Electronic Human Resource Management and Its Role in Improving Job Performance: A Case Study of the Judicial Council of Medea Province

Sabrine BOUAZZA [*1]

[1] **University of Tipaza (Algeria), bouazza.sabrine@univ-tipaza.dz.**

Received (date) : 01/05/2026 **Accepted (date): 30/05/2026** **Published (date) 01/06/2026**

Abstract: This study aims to examine the role of electronic management in improving job performance within the Judicial Council of Medea, considering that electronic management plays a pivotal and fundamental role across various sectors. To achieve this objective, 45 questionnaires were distributed to a sample of employees at the Judicial Council of Medea. Based on the analysis of the collected data, the results revealed that the correlation coefficient between electronic human resource management and job performance reached R = 0.964, and the coefficient of determination R^2 = 0.930. This indicates that electronic human resource management explains 93% of the variations in job performance challenges, while the remaining 7% is attributed to other factors. Accordingly, there is a statistically significant effect of the use of electronic management on improving job performance at a significance level of 0.05. Based on the obtained results, the study proposed several recommendations, including the need to strengthen information security through the adoption of measures aimed at protecting data and information from hacking or loss, particularly in light of reliance on electronic systems. Additionally, it is necessary to develop information systems and technological tools within the Judicial Council to ensure the effective implementation of electronic management

Key words: Electronic Human Resource Management, Job Performance, Judicial Council, Mede

Jel Classification Codes : M15, M54

* Corresponding author

1-Introduction:

In light of the rapid developments taking place worldwide in the field of information and communication technologies, organizations have increasingly sought to adopt modern administrative approaches capable of enhancing management efficiency and improving performance levels. Among these approaches is electronic human resource management, which relies on the use of digital systems and applications to manage various human resource activities. The human element represents the cornerstone of any organization's success, which makes the improvement of job performance one of the most important objectives pursued by institutions. In addition, the implementation of electronic management contributes to facilitating administrative procedures, improving information flow, and enhancing workplace transparency.

Electronic human resource management is considered a strategic tool that enables organizations to manage human capital more effectively through the organization of recruitment processes, the development of training and development programs, and the establishment of performance appraisal and promotion systems. It also helps reduce the time and effort required to complete administrative transactions and minimizes errors associated with traditional methods. Furthermore, this approach allows fast and accurate access to employee-related data and information, thereby facilitating decision-making processes based on objective and reliable data.

Moreover, electronic management contributes to strengthening coordination among different departments and services within the organization, while also motivating employees by providing a well-structured work environment and enabling continuous performance monitoring. This digital transformation in human resource management leads to improved job performance, as well as higher levels of productivity and work quality. In this context, public institutions are increasingly adopting electronic management systems to develop their services and enhance administrative performance in line with the requirements of the digital era.

Research Problem: Based on the above, the main research problem can be formulated as follows:

To what extent does electronic human resource management contribute to improving job performance at the Judicial Council of Medea Province?

Research Hypotheses: The questionnaire was designed based on the study's hypotheses, with questions formulated to test their validity. The study hypotheses are as follows:

A. Main Hypothesis: There are no differences in the responses of the study sample regarding the dimensions of the study attributable to personal variables.

- **First Sub-Hypothesis:** There are no differences in the study sample's responses across the study's dimensions attributable to the gender variable.
- **Second Sub-Hypothesis:** There are no differences in the study sample's responses across the study's dimensions attributable to the age variable.
- **Third Sub-Hypothesis:** There are no differences in the study sample's responses across the study's dimensions attributable to the educational level variable.
- **Fourth Sub-Hypothesis:** There are no differences in the responses of the study sample regarding the dimensions of the study attributable to the current job position variable.
- **Fifth Sub-Hypothesis:** There are no differences in the responses of the study sample regarding the dimensions of the study attributable to the experience variable.
- **Sixth Sub-Hypothesis:** There are no differences in the responses of the study sample regarding the dimensions of the study attributable to the degree of interaction with electronic systems.
- **Seventh Sub-Hypothesis:** There are no differences in the responses of the study sample regarding the dimensions of the study attributable to the level of training in information technology.

B. Second Main Hypothesis: There is no statistically significant effect of electronic human resource management on improving job performance at the Judicial Council of Medea Province at a significance level of 0.05.

Study Objectives: This study aims to highlight the role of electronic human resource management in improving the job performance of employees within the Judicial Council of Medea Province.

Significance of the Study: The importance of this study lies in the vital role played by electronic management in enhancing job performance efficiency. It enables access to accurate data that supports decision-making based on objective information, while reducing errors and time wasted in traditional procedures. It also contributes to strengthening transparency and credibility and helps institutions adapt to modern technological developments, which in turn leads to increased organizational effectiveness and higher levels of productivity and work quality.

Research Methodology: The inductive and deductive approaches were adopted in the theoretical part of this study. In order to verify or reject the study hypotheses and derive the research findings, a questionnaire was designed to collect the necessary data and information. The collected data were then processed and analyzed using the statistical software SPSS V.26.

2. Section One: Conceptual Framework of the Study Variables:

1.2. Conceptual Framework of Electronic Human Resource Management

1.1.2. Definition of Electronic Human Resource Management: Schramm (2006) defines it as the implementation of human resource management strategies, procedures, and policies within the organization through direct and conscious support based on web technologies. Bondarouk and Ruël (2009) further define it as an integration process between human resource management and information technology to create value for employees and management within organizations.

Based on the above definitions, it becomes clear that electronic human resource management refers to the transformation of traditional, paper-based HR functions into an integrated digital form that relies on human resource information systems and modern technologies.

2.1.2. Fields of Electronic Human Resource Management: Electronic human resource management represents a new approach that enables managers, employees, and HR specialists to view, retrieve, or modify the necessary information for managing human resources within the organization. In addition, with the use of electronic HR management, the need for a large number of human resources is reduced, as this system eliminates part of the middle management in human resources. The rapid development of the Internet over the past decade has significantly enhanced the implementation and adoption of electronic HR management systems, with consultancy studies indicating that the number of organizations adopting e-HRM is continuously increasing (Linda,2016\2017,P70)

The fields of electronic human resource management can be divided as follows:

Table No. (01): Areas that Can Be Provided through Electronic Human Resource Management

Number	Human Resources Management Job	Potential uses of the technology
01	Development and Performance Management	- E-learning; - Online performance assessment; - Identifying training needs; - Career path management.
02	Supply	- Recruitment and testing; - Planning and forecasting human resource needs.

03	Employee relations and communications	- Internet; - Shared service centers; - Team development; - Organizational development.
04	Human Resources Information	- Intranet; - Self-service for managers and employees; - Human capital measurement.
05	Employee retention and rewards	- Wages; - Bonuses and incentives; - Employee self-service; - Creating flexible benefits packages; - Reviewing financial statements and compensation; - Benefits management

Source:(Youssef Abu Amouna, 2009, p 87)

Two types of system applications can also be distinguished: administrative and strategic. Administrative applications are those that facilitate and often enhance many routine work tasks.

For example, linking time and attendance systems with financial and email systems automates and speeds up the process of collecting data for customer invoices. Strategic applications, on the other hand, enable companies to perform previously difficult tasks. For instance, e-college applications allow employees on different continents to see and communicate with each other via their desktop computers while collaborating on a spreadsheet or presentation using a graphics software package.

Improved access to information simplifies the transfer of authority to executives, and over time, the importance of these strategic applications will become increasingly apparent, offering tremendous opportunities for organizational development (Amouna,2009,P87)

1.2. Job Performance and Its Relationship to E-Management:

The use of technology in human resource management has a significant impact on reducing administrative costs resulting from personnel processes, shortening recruitment and hiring periods, and increasing employee engagement with HR activities, such as defining benefits packages, compensation, and training online, among many other benefits related to all HR functions.

1.2.1.The Concept of Job Performance:

Performance is a concept that has received considerable attention in management studies and human resource topics in particular, given its importance at both the individual and organizational levels. The word "performance" originates from the Latin word "performare," from which the English word "performance" is derived, meaning to accomplish, complete, or perform.

- **Job performance is defined as:** "The net effect of an individual's efforts, which begin with abilities, role perception, and tasks. This means that performance is the production of a specific situation that can be viewed as the product of the interplay between effort, abilities, and the individual's understanding of their important role."(Hassan,2003,P210)

2.2.1 Types of Job Performance: Performance can be divided and classified like other classifications related to different phenomena. This raises the issue of a precise and practical standard that can be relied upon to determine performance. Therefore, performance can be divided into five categories:

Table No. (02): Represents the types of job performance.

In terms of comprehensiveness	In terms of nature	In terms of source	In terms of function	In terms of behavior
- Overall performance - Part-level	- Economic performance -Social	- External performance - Internal	- Performing the financial function - Performing the	- Task performance - Implicit

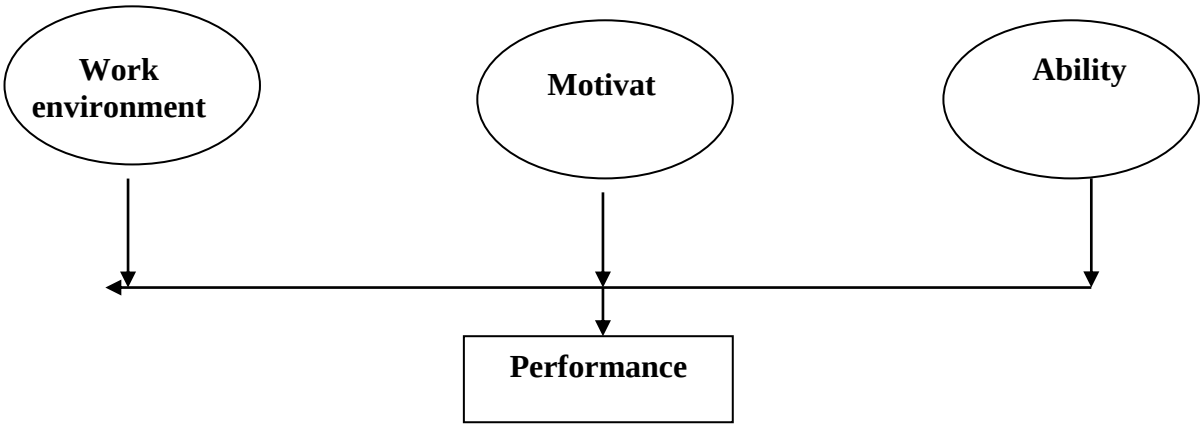
performance	performance - Administrative performance	performance	production function - Performing the human resources function	performance

Source: Prepared by the researcher.

3.2.1. Determinants of Job Performance: The determinants of job performance represent a combination of the effort exerted by the individual to accomplish their tasks, along with the skills, knowledge, and experience they possess, as well as their level of awareness and understanding of their role within the organization to which they belong.

Some researchers argue that performance is not merely determined by the availability of certain factors; rather, it is the result of the interaction among three main determinants, as illustrated in the following figure : (Fayez, 2010, p45)

Figure No. (01): Determinants of Job Performance



Source: (Ahmed Sayed Mostafa, 2005, p71)

• **Individual Motivation:** Each individual must possess a certain level of motivation to perform their work, which may be strong or weak. It is defined as "the internal forces within an individual that influence or determine the level, direction, and persistence of effort exerted toward work." Based on this definition, individuals in organizations can be categorized according to their levels of motivation.

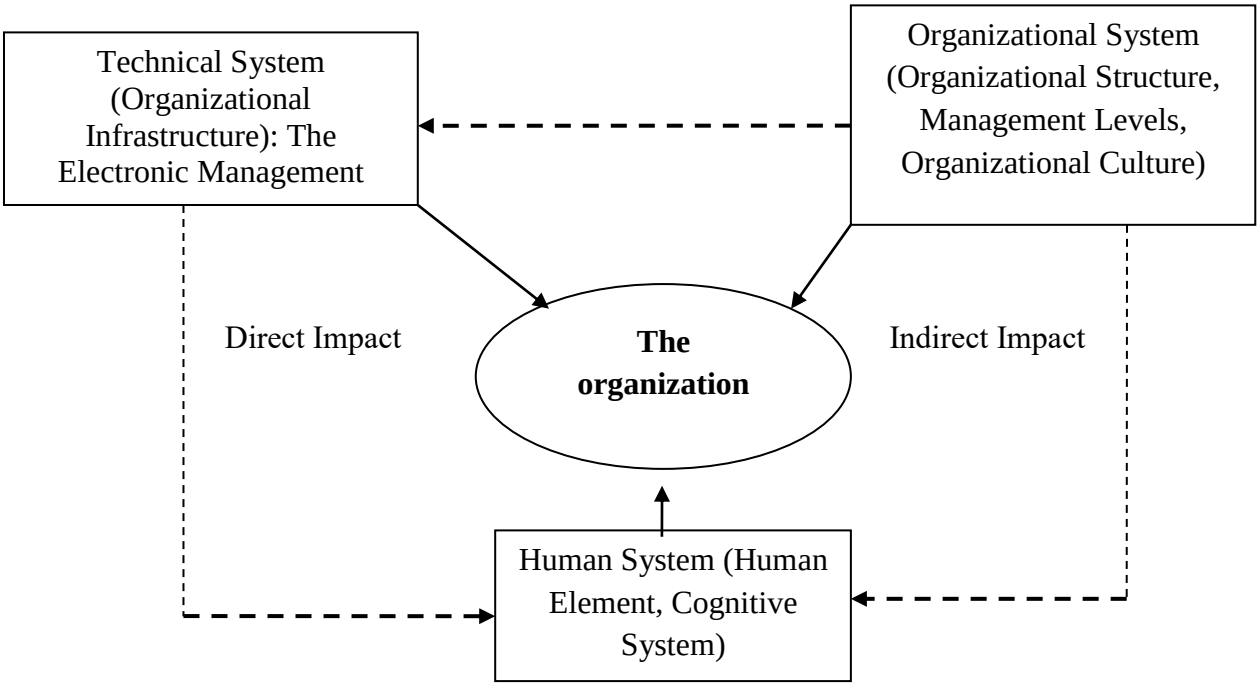
• **Work Climate or Environment:** An appropriate work environment must be established at all levels—whether at the organizational, departmental, or unit level—in a way that satisfies individual needs, which in turn reflects their motivation toward work.

• **Ability to Perform the Task:** The individual must have the necessary ability and competence to perform the assigned tasks effectively.

These factors interact with one another to determine individual performance, as performance is the outcome of the interaction between an individual's abilities, motivation, and the prevailing work environment.

4.2.1. The Impact of Electronic Management on Employee Performance: Electronic management affects job performance both directly and indirectly, as can be explained below:

Figure No. (02): Impact of Electronic Management on Employee Performance



Source: (Mazhar Shaaban 2014, p 234)

The figure above illustrates that e-management has two modes of impact on employees within an organization. The first is direct impact, which occurs when employees directly access and utilize its technologies, including computers, peripherals, and various communication networks.

The second is indirect impact, which arises from e-management's influence on the organization's environment. This includes the organizational structure at all levels, its various administrative structures, the organization's culture (including its laws, values, and strategies), and its employee recruitment policies. All these factors affect the human element, a fundamental component and pillar of the organization (Mazhar, Jawad, 2014, p 234)

Furthermore, the relationship between implementing e-management and job performance is positive, achieving the following:(Aisha ,Al-Khayyal ,2013, p 83)

- Improved job performance by eliminating many routine tasks, resulting in faster, more efficient, and more accurate work at a lower cost;
- Reduced routine workload for managers, allowing them to dedicate this time to strategic planning and developing general policies for the organization, thus contributing to increased efficiency and effectiveness of senior management.

3. Planning and Design of the Field Study

Through this section, we address the procedures of the field study conducted on a sample of individuals familiar with this field. The field study was prepared through several steps, including its presentation and the design of a questionnaire. It was then subjected to preliminary testing procedures as a measurement tool, which included content validity (expert judgment), Cronbach's Alpha reliability coefficient, and internal consistency validity.

3.1. Preparation of the Field Study

After completing the theoretical framework, we move to the practical part, represented by the field study. We begin with the first step, which is the preparation of the field study. This is considered one of the most important stages, as it requires both intellectual and practical effort, in addition to the use of several statistical tools.

3.1.1. Methodology of the Field Study To answer the main research problem and sub-questions, and to verify the validity of the hypotheses, a personal interview was conducted with

some officials at the Judicial Council to explore the extent of electronic human resource management's contribution to improving job performance. Afterwards, a questionnaire was designed to survey a group of employees at the Judicial Council regarding their evaluation of the study topic. A sample from the same sector was selected to facilitate control over the study process, especially since this sector applies electronic management systems in a broad and advanced manner.

3.1.2. Information and Data Sources The type of information required was identified based on the main research problem. It was found that the necessary data are primary data obtained directly from individuals working at the Judicial Council. This type of information is not available in libraries or previous studies, unlike secondary data.

3.1.3. Population and Sample of the Study:

- **Study Population:** The study population consists of employees of the Judicial Council.
- **Study Sample:** Regarding sample size, several studies have proposed different methods for determining sample size. For this study, a questionnaire was designed and distributed to a random sample of Judicial Council employees. The questionnaire was distributed randomly using different methods, either manually or electronically.

Table No. (01): Number of Distributed Questionnaires

Type of questionnaire	Frequency	Percentage (%)
Distributed questionnaires	100	100
Returned questionnaires	60	60
Excluded questionnaires	15	15
Valid questionnaires for analysis	45	45

Source: Prepared by the researcher

From the above table, it is observed that the number of questionnaires accepted for analysis is 45. Accordingly, the results of this study can be adopted and generalized at a confidence level of 95%, with a 5% margin of sampling error.

3.1.4.Questionnaire Design

In order to examine electronic human resource management and its role in improving job performance—a field study approach—this research adopted a model based on several components aimed at identifying the relationship between these components and the way in which electronic management contributes to enhancing job performance.

The questionnaire items were designed based on these components, in accordance with the study model. The statistical software SPSS (version 19) was used in the data processing and design phase.

- Defining the Objectives of the Questionnaire: The main objective of the questionnaire is to identify the relationship between the study variables to confirm or reject the hypotheses and obtain responses that address the main research problem, summarized in the central question: *To what extent does electronic human resource management contribute to improving job performance?*

- Formulation of Questions: In designing the questionnaire, tables were used due to the adoption of the five-point Likert scale, which is considered one of the most widely used methods for measuring attitudes. It is also characterized by its ability to handle a large number of related variables.

3.2.Preliminary Tests of the Measurement Instrument

To ensure the validity of the questionnaire, a set of tests was conducted, including expert judgment as well as the necessary statistical tests.

3.2.1. Face Validity

In order to verify the validity and suitability of the questionnaire items, it was submitted to a group of experienced and specialized reviewers from the teaching staff at the Faculty of Economic, Commercial, and Management Sciences at the University of Médéa and the

University Centre of Tipaza. They evaluated the appropriateness of the questions, the clarity and scientific accuracy of the wording, and the extent to which the questionnaire covered the research problem and achieved its objectives. Based on their feedback, several modifications were made, leading to the final version of the questionnaire.

3.2.2.Internal Consistency

Internal consistency was measured for the questionnaire items using a sample of 45 respondents by calculating the correlation coefficient between each item and the total score of its respective dimension. Accordingly, internal consistency was examined for two dimensions:

- The first dimension: Electronic Human Resource Management
- The second dimension: Job Performance

3.2.2.1.Internal Consistency of Electronic Human Resource Management Items: This dimension consists of 6 items (from 01 to 06). To assess the reliability of this dimension as a whole, the Pearson correlation coefficient was used to determine the degree of internal consistency among its items, as shown in the following table:

Table No. (02): Pearson Correlation Coefficient for the Items of the First Dimension of the Study Questionnaire

Code	Statements	Pearson Correlation	Sig	Result
1	The organization has human resources with experience, skills, and the ability to deal with electronic management systems.	0.833**	0.000	Significant
2	The organization works on retraining and upgrading its current human resources in order to maintain high skill levels through training sessions and various electronic training programs.	0.959**	0.000	Significant
3	The organization has programmers and specialists in information technology.	0.914**	0.000	Significant
4	Employee performance is enhanced and employees are motivated toward initiative, development, and innovation through continuous guidance.	0.874**	0.000	Significant
5	The organization seeks to continuously train human resources in technological developments to create a technically qualified and innovative workforce.	0.854**	0.000	Significant
6	The organization exploits employees' capabilities and skills for the public interest and the development of its work environment.	0.818**	0.000	Significant

Source: Prepared by the researcher based on SPSS output.

From the above table, it is observed that the correlation coefficients between each item of the electronic human resource management dimension and the total score of its items are statistically significant at a significance level of 0.01. Therefore, the questionnaire items are considered valid and internally consistent in measuring what they were designed to measure.

3.2.2.1. Internal Consistency of the Job Performance Dimension of Human Resources: This dimension consists of a set of items (from 01 to 11). To assess the overall reliability of this dimension, the Pearson correlation coefficient was used to determine the internal consistency among its items.

Table No. (03): Pearson Correlation Coefficient for the Items of the Second Dimension of the Study Questionnaire

Code	Statements	Pearson Correlation	Sig	Result
1	Electronic management works on coordinating employees and facilitating communication among them to increase the effectiveness of administrative processes.	0.334*	0.025	Significant
2	Electronic management plays an important role in overcoming problems related to low performance levels.	0.931**	0.000	Significant
3	Electronic management contributes to task speed, thereby improving employee performance levels.	0.926**	0.000	Significant
4	Electronic management clearly defines responsibilities and tasks for employees.	0.881**	0.000	Significant
5	Electronic management reduces the costs of information storage and archiving, facilitating employees' work.	0.887**	0.000	Significant
6	Electronic management organizes employees' daily workload and reduces work accumulation.	0.928**	0.000	Significant
7	I seek to benefit from others' opinions and share information openly according to work requirements.	0.968**	0.000	Significant
8	The organization clearly and properly defines employees' responsibilities and tasks through electronic management.	0.917**	0.000	Significant
9	The organization measures actual performance against standards by identifying employees' strengths and weaknesses and correcting deviations.	0.700**	0.000	Significant
10	The organization uses a participatory approach between supervisors and employees in performance evaluation.	0.939**	0.000	Significant
11	Electronic management exploits employees' intellectual and creative abilities through self-directed teams to keep up with modern technological requirements.	0.831**	0.000	Significant

Source: Prepared by the researcher based on SPSS output.

From the above table, it is observed that the correlation coefficients between each item of the job performance dimension and the total score of its items are statistically significant at significance levels of (0.01) and (0.05). Therefore, the questionnaire items are considered valid and internally consistent in measuring what they were designed to measure.

3.2.2.2.Construct Validity of the Study Instrument: Construct validity is considered one of the measures of the validity of the research instrument, as it assesses the extent to which the instrument achieves the objectives it is intended to measure. It also shows the degree of correlation between each dimension of the study instrument and the total score of all questionnaire items combined. The following table illustrates this:

Table No. (05): Construct Validity of the Study Instrument

Questionnaire Dimensions	Pearson Correlation Coefficient	Sig	Result
Electronic Human Resource Management	0.991**	0.000	Significant
Human Resource Job Performance	0.991**	0.000	Significant

Source: Prepared by the researcher based on SPSS output.

From the above table, it is observed that the correlation coefficients between each dimension and the total score of the questionnaire items are statistically significant at a significance level of (0.01). Accordingly, the dimensions are considered valid and internally consistent in measuring what they were designed to measure.

3.3.Reliability of the Questionnaire Items, Analytical Tools, and Study Model

In order to ensure the stability of the questionnaire results if it is administered repeatedly under the same conditions, it is necessary to measure the reliability of its items. Therefore, Cronbach's Alpha method was used. To facilitate this study, a set of statistical tools was also adopted in order to process the data and reach the various results. In addition, a conceptual model was used to clearly illustrate the study framework.

3.3.1. Cronbach's Alpha Reliability Coefficient

Cronbach's Alpha method was used to measure the reliability of the questionnaire. Alpha values are considered acceptable if they exceed 0.60. The results showed that the reliability value was high, as illustrated in the following table:

Table No. (06): Results of Cronbach's Alpha Test for Questionnaire Reliability

Questionnaire Dimensions	Correlation Coefficient	Reliability (Cronbach's Alpha)	Number of Items
Overall (Electronic Human Resource Management and Job Performance)	0.966	0.992	18

Source: Prepared by the researcher based on SPSS output (V.19).

From the above table, it is clear that Cronbach's Alpha coefficient for the questionnaire as a whole was high, with a value of 0.966. Similarly, the reliability coefficient was also high, reaching 0.992. This high level of Cronbach's Alpha and reliability indicates the internal consistency and stability of the questionnaire items. Therefore, it can be concluded that the research instrument developed to address the study problem is both valid and reliable across all its items and is ready for application on the study sample.

3.3.2. Test of Normal Distribution (Normality Test)

The Kolmogorov–Smirnov (K-S) test was used to determine whether the data follow a normal distribution or not. The results are presented in the following table:

Table No. (07): Results of the Normality Test

Questionnaire Dimensions	Test Value	Sig	Number of Items
Electronic Human Resource Management	0.235	0.000	06
Human Resource Job Performance	0.241	0.000	11
Overall Questionnaire	0.206	0.000	18

Source: Prepared by the researcher based on SPSS output (V.19).

The above table shows that the probability value (Sig) for all study dimensions is greater than the significance level of 0.05, meaning (0.000 < 0.05). Accordingly, the data distribution for these dimensions does not follow a normal distribution. Therefore, non-parametric tests were used to examine the study hypotheses.

3.3.3. Data Analysis Tools

In order to accurately analyze the data collected from the survey, several statistical tools were used, including frequency and percentage tables, median tables, Z-scores, and correlation analysis to identify the relationship between the independent variables. In addition, Cronbach's Alpha coefficient and Pearson correlation coefficient were employed to assess reliability and internal consistency. To determine the statistical significance of the obtained results, the Mann–

Whitney and Kruskal–Wallis tests were used to test the hypotheses. Furthermore, simple linear regression analysis was applied to determine whether there is an effect or not.

3.4. Presentation of Field Study Results

After collecting the necessary data from a sample of 45 respondents, the data were coded, entered, and processed using a computer-based SPSS V.19, which facilitates obtaining results in a short time. The results are presented in tables and figures generated using SPSS V.19.

3.4.1. Description of the Study Sample

Before presenting the results of the research content, a descriptive analysis of the respondents' personal data was conducted to gain their confidence, as shown in the following table:

Table No. (08): Distribution of Sample Individuals According to Personal Variables

Personal Variables	Options	Frequency	Percentage %
Gender	Male	37	82.2%
	Female	8	17.8%
Age	Less than 25 years	10	22.2%
	Between 25 and 40 years	29	64.4%
	More than 40 years	6	13.3%
Educational Level	Baccalaureate	5	11.1%
	Technician (TS)	9	20.0%
	License	18	40.0%
	Master	7	15.6%
	Engineer	4	8.9%
	Magister	1	2.2%
	PhD	1	2.2%
Current Position	Head of Department	10	22.2%
	Administrative Staff	25	55.6%
	IT Engineer	2	4.4%
	Cultural & Social Activities Advisor	1	2.2%
	Chief Inspector	1	2.2%
	Statistician	1	2.2%
	Registry Section Secretary	5	11.1%
Experience	Less than 3 years	5	11.1%
	3–5 years	3	6.7%
	5–10 years	9	20.0%
	More than 10 years	28	62.2%
Use of Electronic Systems	Less than 3 years	32	71.1%
	3–5 years	10	22.1%
	More than 5 years	3	6.7%
Daily Use of Computers/Systems	Always	21	46.7%
	Sometimes	19	42.2%
	Rarely	5	11.1%
Training in IT	No training	20	57.8%
	Basic training	14	31.1%
	Advanced training	5	11.1%
Total		45	100%

Source: Prepared by the researcher based on SPSS output.

3.4.2 Presentation and Analysis of the Results of the First Dimension of the Questionnaire

Through this part, we analyze the results of the items representing electronic human resource management. However, before proceeding, it is necessary to clarify the measurement scale adopted in this study, namely the five-point Likert scale.

Table No. (09): Five-Point Likert Scale

Degree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Level (Score)	1	2	3	4	5
Mean Range	1 – 1.79	1.80 – 2.59	2.60 – 3.39	3.40 – 4.19	4.20 – 5

Source: Ahmed Hussein Abdel Fattah, *Introduction to Descriptive and Inferential Statistics*, Kharazmi Scientific Publishing and Distribution, Jeddah, Saudi Arabia, 2007, p. 541.

To analyze the dimensions of the questionnaire, the Sign Test was used in order to test the following hypothesis: the degree of respondents' agreement regarding the contribution of electronic management to improving job performance is equal to the neutral value (03). This was examined through the following statistical hypotheses:

- **Null hypothesis (H0):** The median response equals the neutral value (03).
- **Alternative hypothesis (H1):** The median response does not equal the neutral value (03).

If the actual significance level is greater than the nominal significance level (0.01), the null hypothesis is accepted. In this case, the median of respondents' opinions regarding the contribution of electronic management to improving job performance does not differ from the neutral value. Conversely, if the opposite is true, the null hypothesis is rejected and the alternative hypothesis is accepted. In this case, the degree of response can be determined by comparing the median with the neutral value.

Table No. (10): Sign Test Results for Electronic Human Resource Management Items

Electronic Human Resource Management	Z Value	Sig	Actual Median	Sample Direction
1	-4.603	0.000	5.00	Strongly Agree
2	-0.986	0.324	4.00	Agree
3	-3.288	0.001	5.00	Strongly Agree
4	-6.002	0.000	3.00	Neutral
5	-6.002	0.000	5.00	Strongly Agree
6	-6.002	0.000	5.00	Strongly Agree
Electronic Human Resource Management (Overall)	**-5.665**	**0.000**	**4.5000**	**Strongly Agree**

Source: Prepared by the researcher based on SPSS output.

From the above table, it is clear that the overall tendency of the majority of the study sample regarding electronic human resource management is "Strongly Agree." This is reflected in the results of the Sign Test, which show that the observed significance level (0.000) is lower than the nominal significance level (0.01). Accordingly, there is a statistically significant difference between the median of respondents' opinions and the neutral value (3), indicating that the respondents' perceptions are not centered around neutrality but rather tend toward agreement.

3.4.3. Presentation and Analysis of the Results of the Second Dimension of the Questionnaire

Through this part, we analyze the remaining results of the items representing the human resource job performance dimension.

Table No. (11): Agreement Levels for the Items of Human Resource Job Performance for the Study Sample

Human Resource Job Performance	Z Value	Sig	Actual Median	Sample Direction
1	-0.500	0.617	4.00	Agree
2	-0.167	0.868	4.00	Agree

3	-6.559	0.000	5.00	Strongly Agree
4	-6.559	0.000	5.00	Strongly Agree
5	-0.167	0.868	4.00	Agree
6	-5.833	0.000	4.00	Agree
7	-1.167	0.234	4.00	Agree
8	-4.500	0.000	4.00	Agree
9	-6.559	0.000	2.00	Disagree
10	-3.500	0.000	5.00	Strongly Agree
11	-5.963	0.000	5.00	Strongly Agree
Human Resource Job Performance (Overall)	**-5.655**	**0.000**	**4.1818**	**Agree**

Source: Prepared by the researcher based on SPSS output.

From the above table, it is observed that the majority of the study sample's responses regarding human resource job performance were "Agree." This is reflected in the Sign Test results, where the actual significance level (0.000) is lower than the nominal significance level (0.01). Accordingly, there is a statistically significant difference between the median of respondents' opinions and the neutral value (3).

3.5. Testing the Study Hypotheses

After collecting and analyzing the data using appropriate statistical methods, and in light of the hypotheses targeted by this study, this section focuses on testing the hypotheses related to the field study and verifying their validity. This will be done through a series of analyses corresponding to each hypothesis.

3.5.1. Testing the First Main Hypothesis

This hypothesis examines whether there are no differences in the responses of the study sample regarding the study dimensions attributed to personal variables. This main hypothesis is divided into seven sub-hypotheses, which will be tested in order to interpret the results of the first main hypothesis.

3.5.1.1. Testing the First Sub-Hypothesis

H0: There are no differences in the responses of the study sample regarding the study dimensions attributed to gender.

H1: There are differences in the responses of the study sample regarding the study dimensions attributed to gender.

Table No. (13): Mann–Whitney Test Results for Statistically Significant Differences in the Contribution of Electronic Human Resource Management to Improving Job Performance According to Gender

Questionnaire Dimensions	Mean Rank		Z Value	Sig
	Male	Female		
Electronic Human Resource Management	20.18	36.06	-3.150	0.002
Human Resource Job Performance	20.12	36.31	-3.182	0.001
Overall Questionnaire	20.12	36.31	-3.172	0.002

Source: Prepared by the researcher based on SPSS output.

From the results of this test, it is observed that the actual significance level is lower than the nominal significance level. Accordingly, there are statistically significant differences in the study variables attributed to the gender variable.

3.5.1.2. Testing the Second Sub-Hypothesis

H0: There are no differences in the responses of the study sample regarding the study dimensions attributed to the age variable.

H1: There are differences in the responses of the study sample regarding the study dimensions attributed to the age variable.

Table No. (14): Kruskal–Wallis Test Results for Statistically Significant Differences in the Contribution of Electronic Human Resource Management to Improving Job Performance According to Age

Questionnaire Dimensions	Mean Rank			Chi-Square	Sig
	(Less than 25 years)	(25–40 years)	(More than 40 years)		
Electronic Human Resource Management	5.50	26.09	37.25	27.240	0.000
Human Resource Job Performance	5.50	25.81	38.58	27.890	0.000
Overall Questionnaire	5.50	25.81	38.58	27.701	0.000

Source: Prepared by the researcher based on SPSS output.

From the results of this test, it is observed that the actual significance level is lower than the nominal significance level. Accordingly, there are statistically significant differences in the study variables attributed to the age variable.

3.5.1.3. Testing the Third Sub-Hypothesis

H0: There are no differences in the responses of the study sample regarding the study dimensions attributed to the educational level variable.

H1: There are differences in the responses of the study sample regarding the study dimensions attributed to the educational level variable.

Table No. (15): Kruskal–Wallis Test Results for Statistically Significant Differences in the Contribution of Electronic Human Resource Management to Improving Job Performance According to Educational Level

Questionnaire Dimensions	Mean Rank							Chi-Square	Sig
	Baccalaureate	Technician	License	Master	Engineer	Magister	PhD		
Electronic Human Resource Management	3.00	10.33	28.83	26.36	34.88	42.00	42.00	32.406	0.000
Human Resource Job Performance	3.20	10.33	28.94	24.79	36.50	41.50	44.00	32.743	0.000
Overall Questionnaire	3.00	10.11	28.49	25.21	36.50	41.50	44.00	33.122	0.000

Source: Prepared by the researcher based on SPSS output.

From the results of this test, it is observed that the actual significance level is lower than the nominal significance level. Accordingly, there are statistically significant differences in the study variables attributed to the educational level variable.

3.5.1.4. Testing the Fourth Sub-Hypothesis

H0: There are no differences in the responses of the study sample regarding the study dimensions attributed to the current job position variable.

H1: There are differences in the responses of the study sample regarding the study dimensions attributed to the current job position variable.

Table No. (16): Kruskal–Wallis Test Results for Statistically Significant Differences in the Contribution of Electronic Human Resource Management to Improving Job Performance According to Current Job Position

Questionnaire Dimensions	Mean Rank							Chi-Square	Sig
	Head of Department	Administrative Staff	IT Engineer	Cultural & Social Activities Advisor	Chief Inspector	Statistician	Registry Section Secretary		
Electronic Human Resource Management	5.50	25.34	29.00	32.50	32.50	32.50	38.20	28.078	0.000
Human Resource Job Performance	5.50	25.42	27.00	29.50	29.50	34.50	39.40	28.206	0.000
Overall Questionnaire	5.50	25.38	27.50	29.50	29.50	34.50	39.40	28.037	0.000

Source: Prepared by the researcher based on SPSS output.

From the results of this test, it is observed that the actual significance level is lower than the nominal significance level. Accordingly, there are statistically significant differences in the study variables attributed to the current job position variable.

3.5.1.5. Testing the Fifth Sub-Hypothesis

H0: There are no differences in the responses of the study sample regarding the study dimensions attributed to the experience variable.

H1: There are differences in the responses of the study sample regarding the study dimensions attributed to the experience variable.

Table No. (17): Kruskal–Wallis Test Results for Statistically Significant Differences in the Contribution of Electronic Human Resource Management to Improving Job Performance According to Experience

Questionnaire Dimensions	Mean Rank				Chi-Square	Sig
	Less than 3 years	3–5 years	5–10 years	10 years and more		
Electronic Human Resource Management	3.00	7.50	13.94	31.14	31.772	0.000
Human Resource Job Performance	3.20	6.67	14.11	31.14	31.294	0.000
Overall Questionnaire	3.00	7.00	13.78	31.25	31.730	0.000

Source: Prepared by the researcher based on SPSS output.

From the results of this test, it is observed that the actual significance level is lower than the nominal significance level. Accordingly, there are statistically significant differences in the study variables attributed to the experience variable.

3.5.1.6. Testing the Sixth Sub-Hypothesis

H0: There are no differences in the responses of the study sample regarding the study dimensions attributed to the degree of interaction with electronic systems.

H1: There are differences in the responses of the study sample regarding the study dimensions attributed to the degree of interaction with electronic systems.

Table No. (18): Kruskal–Wallis Test Results for Statistically Significant Differences in the Contribution of Electronic Human Resource Management to Improving Job Performance According to the Degree of Interaction with Electronic Systems

Questionnaire Dimensions	Mean Rank			Chi-Square	Sig
	Less than 3 years	3–5 years	More than 5 years		
Electronic Human Resource Management	19.59	28.20	42.00	10.309	0.000
Human Resource Job Performance	19.69	28.10	41.33	9.512	0.000
Overall Questionnaire	19.59	28.30	41.67	9.903	0.000

Source: Prepared by the researcher based on SPSS output.

From the results of this test, it is observed that the actual significance level is lower than the nominal significance level. Accordingly, there are statistically significant differences in the study variables attributed to the degree of interaction with electronic systems.

3.5.1.7. Testing the Seventh Sub-Hypothesis

H0: There are no differences in the responses of the study sample regarding the study dimensions attributed to the level of training in information technology.

H1: There are differences in the responses of the study sample regarding the study dimensions attributed to the level of training in information technology.

Table No. (19): Kruskal–Wallis Test Results for Statistically Significant Differences in the Contribution of Electronic Human Resource Management to Improving Job Performance According to the Level of Training in Information Technology

Questionnaire Dimensions	Mean Rank			Chi-Square	Sig
	No Training	Basic Training	Advanced Training		
Electronic Human Resource Management	16.33	29.96	38.20	17.885	0.000
Human Resource Job Performance	16.38	29.43	39.40	17.980	0.000
Overall Questionnaire	16.29	29.61	39.40	18.242	0.000

Source: Prepared by the researcher based on SPSS output.

From the results of this test, it is observed that the actual significance level is lower than the nominal significance level. Accordingly, there are statistically significant differences in the study variables attributed to the level of training in information technology.

3.5.2. Testing the Second Main Hypothesis

H0: There is no statistically significant effect of electronic human resource management on improving job performance at the Judicial Council of Médéa Province at a significance level of 0.05.

H1: There is a statistically significant effect of electronic human resource management on improving job performance at the Judicial Council of Médéa Province at a significance level of 0.05.

To test this hypothesis, simple linear regression analysis was used to determine whether there is a statistically significant effect, leading to acceptance or rejection of the hypothesis, as follows:

- The null hypothesis is accepted if: the calculated F value is lower than the tabulated F value at a significance level of 0.05, or if the significance level (Sig) is greater than 0.05.
- The alternative hypothesis is accepted if: the calculated F value is greater than the tabulated F value at a significance level of 0.05, or if the significance level (Sig) is less than 0.05.

Mathematical model of the effect hypothesis: Electronic Human Resource Management = A + B_0 (Human Resource Job Performance)

Table No. (16): Results of Simple Linear Regression Analysis on the Contribution of Electronic Management to Improving Job Performance

Source		Regression		Error	Total
Sum of Squares		20.288		1.522	21.810
Degrees of Freedom		1		43	44
Mean Squares		20.288		0.035	
Overall Significance	F-value	573.377			
	Sig	0.000			
Partial Significance (Regression Coefficients)		**Constant**	**Electronic Human Resource Management**		
	B	-0.093	0.932		
	T	-0.545	23.945		
	Sig	0.589	0.000		
Explanatory Power	**R**	0.964			
	R^2	0.930			

Source: Prepared by the researcher based on SPSS output.

From the results presented in the above table, it is observed that the correlation coefficient between electronic human resource management and job performance reached R = 0.964, which

is statistically significant, as the calculated F value (573.377) is greater than the tabulated F value at a significance level of 0.05 and degrees of freedom (1, 44). Moreover, the coefficient of determination $R^2 = 0.930$ indicates that electronic human resource management explains 93% of the variations in job performance, while the remaining 7% is attributed to other factors.

Testing the significance of regression coefficients (B_0, A): The decision rule states that if the significance value (Sig) is less than 0.05 corresponding to the calculated T value, then the regression coefficient is statistically significant.

Based on the above table, the following results are obtained:

- For testing the significance of A: the significance value (Sig) is 0.589, which is greater than 0.05; therefore, a = -0.093 is not statistically significant.
- For testing the significance of B_0: the significance value (Sig) is 0.000, which is less than 0.05; therefore, the effect of B_0 is statistically significant. This means that an increase of one unit in the use of electronic management leads to an increase in job performance by 0.932.

  Accordingly, the mathematical model is:

Electronic Management = 0.932 − 0.093 (Job Performance)

Conclusion: The null hypothesis (H0) is rejected, and the alternative hypothesis (H1) is accepted. This indicates that there is a statistically significant effect of the use of electronic human resource management on improving job performance at a significance level of 0.05.

Conclusion of the Study: Through this study, the importance of electronic management in improving job performance has been demonstrated from the perspective of both academic experts and practitioners within the judicial sector. The study yielded the following key findings:

Study Findings:

- There are differences in the responses of the study sample regarding the study dimensions attributed to personal variables (gender, educational level, current position, experience, degree of interaction with electronic systems, and level of training in information technology).
- The correlation coefficient between electronic human resource management and job performance reached R = 0.964, which is statistically significant. The F value (573.377) is greater than the tabulated value at a significance level of 0.05 and degrees of freedom (1, 44). The coefficient of determination $R^2 = 0.930$ indicates that electronic management explains 93% of the variation in job performance, while 7% is due to other factors.
- There is a statistically significant effect of electronic human resource management on improving job performance at a significance level of 0.05.

Recommendations: Based on the above findings, the following recommendations are proposed:

- Raising employee awareness of the importance of digital transformation and its role in facilitating work and improving performance and service quality.
- Strengthening information security through measures that protect data from hacking or loss, especially with increased reliance on electronic systems.
- Adopting electronic performance evaluation systems to ensure accurate and transparent assessment of employees' performance.
- Organizing continuous training programs to enhance employees' skills in using electronic systems and improving job performance.
- Developing information systems and technological tools within the Judicial Council to ensure the effective implementation of electronic management.

References:

1. Farikha, Linda, *The Role of Electronic Human Resource Management in Organizational* Competitiveness – Case Study of the African Glass Company, Jijel, PhD Thesis in Management Sciences, University of Biskra, 2016/2017,
2. Abu Amouna, The Reality of Electronic Human Resource Management in Palestinian Universities – Gaza Strip, Master's Thesis, Islamic University, Gaza, 2009,
3. Rawiya Hassan, Human Resource Management: A Future Vision, University House for Printing and Publishing, Egypt, 2003
4. Fayez Abdul Rahman Al-Faroukh, Organizational Learning and Its Impact on Job Performance Development, Dar Jalees Al-Zaman, Jordan, 2010,.
5. Mazhar Shaban Al-Ani, Shouqi Naji Jawad, E-Management, Dar Al-Thaqafa, 2014,
6. Aisha bint Ahmed Al-Husseini, Shatha bint Abdul Mohsen Al-Khayyal, The Impact of Electronic Management Systems on Job Performance – A Field Study on Female Employees at King Abdulaziz University, Scientific Journal of Commerce Faculties, Al-Azhar University, Issue 10, Egypt, 2013