

THE IMPACT OF ELECTRONIC -MANAGEMENT ON IMPROVING HUMAN RESOURCES PERFORMANCE: AN APPLIED STUDY OF THE MINISTRY OF AGRICULTURE, FISHERIES AND WATER RESOURCES IN THE SULTANATE OF OMAN

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Abstract

This research focuses on examining how implementing electronic management influences the enhancement of human resource capabilities among staff at the Ministry of Agriculture, Fisheries, and Water Resources in Oman. Utilizing a descriptive analytical methodology, the study collected data through a questionnaire distributed to a group of 100 ministry employees. Findings revealed that the ministry has achieved a strong level of electronic management adoption, although some challenges remain at a moderate level.

Additionally, the study found that training programs play a significant role in boosting the performance of human resources, with the impact rated highly. The research suggests prioritizing the integration of electronic management systems within the ministry, alongside efforts to continuously develop employee skills and improve their ability to effectively use these systems.

Keywords: Administration, e-administration, human resources, human resources development, Ministry of Agriculture, Fisheries and Water Resources.

introduction

The rapid technological revolution across various sectors, particularly in information and communication technologies, is driving significant global changes and transformations. Many organizations are increasingly adopting automated management systems, which help them meet their objectives more effectively.

Central to all operations is the human factor, whose success depends on possessing the right skills, knowledge, and the ability to adapt to the nature of their work. The evolving business environment has impacted most organizations, necessitating a reassessment of their workforce's skill set and expertise, as well as efforts to enhance employee performance. Developing human capital involves focusing not only on training but also on other organizational practices such as recruitment, appointment, guidance, and monitoring, with the goal of equipping individuals with the new skills and knowledge required to fulfill their changing job responsibilities.

E-management may contribute to the development of human resources, as it works to provide and exchange information among employees, and enables them to communicate with each other in a way that supports the exchange of knowledge and experiences among employees. It also provides opportunities for individual learning and self-development through electronic networks.(Siraa, 2023, p. 130)Accordingly, this study

aims to determine the impact of e-management on improving the performance of employees at the Ministry of Agriculture, Fisheries and Water Resources.

Study problem

employees as a core strength. This makes it essential for institutions to shift toward digital management in handling their responsibilities. However, a key challenge arises in assessing how much electronic management truly contributes to the development of human resources within the ministry. This is largely due to the evident limitations of conventional management methods, which have shown weakness in meeting the ministry's evolving needs.

As noted by Al-Khalayleh (2023), when staff lack proper training, it becomes harder for organizations to meet their goals. For this reason, many institutions dedicate significant time and funding to employee training programs, aiming to boost both efficiency and service quality.

Likewise, Siraa (2023) pointed out that structural problems within organizations—such as poor internal communication, weak employee involvement in planning, and delays in adopting digital systems—can all hinder progress toward effective electronic management.

Based on the above, the study problem is represented by the following main question:

WhatThe impact of training on improving the performance of human resources in the Ministry of Agriculture, Fisheries and Water Resources?

Study questions

1. What is the status of e-management in the Ministry of Agriculture, Fisheries and Water Resources?
2. What are the obstacles facing the implementation of e-government among employees of the Ministry of Agriculture, Fisheries and Water Resources?
3. How does the implementation of electronic management contribute to enhancing the performance of human resources within the Ministry of Agriculture, Fisheries, and Water Resources?

Study objectives

- 1-This research seeks to explore how electronic management influences the enhancement of human resource performance within the Ministry of Agriculture, Fisheries, and Water Resources by focusing on the following:
- 2- Examining the current state of electronic management practices implemented in the Ministry.
- 3- Investigating the challenges and limitations that hinder the effective application of electronic management within the Ministry.
- 4- Assessing the role of electronic management in boosting the productivity and efficiency of the Ministry's employees.

The importance of studying

The study has practical and theoretical importance in the study ofThe impact of e-management on improving the performance of human resources in the Ministry of Agriculture, Fisheries and Water Resources, whereIt is represented by the following:

theoretical importance

Theoretically, this study contributes to increasing scientific knowledge about analysis. The impact of e-management on the development of human resources, as well as the importance of research in encouraging the development of administrative processes in planning and implementation in Ministry of Agriculture, Fisheries and Water Resources.

Practical importance

From an applied perspective, this study aims to enhance the performance of human resources at the Ministry of Agriculture, Fisheries, and Water Resources in Oman by improving the quality of administrative processes and supporting their development through the study's findings and recommendations.

The outcomes of this research are expected to benefit a wide range of stakeholders, including the ministry's human resources department, employees across different levels and roles, as well as students and scholars specializing in human resource management.

Furthermore, the study can serve as a reference point for comparing administrative strategies and programs used across various government sectors, highlighting the value and impact of implementing electronic management systems.

Limits of the study:

Objective Scope:

This study focuses on exploring how electronic management contributes to the enhancement of human resource development within the Ministry of Agriculture and Fisheries.

Geographical Scope:

The research is specifically centered on the Ministry of Agriculture, Fisheries, and Water Resources in the Sultanate of Oman.

Timeframe:

The study is confined to data and developments relevant to the year 2024.

Study terms:

Electronic management:

It is defined as an action carried out by the management of an institution by providing services via electronic tools and means, which include telephone lines or the Internet, regardless of how they are applied through computers, digital visual devices, or any other tools. (Khalout, 2022, p. 66).

Human Resources Management:

It is known as the system that aims to organize the treatment of individuals in the facility, so that they can realize themselves and make optimal use of their abilities and potentials to achieve the highest productivity.

It represents a link between all parties and deals with everyone to reach the highest level of performance by searching for the factors affecting work productivity and adopting appropriate solutions. (Benmar, 2020, p. 8).

Human Resources Development:

He defined it as the process carried out by institutions related to developing their employees and providing them with professional skills and knowledge to achieve the highest degree of performance and efficiency. (Siraa, 2023).

Theoretical framework:

1. The concept of e-management:

Electronic administration refers to the integration of information technology into administrative operations, aiming to automate institutional tasks and reduce reliance on paper-based processes. It seeks to streamline procedures, minimize bureaucratic delays, and ensure tasks are completed quickly and accurately. In a similar context, digital governance involves utilizing communication technologies—particularly internet-based solutions—as effective tools to enhance access to services and improve the overall quality of administrative performance.

2.Characteristics and objectives of e-government:

The characteristics of e-management are represented by a set of characteristics, which are as follows: (Boubaker, 2021, p. 371):

Providing information to beneficiaries immediately, increasing communication between employees and senior management, and monitoring all resources. The feature of constant communication is that it is a timeless management that operates 24 hours a day, which improves the quality of services provided. Organizational flexibility due to its networked and intelligent nature, and its reliance on knowledge production. Increased mastery of immediate processing of requests, accuracy and complete clarity in completing transactions. Reducing costs by providing large financial budgets, as it reduces the need for manual labor, despite the allocation of financial envelopes to public organizations. Simplifying procedures: The ability to meet citizens' needs quickly and efficiently, given the diversity of groups targeted by public organizations. Achieving transparency: Complete transparency within electronic organizations is the result of electronic oversight. Transparency is defined as the bridge between citizens, civil society institutions, and public authorities on the one hand.

A study (Siraa, 2023) indicated that e-administration aims to achieve the following objectives:

Achieving the strategic objectives of institutions by providing information and data that facilitate appropriate decision-making. Joint link between the institutions' departments and their various branches. Combating administrative corruption, achieving transparency, developing administrative processes, and enhancing their effectiveness. Accommodating a larger number of customers at one time, and eliminating the direct relationship factor between the two parties to the transaction. Reducing the paper-based archiving system reduces the daily work complexities that affect the completion of transactions. Using information technology to support and build a positive organizational culture for all employees. Creating an appropriate organizational environment and climate for comprehensive and continuous administrative research and development. The study (Boubaker, 2021) indicates that the objectives of e-administration are to eliminate the severity of bureaucracy, simplify procedures within institutions, rationalize time, develop

administrative services, ensure the accuracy of transactions due to the stability of the electronic system's performance and the efficiency of its storage system, reduce the burdens of storage and documentation, as well as ensure the confidentiality and privacy of important information in light of the availability of anti-hacking systems, achieve a constant and stable pace of work performance and overcome the psychological state of employees, which affects the quality of service, as well as increase competitiveness by providing high information capabilities to develop its products.

3. Dimensions of e-government:

The implementation of e-government requires the provision of a set of basic elements. These dimensions are represented in a set of requirements represented in the following: (Khalout, 2022, p. 668):

Computers and accessories: This refers to computers and their accessories. Given the development of computer software and the continuous increase in the number of computer users in institutions, it is best for the institution to strive to possess the latest developments made by the world's hardware manufacturers.

Networks: These are the electronic connections that extend across the communication fabric of the Internet, extranet, and the Internet, which represent the value network for the organization and its electronic management.

Software and databases: This includes the software used to operate the computer and take advantage of its various capabilities, and system software. Software Which is concerned with completing tasks for end customers, and databases are a group of logical elements and data linked to each other by a mathematical relationship. **Human resources:** or knowledge creators, are the most important element in the e-management system, including managers and analysts of knowledge resources and intellectual capital in the organization. Knowledge creators are responsible for managing the strategic planning of the e-management elements on the one hand, and changing the prevailing ways of thinking to achieve a knowledge culture on the other hand.

Previous studies:

The study (Al-Hussein, 2023) aimed to: To identify the impact of e-HRM on improving employee performance. The importance of the study was represented in defining e-HRM and its positive role in the performance of organizations, taking employees at the Ministry of Environment, Water and Agriculture branch as a sample for the study. **Methodology:** The study used the descriptive and analytical approach, relying on a questionnaire as a study tool, and through the study's methodology and tools.

Results: The study reached several results, the most important of which are: There is a statistically significant effect of using e-HRM practices on employee performance; There is a statistically significant effect of the training and development system in improving employee performance at the Ministry of Environment, Water and Agriculture branch in the Najran region; There is a statistically significant effect of implementing e-HRM practices in enhancing the role of training in improving employee performance.

Conclusion: The study recommended a number of recommendations, most notably working to benefit from e-HRM practices in organizations to create a positive work environment; Working to support e-HRM practices to help organizations achieve

institutional excellence; Conducting a continuous evaluation of the reality of e-HRM practices supporting organizations in achieving quality performance; and Encouraging employees at the Ministry of Environment, Water and Agriculture branch in the Najran region to participate in identifying their training needs.

The study (Al-Waer, 2021) aimed to: To shed light on “the impact of e-management on improving employee performance” and the study environment was the Libya Telephone Company in the city of Zawiya to identify the most important problems and obstacles that this organization suffers from. The study population consisted of (30) middle management officials. After distributing the questionnaire to the study sample, (24) questionnaires were obtained, and the total response rate was (80%).

Through analyzing the questionnaire results, a set of results was reached, the most important of which is that there is a decrease in the level of electronic management as well as a decrease in the level of performance of the company's employees.

This proves the existence of a direct (positive) effect with statistical significance of the level of electronic management on the level of employee performance, as (76.91%) of the change in the level of employee performance is due to the change in the level of electronic management if the level of employee performance is not affected except by the level of electronic management. Increasing the level of electronic management by one unit leads to an increase in the level of employee performance by (0.916) of the unit.

In light of the study results, the researcher recommends that the company's management spread the culture of work with modern electronic management and employ it with all its contents, and provide continuous training and development for all employees at various job levels, and develop computerized administrative information systems and work to provide the necessary budgets to overcome all difficulties and requirements of the transition to electronic management.

The study (Boubaker, 2021) aimed to address the relationship between e-management and job performance. This was confirmed by the results of the questionnaire prepared for this purpose, as the questionnaire was distributed to a sample of (50) employees, from which (34) questionnaires were tested as valid for the study. The study of the variables and the relationship between them, through statistical analysis, reached an acceptable level with regard to the availability of technical, financial and human components for the application of e-management, estimated on average at: (54%).

The results also showed that e-management contributes significantly to increasing and developing the job performance of employees. As a recommendation, the study emphasized the training and development of a culture of using modern technologies for employees, and their involvement in development and improvement efforts. It also stressed the need to adapt the applications and equipment used to the reality of public administration and to unify the work methods used in order to raise the level of job performance of employees..

The study (Khalout, 2022) aimed to: To know the role of e-administration in improving job performance in the municipality of Chtawan - Tlemcen province, the following problem was formulated: To what extent does e-administration contribute to improving job performance in the municipality of Chtawan? We relied on the descriptive analytical approach in describing and analyzing the study variables, based on the questions posed in the study. Data were collected using a questionnaire, which included two main axes: e-

administration systems and improving job performance. After analyzing the data using the program SPSS. After conducting the necessary statistical tests, the results indicated a significant statistical impact of the dimensions of e-management on job performance in the municipality of Chtawan, Tlemcen province.

The study (Mustafa, 2018) aimed to: To determine the impact of the readiness of government units to implement electronic human resources management on the job performance of employees. The study was applied to the units of the government apparatus in Qena Governorate and to determine the impact of the readiness of the government units under study.

A set of recommendations and indications were reached regarding the impact of the availability of appropriate requirements for implementing electronic human resources management on the job performance of employees in government units in Qena Governorate, which works to improve the level of performance of the organization in general, and job performance in particular as a result of the improvement in the level of readiness in organizations., and The study results showed that each dimension of readiness for implementing e-government in human resources management (administrative readiness, financial readiness, technical and technological readiness, and human readiness) impacted the level of job performance of employees in the governmental organizations under study.

This result is consistent with the results of previous studies that addressed one of the dimensions of the current research variables. The study recommended simplifying routine procedures that delay the transition to e-government in the field of management.

This can be achieved by reviewing these procedures, developing new human resources maps in the governmental organizations under study to streamline operations, improving the level of infrastructure necessary for implementing e-government in human resources management in the organizations under study, and developing policies and methods for developing human resources in the organizational units under study and linking them to the implementation of e-government..

The study (Hamada, 2020) also aimed to: Clarifying the role of electronic property management R Human resources management (HRM) is improving sustainable performance at Cairo International Airport Company by examining the relationship between the key elements of e-HRM and sustainable performance at Cairo International Airport Company. The study also sought to understand how e-HRM can improve sustainable performance. The study found a statistically significant positive correlation between e-HRM and improving the company's sustainable performance.

This supports the recommendation of the need to pay attention to e-HRM in the Egyptian environment, given its role in improving sustainable corporate performance and achieving planned objectives. E-HRM is a method with a significant and direct impact in management literature, achieving significant improvements in the organization, generating significant contributions to organizational performance and creating a sustainable competitive advantage. In addition, there is a belief that e-HRM plays a significant role in knowledge transfer and transforming organizations from the traditional to the electronic sphere.

Comment on previous studies

These studies provided different results in different aspects. In e-management and improving the level of human resources in various institutions. It is clear from the results of previous studies that there is a growing trend of interest in the necessity of activating e-administration and developing skills for employees of all organizations. Therefore, all these studies help this study in how to analyze and evaluate applying e-management to improve human resources in the Ministry of Agriculture, Fisheries and Water Resources.

Study methodology:

The current study used the descriptive analytical approach, which is the closest and most appropriate approach to the nature of the study, as it collects information and data about the phenomenon under investigation, and then analyzes, studies, and describes it to arrive at the final results of the study.

Study community:

The study sought to involve all parties concerned with the study topic, and to represent them adequately and correctly according to a scientific method for selecting the study community and its sample. The study community is represented by all employees of the Ministry of Agriculture, Fisheries and Water Resources in the Sultanate of Oman.

Study sample:

A random sample was intentionally selected from the employees of the Ministry of Agriculture, Fisheries and Water Resources, numbering (100) employees working in the Ministry, as shown in the following table.

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

%	number	Variable class	variable
70%	70	male	Sex
30%	30	feminine	
85%	85	Bachelor's degree	Academic qualification
8%	8	Master's	
7%	7	PhD	
10%	10	10 years or less	Years of experience
40%	40	More than 10 years - 15 years	
15%	15	More than 15 years - 20 years	
35%	35	More than 20 years	
100%	100	the total	

Study tool:

The current study relied on the questionnaire as a tool for data collection. Being the most widely used method in descriptive studies; Depending on the theoretical framework, and studies previous same relationship on topic the study, from To achieve goals Here, the researcher designed the study tool (questionnaire), which included three axes:

First Theme:

An overview of the current state of electronic management practices within the Ministry of Agriculture, Fisheries, and Water Resources.

Second Theme:

An exploration of the challenges and barriers that employees at the Ministry face in adopting and applying electronic management systems.

Third Theme:

An assessment of how electronic management influences and enhances the performance of human resources within the Ministry.

The questionnaire statements were structured using a five-point Likert scale to gauge the range of responses.

according to the five-point Likert scale as follows:

Strongly agree (5 points).

Agreed (4 marks).

Neutral (3 marks).

Disagree (2 marks).

Strongly disagree (1 point).

The Likert scale was processed and the degree of agreement and the extent of agreement with the scale were calculated, as shown in the following table:

Table (2) Degree of agreement and extent of agreement

Range	Coding	Level
From 1E1.80	1	very low
1.81 to 2.60	2	low
2.61 to 3.40	3	middle
3.41 to 4.20	4	high
to 5 4.21	5	very high.A

Stability of the study tool:

The coefficient is calculatedThe stability of the study tool was determined using the Cronbach's alpha coefficient for each of the scale's axes, using the SPSS statistical packages after applying them to the survey sample, **which is shown in the following table:**

**Table No. (3)
Calculating the reliability coefficient for the questionnaire axes**

stability coefficient	Axis
0.739	The reality of e-management in the Ministry of Agriculture, Fisheries and Water Resources.
0.821	Obstacles facing e-management for employees of the Ministry of Agriculture, Fisheries and Water Resources.
0.741	The impact of e-management on improving human resources performance in the Ministry of Agriculture, Fisheries and Water Resources.
0.767	Total stability

It is clear from Table No. (3) that the scale axes are characterized by a statistically significant degree of stability, and the stability coefficients ranged between (0.741-0.821), and thus the questionnaire can be generalized to the basic study sample.

Validity and reliability of the study:

Apparent honesty (honesty of the arbitrators):

The scale is presented to a group of arbitrators from professors in the same specialization for the study, and then modifications are made according to their suggestions, so that the number of questionnaire items becomes (21 phrases) in its final form. The arbitrators' agreement is considered a statement of the validity of the questionnaire's content. The following table shows the questionnaire's axes in their final form and the number of items in each axis.

Table No. (4)
Questionnaire axes in its final form

Number of phrases	Axis
10	The current state of electronic management practices at the Ministry of Agriculture, Fisheries, and Water Resources.
6	Challenges encountered by employees in implementing e-management at the Ministry of Agriculture, Fisheries, and Water Resources.
5	The impact of e-management on improving human resources performance in the Ministry of Agriculture, Fisheries and Water Resources.
21	Total

Internal consistency validity

In order to ensure the validity of the internal consistency of the scale by calculating the correlation coefficients between each axis and the total score of the questionnaire obtained from the survey study, the scale is applied to a sample consisting of (20) employees of the Ministry of Agriculture, Fisheries and Water Resources, using statistical packages.SPSS and Cronbach's alpha coefficient to calculate the results as shown in the following table:

Table No. (5)
Calculating internal consistency validity using the statistical correlation coefficient of the questionnaire

Correlation coefficient	phrase	Correlation coefficient	phrase
.301	11	..254	1
.531*	12	.321	2
.678**	13	.354	3
.325	14	.541*	4
.254	15	.551**	5
.535**	16	.639**	6
.615**	17	.598**	7
.523**	18	.645**	8

.535**	19	.459*	9
.434*	20	.564**	10
.465*	21	.559**	11

Statistical methods for research:

It is done EData entryStatistics used in the studythat You will collect By questionnaires what Processed through statistical software (SPSS)By extracting following:

Descriptive statistics measuresDescriptive Statistics MeasuresWhich relies on the use of percentages, frequencies, arithmetic means, and standard deviations, in order to describe the characteristics of the study sample and arrange its variables according to their relative importance.

Dependency analysisReliabilityThis is to ensure the validity of the measurement tool by extracting the value of Cronbach's alpha coefficient.

Links:CorrelationsThis is done by relying on Pearson's correlation coefficients to measure the relationship between the independent and dependent study variables.

Question 1:whatThe reality of e-management in the Ministry of Agriculture, Fisheries and Water Resources?

To calculate the study sample's response to the reality of e-management in the Ministry of Agriculture, Fisheries and Water Resources, which can be explained as follows through four axes that are addressed as follows:

Table (6) Arithmetic means and standard deviations of the responses of the study sample items:

Degree of approval	Rank	standard deviation	arithmetic mean	phrase	M
High	7	0.788	3.42	The Ministry of Agriculture and Fisheries emphasizes the use of the existing electronic management system.	1
High	4	0.681	3.65	The Ministry effectively implements the e-management system.	2
High	3	0.899	3.80	The Ministry has evaluation plans for the effective use of the e-administration system.	3
Medium	10	0.943	3.24	The Ministry is shifting all its tasks to the electronic management system.	4
Medium	2	0.599	2.85	The Ministry is working to incorporate new technology and advanced software into its IT infrastructure.	5
High	1	0.965	3.86	The Ministry has flexible electronic links to all other administrative institutions and	6

				bodies.	
High	8	0.931	3.40	The Ministry has regulations and systems for implementing e-administration.	7
High	5	0.951	3.54	The Ministry's organizational structures are compatible with the application of e-management.	8
Medium	9	0.354	3.39	The Ministry provides professional and academic guidance to employees electronically.	9
High	6	3.935	3.43	The Ministry has an electronic control system.	10
High		1.104	3.45	Total arithmetic mean	

The results showed that the reality of electronic management in the Ministry of Agriculture, Fisheries and Water Resources was at a high level, with an average of 3.45. With regard to the paragraphs of the axis, the paragraphs were arranged as follows: First place (the ministry has flexible electronic links to all institutions and other administrative bodies) with an average of 3.86 and a high degree of approval, followed in second place by (The Ministry is working to absorb new technology and advanced programs in the technology infrastructure) with an average of 3.80 as a high score, while the third rank comes with the phrase (the Ministry has evaluation plans to use the electronic administration system effectively).) with an average of 3.80, which is a high score, and the phrase comes (The Ministry effectively implements the e-management system.) with an average of 3.65 with a high score in fourth place, while the fifth place goes to the phrase (the ministry's organizational structures are compatible with the application of electronic management) with an average of 2.54 with a high score, while the sixth place goes to the phrase (the ministry has an electronic control system) with an arithmetic mean of 3.43 with a high score.

while the seventh place goes to the phrase (the ministry emphasizes the use of the applicable electronic management system) with an arithmetic mean of 3.42, while the eighth place goes to the phrase (the ministry has regulations and systems for implementing electronic management) with an arithmetic mean of 3.40 with a high score, while the ninth place goes to the phrase (the ministry provides professional and academic guidance for employees electronically) with an arithmetic mean of 3.39 with a medium score, while the phrase (The Ministry is shifting to the electronic management system in all its tasks. It is ranked tenth with an arithmetic mean of 3.24, with an average score.

Question 2:Obstacles facing the implementation of e-management for employees of the Ministry of Agriculture, Fisheries and Water Resources.

To calculate the study sample's response to the obstacles facing the implementation of e-management in the Ministry of Agriculture, Fisheries and Water Resources, which can be explained as follows:

Table (7) Arithmetic means and standard deviations of the study sample's responses regarding the obstacles facing training

Degree of approval	Rank	standard deviation	arithmetic mean	phrase	M
Medium	4	0.781	2.60	Lack of morale among ministry employees in implementing the e-management system	1
High	1	0.655	3.72	High costs of e-government infrastructure, including hardware and software	2
High	2	0.890	3.65	Randomness in planning and weak coordination at the strategic level in the implementation of e-government	3
High	5	0.987	3.45	Electronic illiteracy among many groups and the difficulty of communicating via modern technologies	4
Medium	3	0.811	2.61	Lack of training courses to prepare employees to integrate into e-administration.	5
Medium		0.824	3.20	Total arithmetic mean	

The results showed that the obstacles facing e-management in the Ministry of Agriculture, Fisheries and Water Resources were at a medium level, with an average of 3.20. With regard to the paragraphs of the axis, the paragraphs were ranked as follows: first place (High costs of e-government infrastructure, including hardware and software) with an average of 3.72 and a high degree of approval, followed in second place by (Randomness in planning and weak coordination at the strategic level in the application of e-management) with an average of 3.65 as a high score, while the third place comes with the phrase (the absence of training courses to qualify employees to integrate into e-management) with an average of 3.61 as a high degree, and the phrase (the lack of morale of the ministry's employees in implementing the electronic management system) with an average of 2.60 as a medium degree comes in fourth place, while the phrase (Electronic illiteracy among many groups and the difficulty of communicating via modern technologies) with an average of 2.60 with an average grade.

Question 3: whatThe impact of e-management on improving human resources performance at the Ministry of Agriculture, Fisheries and Water Resources?

To calculate the study sample's response to the impact of e-management on improving the performance of human resources at the Ministry of Agriculture, Fisheries and Water Resources, which can be explained as follows:

Table (8) Arithmetic means and standard deviations of the study sample's response to the impact of training on improving human resources performance.

Degree of approval	Rank	standard deviation	arithmetic mean	phrase	M
Medium	4	0.820	3.30	The Ministry's human resources possess the basic knowledge and skills to accomplish the work.	1
High	1	0.618	3.81	The Ministry's human resources have good communication skills with superiors and subordinates.	2
High	2	0.823	3.70	The Ministry's human resources have the ability to complete the work on time.	3
Medium	3	0.917	3.41	The Ministry's human resources have the ability to solve work problems and withstand work pressures.	4
Medium	5	1.04	3.25	The Ministry uses a productivity-based incentive system.	5
High		0.843	3.49	Total arithmetic mean	

The results showed that the impact of e-management on improving the performance of human resources in the Ministry of Agriculture, Fisheries and Water Resources was high, with an average of 3.49. With regard to the paragraphs of the axis, the paragraphs were ranked as follows: first place (The Ministry's human resources have good communication skills with superiors and subordinates.)

with an average of 3.81 and a high degree of approval, followed in second place by (The Ministry's human resources have the ability to complete work on time (with an average of 3.70 as a high score), while the third rank is for the phrase (the Ministry's human resources have the ability to solve work problems and bear work pressures).) with an average of 3.39, with a medium degree, and the phrase (the ministry's human resources possess the basic knowledge and skills to accomplish the work) with an average of 3.30, with a medium degree, comes in fourth place, while the phrase (The Ministry uses a productivity-based incentive system.) with an average of 3.25 with an average grade.

Results:

The results of the study showed that the reality of applying electronic management in the Ministry of Agriculture, Fisheries and Water Resources came in at a high degree, as it came in at an average of 3.45, as the ministry's possession of flexible electronic links to all institutions and other administrative bodies came in at a high degree with an arithmetic average of 3.86 in first place, while it came in The Ministry has shifted all its tasks to the electronic management system. Ranked last with an average of 3.24.

Ranked last.

The results showed that the obstacles facing e-management in the Ministry of Agriculture, Fisheries and Water Resources were at a medium level, with an average

of 3.20, so High costs of e-government infrastructure, including hardware and software It ranked first with a high degree, while it came Electronic illiteracy among many groups and the difficulty of communicating via modern technologies rank last with a moderate degree.

The results showed that there is an impact of training on improving the performance of human resources in the Ministry of Agriculture, Fisheries and Water Resources, which came in a high degree, as it came in at an average of 3.49, which included: The Ministry's human resources possess good communication skills with superiors and subordinates, ranking first with a high score, while the Ministry's use of a productivity-based incentive system ranked last with a medium score.

Recommendations:

The study recommends the following:

The need to adapt electronic management systems and program at the level of the Ministry of Agriculture, Fisheries and Water Resources.

The need to unify existing applications to facilitate administrative work and improve coordination.

Emphasizing the need to develop employees and improve their performance and ability to implement e-management.

Double efforts in training and qualification in the field of information technology and the use of modern management methods.

Create a suitable digital environment to maintain the confidentiality and integrity of information.

Future studies:

The study recommends future studies and the following proposals:

Conducting studies on the obstacles and challenges that prevent the adoption of e-management by government employees in the Sultanate of Oman.

Conducting studies on e-management and improving sustainable performance in institutions in the Sultanate of Oman.

Conducting studies on the role of e-governance in improving organizational trust in the Ministry of Agriculture, Fisheries and Water Resources.

the reviewer:

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