KNOWLEDGE MANAGEMENT IN LIGHT OF ARTIFICIAL INTELLIGENCE AND ITS IMPACT ON IMPROVING THE   PERFORMANCE OF THE HOTEL ORGANIZATION

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ABSTRACT

Interest in the role played by artificial intelligence has increased in various fields, including the field of management in general and the service sector in particular, as most institutions seek to achieve first ranks in the level of competition.

The research aims to identify the impact of knowledge management in light of artificial intelligence on improving the performance of the hotel organization. The case of the Rotana Babel five-star hotel in Baghdad was studied and a questionnaire was used to collect data for the research, which included 50 workers in the hotel at all job levels. The results showed the clear impact of knowledge management and artificial intelligence in improving Hotel performance: The study recommended paying attention to the applications of artificial intelligence and its use in knowledge management in the hotel.

KEYWORDS: Artificial Intelligence- Hotel Organization - Knowledge Management.

INTRODUCTION

The world has witnessed many transformations in lives of people, which include globalization, current economic changes, intense competition, and resulting regional global effects, which urged and prompted scientists to search for modern approaches and new strategies to interact with these changes and challenges in various organizations. So , owing to that transformations, methods of developing performance in organizations have changed, and the focus has become on the human side of the administrative process.

By the time when organizations realize the importance of the human element to them, they start thinking about the means and methods that enable them to optimally and efficiently exploit this element.

Knowledge management is considered one of the modern administrative concepts in which interest has increased as a result of the tremendous development of technology, information and communication. Organizations have begun to stress that the source of wealth is not only capital but also knowledge. Knowledge management has occupied an intellectual place in the world of business and knowledge is derived from information and its internal and external sources and it is nothing without such information, as well as creating a culture of knowledge in organizations and administrative institutions that affect sources in terms of technical skills and the basics of work implementation .

Research problem:

By the appearance of globalization, the increase of competition intensity, the emergence of modern technology, the shift towards a knowledge-based economy, and the change in organizational structures, as well as the new preferences of knowledge workers , accordingly the world tends toward adopting knowledge as a strategic resource. The knowledge economy whets organizations to adopt strategies that increase innovation, creativity, and excellence in performance by integrating their activities, operations, and systems to intentionally exploit

its resources in a better and more efficient way . It is not impossible to take in any application of knowledge management without a clear understanding of knowledge.

For the importance of intelligence , the computer has developed intelligence programs that imitates human intelligence and technological applications in order to get benefit of knowledge for applying and publishing it.

Given artificial intelligence interacts with how humans think, so knowledge management includes some artificial intelligence concepts to help individuals collect, organize, and exchange knowledge inside and outside the organization (Abdel Razzaq, 2022: 123(

As a result , the main research question lies in the following:

What is the role of knowledge management in light of artificial intelligence as to improve the performance of the hotel system?

Importance of studying

Scientific importance:

The importance of the study lies in its treatment of a topic that supports scientific research. The study constitutes a reference for future studies that contribute to enriching libraries with information related to the research topic and benefiting from the study topic.

Theoretical importance:

It addresses an essential and vital topic in studying the relationship between knowledge management in light of artificial intelligence and improving the performance of the hotel system. The increase e of the importance of knowledge management and its role in the success of institutions is related to the institutional performance and its integrated system for the organization's work outcomes. The hotel system organizations face many challenges as a result of local and global changes and developments which have become a new reality and management today is a change management that is linked to the past to identify trends and lessons learned. Renewal and change have become a necessity for institutions to remain competitive and the necessity of abandoning classic models and adopting

modernity in order to reach a high level of performance.

The general objective of the study
The research seeks to know the role of knowledge management in light of artificial intelligence in improving the performance of the hotel system through:
• Introducing the concept of knowledge management.
• Know the role of knowledge management in improving the performance of the hotel system.
• Defining the role of artificial intelligence applications in improving the performance of the hotel system.
• Identifying institutional performance and approaches to improving performance.
Research's hypotheses :
Main hypothesis: There is a statistically significant impact relationship at (α≥0.05) between knowledge management under artificial intelligence and improving the performance of the hotel system.
This main hypothesis is divided into the following sub-hypotheses:
There is a statistically significant impact relationship at (α≥0.05) between knowledge management and improving the performance of the hotel system.
There is a statistically significant impact relationship at (α≥0.05) between artificial intelligence and improving the performance of the hotel system.
The limits and obstacles of the thesis:
Time field : The study began on February 1, 2024 and continued for two months
Spatial field: The hotel system in Iraq
The human sphere: managers and workers at the Rotana Babylon Hotel in Baghdad
Terminology of study:
System: A group of units or elements interacting with each other to form an integrated whole intended to achieve a certain function. (Odeh: 2012: 77)
Artificial Intelligence: Computer programs that engage in tasks that are completed satisfactorily by humans. (Bilal, 2019: 12(
Knowledge management: It is prediction, extrapolation, inference, deduction, reasoning, synthesis, analysis, interpretation, and causality, which is providing information and making it available to all employees in the organization. (Muslim, 2015: 20)

Chapter Two: Theoretical background and previous studies
First, a theoretical background:
1.   Knowledge management:
Knowledge :
It means Information and facts that a person has in his mind about something, which is everything implicit or apparent that individuals bring to mind to perform their work with perfection or to make sound decisions.
The importance of knowledge in business organizations is highlighted by the value it adds to them. The importance of knowledge can be determined through:
• Knowledge contributed to the flexibility of institutions by pushing them to adopt more flexible forms of coordination, design, and structure.
• Knowledge has contributed to transforming institutions into knowledge societies that bring about radical change in the organization to adapt to the rapid change in the business environment and to confront increasing complexity.
• The organization can benefit from the same knowledge of a final commodity other than selling and trading, and its use guides administrative knowledge and institutional managers on how to manage their institutions. (Al-Maghrabi, 2019: 13)
Management: It is an accurate knowledge exactly what you want people to do and then ensuring that they do their work in the best and cheapest way.
Knowledge management means information, data, and expertise that can be processed automatically and transfers expertise and understanding to those who need it and search for it, to organize and present it to others to be applied and active. (Buran, 2016: 14)
Sources of knowledge :
Internal sources include:
The accumulated experiences of the organization's individuals on various topics and their ability to benefit from the learning of

individuals, groups, and the organization as a whole, its processes, and the approved technology. Examples of internal sources include: strategy, internal conferences, electronic libraries, dialogue, and internal processes of individuals through intelligence, reason, and experience.

External sources: those sources that appear in the institution's surrounding environment and which depend on the type of relationship with other leading institutions in the field or affiliation to groups that facilitate the process of extracting knowledge, such as libraries, the Internet, the institution, competitors, suppliers, and scientific research centers. The environment is the external source of information and knowledge, as individuals work to their various organizational levels, through one or all of their sensory perceptions, acquire data and incidents through their perceptual and cognitive abilities, such as contemplation and understanding and transform them into information, and put them into meaning to transform them into knowledge, and the difference in the level of this knowledge is expected to reflect the difference in issues and perceptions (Al-Maghrabi, 2019: 14)

Knowledge management objectives:

• Reusing and maximizing knowledge

• Attracting greater intellectual capital to develop solutions to the problems facing the organization.

• Creating an organizational environment that encourages every individual in the organization to share knowledge to raise the level of knowledge of others.

• Identifying core knowledge and how to obtain and protect it.

• Building learning capabilities, spreading a culture of knowledge, stimulating its development, and competing through human intelligence.

• Ensuring the effectiveness of the organization's techniques, converting tacit knowledge into visible knowledge, and maximizing returns from intellectual property through the use of the inventions and knowledge it possesses.

• The transformation of organizations from the traditional economy to the new scientific economy and acts as a network of activities as it contributes to the transformation towards broad economic networks and electronic commerce (Muslim, 2015: 27 (

Knowledge management features:

One of the most important features of knowledge management is that it deals with knowledge as well as information. In order for organizations to be able to understand, manage and measure knowledge, there must be a clear understanding of the nature of knowledge and distinguishing it from information and data. Data is represented by facts, observations, or known things and is used for inference. Data is needed to become information, but information is sub-groups. From data, it has relevance and examination, and knowledge is embodied as a potentially occurring act that generates value based on data. Knowledge is a procedure that explains the basis for obtaining information (Abdel-Razzaq and Al-Nasser, 2020:18).

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Determinants of knowledge management:

A group of factors contribute to the formation of the determinants of knowledge management and lead to the obstruction of knowledge management within the organization:

Organizational culture: Knowledge is no longer just information and documents, but rather human relationships that play a role in creating and disseminating knowledge.

Values: judgments acquired by the individual that may be positive, such as the value of respect for time.

Standards: These are the expected patterns of harmful behavior that the individual refers to in order to guide him to what the behavior should be.

Practices: The formal or informal procedures that are followed when performing the required activities and professions.

Organizational structure: The structure that encourages individual behavior within one organizational unit and withholds knowledge from the rest of the units leads to obstructing effective knowledge management within the organization as a whole (Al-Thabti, 2023: 94(

The relationship of knowledge management to organization performance:

The role of knowledge management in improving the organization's performance:

• Increase the opportunity for organizations to focus on motivating individuals to innovate and activate the creative department.

• It helps bring about change in the organization in light of rapid change.

• It helps reduce costs, increase revenues, and achieve competitive advantage.

• Activating the organization's activities in order to achieve goals.

• Helping institutions in renewing and increasing their ability to face constant changes.

• Working to coordinate efforts, optimize the use of the facility's resources, and provide the framework for enhancing organizational knowledge.

• Enhancing the organization's ability to maintain knowledge-based organizational performance.

• Working to benefit from information, knowledge and research in developing the institution as an independent entity. (Araqawi

and Abdel Louh 2019: 14)

2.   Artificial intelligence

The concept of artificial intelligence:

Artificial intelligence consists of two words: the first, artificial, refers to something made and unnatural, and the second, intelligence, means the ability to understand and think. John McCarthy in 1955, one of the pioneers of AI, was the first to define the term artificial intelligence as follows: "The goal of artificial intelligence is to develop machines." She acts as if she is intelligent. Artificial intelligence can be defined as a method of making a computer, a robot that is controlled by a computer, or a program that thinks intelligently in the same way that intelligent humans think, which is to build a computer program that engages in tasks that are completed satisfactorily by humans because they require high mental processes. level.(Moses, 2019: 20)

The importance of artificial intelligence:

The great interest that artificial intelligence has received at all levels is one of the most prominent indicators of its importance and the importance of artificial intelligence at all levels. It is the highlight of indicators of its importance, which is an extension of the importance of the machine in human life for a long time, dating back to the Stone Age. Since ancient history, humans have been making machines and every new invention diminishes previous inventions

The results of studies conducted by Stanford University in the United States showed that artificial intelligence in the twenty-first century has contributed to influencing daily life in many areas, as the dominant part of the entire technological industry consists mainly of artificial intelligence and machine learning, which have increasingly become a part of human daily life. Developments allow companies to achieve the desired goals with less time and money, make important decisions quickly, and create new innovative products and services. In recent years, artificial intelligence and machine learning technology have received a strong boost in development and spread around the world, as artificial intelligence markets have become competitive markets between countries of the world in various aspects of daily

life. (Muhammad, 2023: 59 (

The most important areas and applications in which artificial intelligence has been used can be summarized:

Natural language processing:

It means developing programs and systems that have the ability to understand and generate human language, as data enters the computer normally and then it understands it. The main goal in natural language processing is to make the relationship between the computer and the human being natural. It is divided into two parts: finding ways for the computer to understand the instructions given to it.

Natural language production:

The computer produces sentences in Arabic or English.

Defining the speech :

It is through sentences given to it using the keyboard and speech recognition, the computer becomes able to understand human speech and commands can be directed verbally to the computer.

Robot:

Artificial intelligence includes giving the robot the ability to move, understand the environment around it, and respond to commands in a flexible and sensitive way.

Automated programming:

Programming is the means of executing information in a computer, and automated programming is the production of intelligent programs used to help programmers produce their programs. The goal of automated programming is to produce an intelligent program that enables a program on its own.

 Computer vision:

Providing the computer with optical sensors that enable it to recognize people and shapes. The goal of the field of computer vision is to make human experts describe them in images that enable the computer to apply that information to similar problems (Abdel Samad, 2020: 24(

Institutional performance

Institutional performance: The integrated system of the results of the organization's work in light of its interaction with the elements of its internal and external environment. It is a

summary, either daily, monthly, or annually.

The concept of performance is linked to effectiveness, which refers to achieving the goals set by the organization regardless of the costs incurred, while efficiency refers to the ratio of inputs to outputs (Al-Shamili, 2017: 10)

Approaches to improving performance:

The most important approaches to improving performance (Al-Husseini, 2011: 134) * Improving performance by focusing on developing employees' skills and behavior.

* Improving performance by focusing on developing physical working conditions.

* Improving performance by focusing on technical development.

* Improving performance by focusing on organizational development and restructuring.

Factors for improving performance: (Al-Shamili, 2017: 87(

 Thinkers and those concerned have agreed about improving the performance of organizations, as performance in itself is dependent on a group of variables and factors, some inside the organization and some outside the organization. The most important of these factors are:

1. Internal factors: They represent a group of variables and factors that exist in the organization's internal environment and are related to the organization's resources, internal system, culture, functions, departments, and branches. They are:

Technical factors: include the type of technology used and the contribution of the machine versus the contribution of workers.

Human factors: level of qualification, composition of workers, and workers' relationship with each other.

2. External factors: These are the factors that lie outside the organization's environment and that negatively and positively affect its performance.

Performance Standards :

There is a set of standards to judge the level of performance (Al-Azzawi, 2005: 21)

Historical standard: The level of performance for previous years represents a historical standard. This standard is effective when judging the level of improvement or deterioration of

performance over time, but it does not give an indication of the level of satisfaction with this performance.

Target standard: reflects reasonable levels of performance, and organizations prepare this standard in light of their previous experience.

Competitive performance standard: Organizations use comparison rules as a performance standard, as they compare actual performance with the performance achieved by one of the organization's competitors in the market.

Absolute standard: These are theoretical standards, such as the zero defects standard applied by Japanese companies. They may not be achieved in application, but they remain a standard that seeks to achieve goals.

Artificial intelligence and knowledge management:

The role of knowledge in artificial intelligence is highlighted in terms of improving the organizational decision-making process, which depends on the availability of data and information in information stores and warehouses and allows adaptation to the variables of their environments in order to implement their strategies. Artificial intelligence also provides the ability to access the source of external data and information to develop a systematic and ethical program. To manage, analyze and apply information and know how to improve organizational decisions, as executives view the immediate support of the information environment as a critical strategic advantage (Abdul Razzaq, 2022: 123)

Secondly, previous studies:

Name of the researcher and the country	Objective of the study	Stage, educational material	Research tool and methodology.	Statistical Means	The most important results of the study
Iraqi Studies					
Al-Fakhri: 2020) Journal of the Baghdad University College of Economic Sciences, Issue Sixty-Eight, pp. 169-183	Introducing the role of emotional intelligence in improving the performance of Iraqi organizations based on knowledge bases	Nineveh Water Directorate	Case study	using MATLAB	The results showed that the performance of knowledge bases was more effective in calculating the distance matrix, especially data with larger dimensions. The study recommended holding various courses and

					workshops for employees specialized in training on advanced devices that conduct examinations
Madeed: 2018) Scientific Journal of Commercial and Environmental Studies, Volume 9, Issue Two, pp. 173-192	The role of knowledge management in enhancing competitive intelligence in Iraqi hospitals	The health sector in Iraq has 568 directors in senior departments in public hospitals and 451 in private hospitals -	Descriptive analytical method - investigation	Regression Multilinearity	There is a significant impact on knowledge management in its dimensions (knowledge generation, knowledge storage, knowledge distribution - knowledge application), with the exception of knowledge storage, which has no effect on competitive intelligence. The study recommended enhancing competitive intelligence by managers, both in thought and

					behavior, in order to enhance the exchange of knowledge and ideas between management and individuals.
Arabic studies					
Abla: 2013, Algeria, Master's degree	The role of knowledge management in building a learning organization (a case study of ENAD-SIDENT in Sur al-Ghazlan(	The National Foundation in Sur Al-Ghizlan 60managers in government institutions in Cairo Tourist hotels and restaurants in Palestine	Descriptive approach - questionnaire The descriptive analytical method is a questionnaire	Correlation coefficients - descriptive statistics	There is a relationship between knowledge management and improving the work performance of Palestinian tourist establishments, and there are no differences between the respondents' responses regarding the role of knowledge management in tourism establishments due to the variable (job -

					academic qualification - years of service). The study recommended the necessity of improving the performance of tourism establishments by paying attention to the human element and selecting it based on Certified specifications
Foreign Studies					
Hyunsukim:2024) Journal of Hospitality Tourism	Learn about the role of artificial intelligence in the field of hospitality and tourism and the opinions of experts		Descriptive approach	Documentary study	The results showed the importance of artificial intelligence in the field of tourism, which provides new opportunities for academia and providing better service to consumers, which leads to customer retention

)Balody:2022) International Journal of Natural Sciences IJFANS 2022Volume 11 p. 3138	The role of artificial intelligence in the travel and hospitality industry	Hospitality and tourism	Survey paper	Survey study	The results showed the role of generative AI to have a transformative impact on the industry and hospitality sector

Chapter Three: Research methodology and procedures

Firstly, the research methodology: The descriptive analytical method was adopted to clarify the concepts contained in the research and express them quantitatively and qualitatively, and the case study method of the Babel Rotana Hotel in Baghdad.

Second: The research community: includes administrators working in the hotel system in Iraq

Third: The research sample: It included 50 individuals working at the Babylon Rotana Hotel in Iraq

Fourth, the study model

Independent variable

> **Knowledge management under artificial intelligence**

→

dependent variable

> **-Improving the performance of the hotel organization**
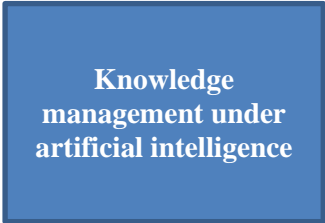
Fifth: The study tool used:

To achieve the research objectives and test its hypotheses, we collected the necessary information from many sources, the most important of which are:

For the theoretical aspect, we relied on the largest possible number of books that dealt with the subject in a comprehensive or partial manner, in addition to a group of research papers related to the research.

As for the applied aspect of the study, we relied on a set of data and information collected from the selected hotels.

A questionnaire was designed as a tool for collecting data, and the questionnaire was divided into three axes:

The first axis: knowledge management
The second axis: artificial intelligence
The third axis: improving performance

Psychometric properties of the research tool: The researcher verified validity of the tool and the reliability of its results through a set of procedures. The questionnaire was applied to a survey sample of 10 individuals in the hotel, and the validity and reliability were confirmed as follows:

Apparent validity: The tool was presented to a number of faculty members with experience in the field of education in order to determine the accuracy and clarity of the statements in the questionnaire and the extent of the soundness of its wording. The observations of the arbitrators were adhered to and the questionnaire settled on its final form.

Validity of the tool: means ensuring that the questionnaire will measure the phenomena for which it was prepared. This means that the tool includes all the elements that must be included

in the analysis and the clarity of the paragraphs and vocabulary (Obaidat, 2002: 79). The researcher calculated the validity of the tool:
Internal consistency validity: Internal consistency validity is calculated by calculating the correlation coefficients between the questionnaire axes and the total score, as in Table No. (1)

Table No. (1)

Correlation coefficient	
**0.68	knowledge management
**0.69	artificial intelligence
**0.72	the performance

Table (1) shows the Pearson correlation coefficient between the questionnaire's axis items and the total score belonging to it, statistically significant at the significance level (0.001), (0.005).

Statement	Cronbach's alpha coefficient
0.77	knowledge management
0.61	artificial intelligence
0.77	the performance
0.74	The questionnaire as a whole

To ensure the consistency of the scale's statements, Cronbach's alpha coefficient was calculated for all items of the questionnaire, and it was of an acceptable degree, as Table No. (2) shows.
Table No. (2) Reliability coefficient
The resolution as a whole is 0.74
We note from Table No. (2) that the reliability coefficient for the questionnaire axes was good and ranged between 0.61 and 0.77, which is higher than the acceptable limit of 0.60, which indicates the stability of the study tool.
The fourth section

RESULTS AND RECOMMENDATIONS
Study results: results related to the main question
Means and standard deviations were extracted to test the degree of agreement with the questionnaire items about the role of knowledge management under artificial intelligence in improving the performance of the hotel system, and the results were as follows:
Means and deviations related to knowledge management items:
Table No. (3) Means and deviations for the items on the role of knowledge management.

Serials		Items	Arithmetic Mean	Standard Deviation	Degree of Agreement
Knowledge generation					
1	Providing data on the numbers of inmates and their place of work		4.03	0.86	high

2	Knowing the future needs of the human element	3.37	1.03	middle
3	Knowing employees who have the ability to be creative	3.76	1.22	high
4	The presence of sufficient technical and administrative expertise	4.12	0.89	high
	Knowledge storage			
5	Relying on the human element to save information	3.86	1.30	high
6	Providing the necessary technology to improve services	4.33	0.89	high
7	Use of papers and paper archives	3.35	1.23	middle
	Spreading knowledge			
8	The presence of employees who have the ability to solve problems and benefit from their expertise in other departments. The presence of the Internet for communication between all internal departments			
9	Developing the services provided and related activities	4.16	1.34	high
10	Encouraging conferences, seminars and workshops	3.99	0.86	high
11	Converting information into knowledge and disseminating it	4.01	0.88	high
12	Knowledge can be applied coordination with other hotels	3.58	1.002	high
13	Added value is achieved by applying knowledge	4.38	0.899	high
	Average as a whole	3.918		high

We note from the previous table (3) that the average for the axis as a whole came with a high degree of agreement, as the arithmetic average for the knowledge management axis reached 3.918, meaning that the role of knowledge management in the hotel system came at a high degree. This is due to the nature of the work of the hotel system, which depends largely on knowledge management, as the hotel system is keen to build a good relationship with guests

Averages and deviations related to artificial intelligence items:

The means and standard deviations for the artificial intelligence axis were extracted and were as follows:

Table No. (4) Means and standard deviations for the artificial intelligence axis items

Serials	Items	Arithmetic Mean	Standard Deviation	Degree of Agreement
	Automate routine tasks and data entry	4.12	0.88	high
1	Using chatbots to facilitate the process (reservations - customers)	4.25	0.66	high
2	Process huge amounts of data using powerful algorithms	4.63	0.63	high
3	Using intelligent robots to collect and analyze data and allow robots to interact with consumers	4.13	1.075	high
4	Contributes to identifying changing trends in customer behavior	4.86	0.60	high
5	Uncover untapped opportunities and monitor energy consumption patterns	4.36	0.87	high
6	Providing the right information and improving innovation	4.04	0.73	high
7	Using machine learning algorithms to analyze employee work patterns	3.96	1.04	high
8	Providing the network with primary and basic data	3.99	0.82	high

9	Combining chat robots and automated access	4.23	0.90	high

We note from the previous table (4) that all statements came with a degree of agreement. The reason is that the hotel system depends on technology and seeks to keep pace with modernization and the use and employment of artificial intelligence applications.

Averages and deviations for performance-related items:

Table No. (5): Means and deviations related to the items on the reality of improving performance in the hotel

Serials	Items	Arithmetic Mean	Standard Deviation	Degree of Agreement
1	Accelerate decision-making processes	3.71	0.92	high
2	Improving operational efficiency	3.88	0.98	high
3	The upgrades contributed to lower maintenance costs	3.68	1.03	high
4	Customize services and offers for each guest	3.96	1.07	high
5	Improving customer experience and directing them to appropriate services	3.98	0.87	high
6	Document knowledge about best practices and share them among hotel staff	4.01	0.90	high
7	Analyze data with high speed and accuracy	4.67	0.86	high
	Average as a whole	3.99		

The performance statements came with a high average of 3.99, which indicates the hotels' keenness to adhere to, commit to, and always strive to improve performance in order to achieve excellence, compete with competitors, and achieve a good guest experience.

Discussing hypotheses
Testing the main hypothesis:
There is no statistically significant effect at the 0.05 level of knowledge management under

artificial intelligence on the performance of the hotel system in Rotana Babylon:

To determine the impact of knowledge

management on the performance of the hotel system, the coefficient of determination and the simple regression coefficient were calculated:

Table No. (6) Coefficient of determination and correlation coefficient for knowledge management, artificial intelligence, and performance improvement

	Performance improvement		
Statement	Correlation coefficient R	Coefficient of determination R2	Significance
knowledge management	0.82	0.72	0.00
artificial intelligence			0.00

It is clear from Table (6) that the level of significance is smaller than 0.05, which indicates the presence of a significant effect at 0.05, and the Pearson correlation coefficient reached R = 0.82, which indicates that there is a correlation between each of the independent variables, knowledge management and artificial intelligence, and the dependent variable, performance improvement. As for the coefficient of determination reached 0.72, meaning that there is an effect of knowledge management and artificial intelligence in improving performance, which explains 72% of the improvement in hotel system performance, and 28% is due to other factors.

Testing the first sub-hypothesis:

There is no statistically significant effect at the 0.05 level for knowledge management and improving the performance of the hotel system at Rotana Babylon.

The results were:

Table No. (7) Coefficient of determination and correlation coefficient between knowledge management and performance improvement.

	Performance improvement		
Statement	Correlation coefficient R	Coefficient of determination R2	Significance
knowledge management	0.79	0.62	0.00

It is clear from the previous table (7) that the significance level is smaller than 0.05, which indicates the presence of an effect of knowledge management in improving performance in the hotel system, the correlation coefficient reached 0.62, which indicates that there is a strong and positive correlation between knowledge management and

improving hotel performance. This indicates that attention to generating, disseminating, storing and applying knowledge will have a positive role in improving performance, and the coefficient of determination is 62% of the improvement in Performance is explained by knowledge management and the remaining percentage is due to other factors

Testing the second hypothesis:
There is a statistically significant effect at the

level of 0.05 for artificial intelligence on improving the performance of the hotel system in Rotana Babylon.
Through the extracted results:
Table No. (8) Coefficient of determination and correlation coefficient between artificial intelligence and performance improvement. Knowledge management and performance improvement.

Statement	Performance improvement		
	Correlation coefficient R	Coefficient of determination R2	Significance
Artificial intelligence	0.76	0.55	0.00

It is clear from Table (8) that the level of significance was smaller than 0.05, which indicates an impact of artificial intelligence in improving the performance of the hotel system, as the correlation coefficient reached 0.76 between artificial intelligence and improving performance in the hotel system, as there is a strong and positive correlation between artificial intelligence and improving performance, and the coefficient reached 0.76. Determine that 55% of the performance improvement is due to artificial intelligence

CONCLUSIONS
• There is a statistically significant effect at a significance level of 0.05 for knowledge management in light of artificial intelligence on the performance of the hotel system.
• There is a statistically significant effect at the 0.05 level for knowledge management and improving the performance of the hotel system
• There is a statistically significant effect at the level of 0.05 for artificial intelligence on improving the performance of the hotel system
• There is a positive impact between knowledge management and artificial intelligence on improving the performance of the hotel system
• The more the hotel system pays attention to

knowledge management and seeks to apply artificial intelligence, this will lead to improved performance and thus increase its competitive advantage.
• Knowledge management seeks to facilitate knowledge generation and create an effective organizational culture
• The independent variable, knowledge management, explains the change in the dependent variable (hotel system performance) by 62%.
• Artificial intelligence also explains the change in performance improvement by 55%.
• Artificial intelligence technologies play an important role in activating knowledge management by allowing its components to be consolidated with a huge amount of knowledge. Artificial intelligence allows obtaining knowledge and disseminating knowledge, which facilitates decision-making processes.

RECOMMENDATIONS
• Working to develop a system to evaluate performance and benefit from the outputs of this system
• Getting benefiting from artificial intelligence applications in developing knowledge management to improve hotel performance and achieve competitive advantage.

• Focusing on the human element and increasing his stock of knowledge to develop his creative abilities.

• Holding training courses and workshops on the role and importance of artificial intelligence applications

Suggestions:

• Conduct upcoming studies on the role of artificial intelligence in achieving competitive advantage for other institutions

• Conducting studies on smart organizations in the knowledge era

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