0.75	3.16	Encourage and use creative suggestions from employees	2	1
Medium	0.65	3.15	Employs new ideas to develop managerial creativity among employees	1	2
Medium	0.86	3.08	Provides financial and functional facilities to develop creativity among employees.	3	3

Medium	0.66	2.95	Encourages employees to be creative within and outside their jurisdiction.	5	4
Medium	0.83	2.82	Establish a specialized team to supervise and develop creative administrative work.	4	5
Medium	0.70	3.04	<b>The field of encouraging creativity for all</b>		

The data contained in Table (4) showed that the arithmetic averages of the estimates of the study sample of the elements in the field of encouraging creativity ranged between (2.82 - 3.16) with average evaluation scores for all vocabulary, and paragraph (2). It came in first place, which reads: Encouraging and using creative proposals from employees with an arithmetic average of (3.16), and paragraph (4) came finally, which reads: Establishing a specialized team to supervise and develop creative projects. Administrative work with an arithmetic average of (2.82)

### **Third: The field of continuous improvement and development**

**Arithmetic averages and standard deviations of the estimates of the study sample members on the paragraphs of the field of continuous improvement and development arranged in descending order according to the arithmetic averages**

Role	Standard deviation	Arithmetic mean	Domain	Number	Rank
Medium	0.51	3.08	Contribute to the development of solutions to routine procedures to improve and develop administrative work	1	1
Medium	0.69	3.03	Provides training courses to improve employees' managerial skills and knowledge.	2	2
Medium	0.54	2.92	Depends on the results of the performance evaluation of employees to develop administrative work	3	3
Medium	0.62	2.81	Contributes to spreading the culture of removing waste and administrative loss to improve it	4	4
Medium	0.69	2.65	Develop advanced programs and methodologies for the improvement and development of activities and processes.	5	5
Medium	0.69	3.02	<b>The field of continuous improvement and development all</b>		

Table(5)

It is clear from the data in Table (5) that the arithmetic means of the study sample's estimates of the elements in the field of continuous improvement and development ranged between 2.65 and 3.08) with average scores for all vocabulary, and paragraph. Paragraph (1) came in first place, which reads: Contribute to the development of solutions to improve joint administrative work and development procedures with an arithmetic average of (3.08) and paragraph (5) came last, which reads: Developing advanced programs and methodologies to improve and develop activities and processes with an arithmetic average (2, 65).

**Fourth: The field of organizing administrative work**

**Arithmetic averages and standard deviations of the estimates of the study sample members on the paragraphs of the field of organizing administrative work arranged in descending order according to the arithmetic averages**

Role	Standard deviation	Arithmetic mean	Paragraph	Number	Rank
Medium	0.56	3.51	Contribute to the development of a specific methodology for the organization of administrative work.	1	1
Medium	0.58	3.03	Contribute to the arrangement of files and records to facilitate access when needed.	3	2
Medium	0.64	3.02	Helps maintain the flow of administrative work.	2	3
Medium	0.82	2.36	Stimulates self-discipline to keep work organized	5	4
Medium	0.36	2.33	Sets specific standards for the organization of the workplace.	4	5
Medium	0.57	2.85	<b>The field of organizing all administrative work</b>		

**Table(6)**

It is clear from the data in Table (6) that the arithmetic means of the estimates of the study sample on the paragraphs of the field of organization of administrative work ranged from 2.33 to 3.51 with an average evaluation score for all paragraphs, and paragraph (1) comes first, which states the following: Contribute to the development of a specific methodology for organizing administrative work, with an arithmetic average of (51.3), and subsection (4). It reads: Sets specific standards for the organization of the workplace, with an arithmetic average of (2.33)

**Fifth: the field of changeability**

**Arithmetic averages and standard deviations of the estimates of the study sample members about the paragraphs of the field and changeability in descending order according to the arithmetic averages**

Role	Standard deviation	Arithmetic mean	Paragraph	Number	Rank
Medium	0.77	2.85	Develop ideas and experiences to develop administrative work for the better.	3	1
Medium	0.66	2.65	You benefit from the experiences of others in the administrative field to change for the better	5	2
Medium	0.85	2.74	Administrative positions shall be modified in proportion to the nature of administrative work	1	3
Medium	0.57	2.55	Accept the proposed administrative development and change	2	4
Medium	0.83	2.45	Keen to benefit from the opinions and suggestions of others to develop administrative work.	4	5
Medium	0.67	2.65	<b>The field of changeability all</b>		

**Table(7)**



It is clear from the data contained in Table (7) that the arithmetic averages of the estimates of the study sample of the elements in the field of variance ranged between 2.45 (2.85) with an average evaluation of all paragraphs, and came in first place paragraph (3) and its text: Ideas and experiences to develop administrative work for the better, with an arithmetic average (2.85), and came in last place paragraph (4), which reads: Keen to benefit from the opinions and suggestions of others to develop administrative work, with an arithmetic average of .(2.54)

Second: Results related to the second question: Are there statistically significant differences in the level of significance ( $0.05 = \alpha$ ) in the respondents' answers about the role of high-performance systems in the application of agile management in Iraqi universities based on the variables of academic rank and practical experience?

To answer this question, arithmetic averages and standard deviations were extracted, and one analysis of variance was used for the answers of the study sample members on the areas of the role of agile management and the role of everyone, according to the variables of academic rank and practical experience, as shown in Table(8).

**Table(8)**

**Analysis of Single Variance (ANOVA) for the Role of High Performance Systems in the Application of Lean Management According to the Academic Rank and Work Experience Variables**

Statistical function	F	standard deviation	Arithmetic mean	Level	Variable
0.19	1.62	0.75	2.92	Assistant Professor	<b>Academic Rank</b>
		0.67	2.89	Associate Professor	
		0.69	2.95	professor	
0.68	0.58	0.44	2.89	Less than 5 years	<b>Work Experience</b>
		0.73	2.95	5-10 years	
		0.64	2.94	More than 10 years	

Table (8) shows that there were no statistically significant differences at the level of significance (0.05) ( $\alpha$ ) on the role of high-performance systems in the application of agile management in Iraqi universities from the point of view of faculty members according to the variables of academic rank and practical experience, as not all values of (F) were statistically significant.

### Discussion of findings and recommendations

**This section includes a discussion of the results of the study, as well as a set of recommendations in light of these findings:**

First: Discussing the results related to the first question, which states: "What is the role of high-performance systems in the application of agile management in Iraqi universities from the point of view of the faculty members themselves?" The results showed that the role of high-performance systems in the application of agile management in all Iraqi universities came in middle place and first in the field of "problem solving", with a medium degree, while the field of "variation" came in last place, with a medium degree.

This result can be explained by the novelty of the use of the agile management method in Iraqi universities, which led to the role of agile management in the average quality of administrative results, and therefore depends on the degree of use of the agile management method, which came with an average degree of use, and this corresponds to the nature of use and the quality of administrative work results.

This result can also be attributed in light of the monitoring of those in charge of developing administrative work in Iraqi universities, and the extent to which they use and employ the style of agile management, whether in the use of agile management tools, or in solving administrative problems, or in continuous development and improvement, and thus this will be reflected directly on the quality of administrative work products and will appear in the administrative performance of employees. The result of the case study was consistent with the study of (Ramly) (2012), whose results showed that the use of the agile management method succeeded in solving administrative problems, which led to the improvement of administrative work, and it was also consistent with the study of Bin Warith and Jabba (2016), which showed that the use of agile management method contributes to the elimination of waste and administrative losses, and it is consistent with the study of Vijaya (Vijaya 2016), whose results indicate that the agile management style helps to organize administrative work in Libraries and activating the administrative process.

Second: Discussing the results related to the second question, which indicate that there are statistically significant differences at the level of significance ( $0.05 = \alpha$ ) in the respondents' answers to the role of high-performance systems in the application of agile management in Iraqi universities based on the variables of academic rank and practical experience« ?

The results showed that there were no differences on the role of high-performance systems in the application of agile management in Iraqi universities from the point of view of faculty members based on the variables of academic rank and practical experience.

This result can be explained by the absence of differences in the opinions of faculty members about . The role of high-performance systems in the application of agile management in Iraqi universities, based on the nature of this use and the degree of its use in administrative processes, as well as in light of the modernity of the use of this method in administrative processes in various departments that did not reach the required level, and this is what faculty members felt or touched in their work and relations with those responsible for administrative work, which is almost clear and tangible to everyone, which led to the unification of the views of faculty members towards The role of high performance systems in the application of agile management. This result can also be attributed according to the nature of this method, its tools and the extent of its use, whether in solving problems facing administrative work at the university, or in developing the performance of employees, as well as in providing the requirements and requirements for the success of the agile management style, and this has led to the existence of realistic and unified opinions on the role of the agile management style in the quality of administrative work in the various university departments and in the different administrative work.

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### **Recommendations**

In light of the results of the study, the researcher recommends the following :

- Spread the culture of using agile management to all employees, regardless of their positions.
- Providing the requirements for the use of agile management in various fields of academic administrative work.
- Using the agile management method to solve administrative problems and organize, develop and improve the administrative work environment to ensure the quality of the results of administrative work.
- Providing the necessary training programs to train those responsible for administrative work in the various departments of the university.

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