



The Impact of E-Management on Employee Performance

اثر الادارة الالكترونية على اداء الموظفين

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Abstract

Keywords

This study examines the role of e-management in enhancing employee performance, emphasizing its function as a modern, technology-based approach to improving administrative processes and service quality. The National Social Security Fund for Salaried Workers (CNAS) in Mascara was selected as a case study. Data were collected through a questionnaire administered to a sample of 100 employees.

The findings reveal that e-government contributes significantly (43.6%) to improving performance by simplifying procedures, accelerating task completion, and enhancing internal communication. In addition, the results highlight the importance of digital infrastructure and continuous training in supporting effective implementation.

The study concludes that adapting e-government applications to the specific context of Algerian public administration is essential for improving the work environment and increasing employee productivity.

E-management,
employee
performance,
modern
technology,;

JEL Classification Codes : M12 ; M15 ; O33

الكلمات المفتاحية

الملخص

تهدف هذه الدراسة إلى استكشاف دور الإدارة الإلكترونية في تحسين أداء الموظفين، مع إبراز أهميتها كآلية حديثة تعتمد على التكنولوجيا لتسهيل العمل الإداري ورفع جودة الخدمات. تم اختيار الصندوق الوطني للتأمينات الاجتماعية للعمال الأجراء - معسكر كميدان للدراسة، واعتمدت الدراسة على استبيان استهدف 100 موظف.

أظهرت النتائج أن الإدارة الإلكترونية لها تأثير ملموس على تحسين الأداء بنسبة 43.6%، من خلال تبسيط الإجراءات، وتسريع إنجاز المهام، وتعزيز التواصل الفعال داخل المؤسسة. كما أبرزت الدراسة أهمية توافر البنية التحتية الرقمية والتكوين المستمر للموظفين كعوامل رئيسية لنجاح تطبيق الإدارة الإلكترونية. وأكدت كذلك ضرورة تكيف التطبيقات الإلكترونية وفق خصوصيات الإدارة العمومية الجزائرية، بما يساهم في خلق بيئة عمل داعمة وزيادة إنتاجية الموظفين.

الإدارة الإلكترونية؛
أداء الموظفين؛
التكنولوجيا الحديثة؛
الأداء الوظيفي.

تصنيف JEL : M12 ؛ M15 ؛ O33

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I.INTRODUCTION:

In recent decades, the world has witnessed remarkable advancements in information and communication technology, leading to the emergence of new paradigms in organizational management. Among these developments is the rise of e-management as a modern approach to managing human resources and administrative processes. This approach relies on digital technologies to enhance efficiency, streamline procedures, and reduce costs, thereby fostering a more flexible and transparent work environment.

E-management can be defined as an administrative system that employs electronic tools to carry out core managerial functions—such as planning, organizing, directing, and controlling—through technologies including email, human resource management systems, databases, cloud computing, and collaborative platforms. The impact of this modern system extends beyond technical dimensions to encompass the human element within organizations, particularly employees. E-management plays a vital role in improving employee performance and increasing productivity. Moreover, it contributes to a better work environment by minimizing traditional bureaucratic procedures that often hinder professional development, while providing employees with greater opportunities to participate in decision-making and express their perspectives. In addition, e-management opens new avenues for skill development through continuous e-training and easy access to up-to-date knowledge, thereby enhancing employees' readiness to adapt to the demands of the digital age.

In this context, Algeria, like many other countries, has recognized the importance of digital transformation within its administrative institutions, particularly in light of ongoing public administration reforms. The Algerian government has initiated the adoption of e-government systems across various sectors as a step toward improving the quality of public services and enhancing the efficiency of human resources. This shift reflects a growing awareness of the critical role that digital transformation plays in improving employee performance and advancing administrative development in the country.

Several previous studies have addressed this topic from different perspectives. Research in the field of management information systems has demonstrated a positive relationship between the implementation of e-government and improved job performance, primarily through the provision of accurate and timely information and the support of decision-making processes. Additionally, studies in human resource management have confirmed that the use of modern technologies contributes to the development of employee skills and increases job satisfaction, which, in turn, positively affects overall performance.

Conversely, some studies have identified several challenges that may limit the effectiveness of e-management, including inadequate technological infrastructure, insufficient training, and employee resistance to change. Nevertheless, the overall trend in the literature suggests that the advantages of e-management outweigh these challenges, particularly when it is implemented in a well-planned and systematic manner.

In this regard, Al Salem's study (2025) aimed to assess the current status of e-management at Najran University in Saudi Arabia and to examine its impact on improving employee job performance. The study adopted a descriptive-analytical approach, with data collected through a structured questionnaire. The sample consisted of 80 employees randomly selected from Najran

University and the Ministry of Education in Najran. The findings revealed no statistically significant differences in the impact of e-management on job performance attributable to gender, academic qualifications, or years of experience. Moreover, the majority of participants agreed that e-management contributes significantly to improving job performance and enhancing employee productivity, particularly in the context of ongoing technological advancements and digital transformation.

Similarly, Nawafleh's study (2018) sought to investigate the role of e-management in improving employee performance in the Jordanian public sector. The study measured the impact of e-management across multiple dimensions using a questionnaire distributed to a random sample of 337 employees working in key public institutions, including the Ministry of Foreign Affairs and Expatriates, the Civil Status and Passports Department, and the Department of Lands and Survey. The results indicated a statistically significant relationship between e-management practices and improved employee performance in the Jordanian public sector ($\alpha \leq 0.05$). The researcher recommended conducting further studies in this field to generalize the findings across other governmental institutions in Jordan.

Furthermore, the study conducted by Uma, Yammama, and Shaibu (2000) aimed to examine the relationship between e-HRM practices and individual job performance, including task performance, contextual performance, adaptive performance, and counterproductive work behaviors. The researchers adopted a quantitative approach using a questionnaire administered to 214 academic and non-academic staff members across five higher education institutions in northern Nigeria. Using partial least squares structural equation modeling (PLS-SEM), the findings revealed that certain components of e-HRM practices were positively associated with job performance. Specifically, e-communication and e-compensation demonstrated positive and statistically significant relationships with all dimensions of job performance (i.e., task, contextual, and adaptive performance, as well as counterproductive work behaviors). E-training was found to be positively associated only with task and adaptive performance. Similarly, e-performance appraisal practices were significantly related to contextual performance and counterproductive work behaviors. However, e-training showed no significant effect on contextual performance or counterproductive work behaviors. In addition, no significant direct relationship was found between e-performance appraisal and either task or adaptive performance.

Nyathi and Kekwaletswe's study (2023) represents an initial attempt to examine the mediating role of employee performance in the relationship between the use of e-HRM and organizational performance. The study aimed to propose and empirically test a model designed to enhance both employee and organizational performance in developing economies through the implementation of e-HRM practices.

Data were collected באמצעות a questionnaire distributed to 35 organizations utilizing e-HRM systems, and the data were analyzed using the Statistical Package for the Social Sciences (SPSS). The findings indicated that, despite the relatively recent adoption of e-HRM in many African countries, it has a positive impact on both employee performance and organizational performance. Moreover, the results suggest that improvements in employee performance serve to amplify overall organizational gains.

In addition, the study proposed a validated model that could contribute to enhancing both employee and organizational performance, particularly within the context of developing economies

This study aims to examine the impact of implementing modern electronic management systems on improving administrative efficiency and enhancing employee performance at the College of Administration and Economics, University of Baghdad. It also seeks to highlight the strategic role of e-management in improving job performance and strengthening institutional effectiveness.

The researcher adopted a descriptive-analytical approach, employing a field study methodology. Data were collected through a questionnaire distributed to a random sample of 60 employees from various job categories within the college. The findings revealed a strong positive impact of implementing modern electronic management systems on both administrative efficiency and job performance. The study also indicated that employees possess a high level of knowledge and proficiency in using these systems across different departments and divisions. Furthermore, the implementation of these systems contributed to more effective job performance evaluation based on criteria such as experience, skills, abilities, and competencies (Albaejawe, 2022).

Similarly, Al Montaser Mohammad and Abu-Jreas (2026) conducted a study to assess the impact of e-governance on human resource performance in commercial banks. To achieve the study's objectives and address its main research question, a descriptive-analytical approach was employed. A questionnaire was designed and distributed to a random sample of 400 administrative employees working in commercial banks. After data screening and processing, 347 valid responses were analyzed, representing 86.7% of the distributed questionnaires.

The results indicated that e-governance has a significant effect on human resource performance in commercial banks. Moreover, the findings showed that both the level of e-governance implementation and human resource performance in these banks are relatively high. The study recommended the adoption of new policies aimed at enhancing organizational autonomy (e-independence) and encouraging decentralized decision-making. It also emphasized the importance of using key performance indicators (KPIs) to evaluate the impact of improvements on the quality of work.

E-management has become a strategic option adopted by organizations to enhance employee performance through process automation, improved communication, and increased speed and efficiency in decision-making. However, its impact on employees may vary depending on the organization's level of readiness and the extent to which individuals accept and adapt to these changes.

Accordingly, the research problem can be formulated as follows:

To what extent does e-management contribute to improving employee performance and enhancing organizational efficiency?

Research Questions

In line with the research problem, the following sub-questions are مطرح:

- What is e-management?
- What are the key components and application areas of e-management within organizations?
- What is employee performance, and why is it important for organizational success?

• How does e-management influence these factors and contribute to performance improvement?

Research Hypotheses

Based on the above, the study proposes the following hypotheses:

- **H1:** There is a statistically significant relationship between the implementation of e-management and improved employee performance.
- **H2:** The application of e-management practices significantly contributes to enhancing employee efficiency.
- **H3:** E-management has a positive effect on key organizational factors, such as motivation, discipline, and communication.

II. THEORETICAL FRAMEWORK AND PREVIOUS STUDIES:

1.E-Management:

In recent decades, the world has witnessed significant advancements in information and communication technology (ICT), leading to the emergence of new paradigms in organizational management. These developments have given rise to the concept of e-management as a modern approach to managing human resources and administrative activities. Accordingly, this section explores the nature and fundamental aspects of e-management.

A.Defining E-Management:

Management, both as a theoretical discipline and a practical function, has undergone substantial transformation due to rapid advancements in information technology. The accelerating changes of the modern era are the result of cumulative developments, rendering management a dynamic and evolving field. Today, management operates in alignment with technological developments and data-driven processes, as a growing number of administrative activities are being reshaped by digital innovations.

In its contemporary sense, e-management refers to the use of electronic tools and technologies across all administrative functions, including planning, organization, procedures, and communication, as well as in related activities such as commerce and information dissemination (Mohammed Samir, 2009).

It is also defined as the transition from paper-based transactions to a fully electronic environment through the extensive use of information technology, whereby services are delivered through structured and automated processes (Youssef Abdel Attia & Ehab Farouk).

Furthermore, e-management can be understood as the transformation of traditional administrative tasks—often characterized by lengthy and complex procedures—into streamlined electronic processes executed with high speed and accuracy (Nasreen, 2016). Similarly, Dunleavy et al. (2006) define e-management as a shift from traditional administrative models toward the adoption of digital systems aimed at delivering services more efficiently and transparently.

B. Elements of E-Management:

The implementation of e-management is based on several fundamental components (Al-Jarjari, 2018), which can be summarized as follows:

Hardware Components:

These include computers, servers, and their associated systems, as well as peripheral devices such as printers, scanners, cameras, audio equipment, display units, and storage media. These components form the physical infrastructure necessary for operating electronic systems.

Software:

This encompasses both system software—such as operating systems, network management systems, and data processing tools—and application software, including email systems, databases, e-commerce platforms, and project management applications. These programs enable the execution and management of administrative tasks in a digital environment.

Communication Networks:

Communication networks represent a critical component of e-management, as they enable connectivity and data exchange. These include various types of networks such as the Internet, Intranet, and Extranet. Without these networks, the functionality of e-management systems would not be possible.

At the core of these components lies the human element, particularly knowledge workers, who play a pivotal role in managing and operating e-management systems. These individuals represent the driving force behind digital transformation, encompassing intellectual capital, managerial capabilities, and the ability to generate and utilize knowledge effectively within the organization

C.Forms of E-Management:

E-management manifests in various forms and patterns that align with the nature of organizational activities and support the achievement of strategic objectives. The most prominent forms include:

First Branch: E-Government

E-government refers to the use of information and communication technologies (ICT) to enhance transparency, improve service delivery, reduce administrative barriers, and facilitate citizen participation in decision-making processes that affect different aspects of public life.

This process is often associated with electronic transactions, defined as any exchange, communication, contract, or procedure conducted wholly or partially through electronic means (Younes, 2020).

Second Branch: E-Commerce

E-commerce involves commercial activities conducted عبر the Internet and modern electronic communication technologies. It includes the buying and selling of goods and services, electronic financial transactions and payments, the exchange of business information and data, as well as online marketing and advertising (Mustafa, 2023).

Third Branch: Electronic Publishing

Electronic publishing emerged as an innovative alternative to traditional publishing methods, offering solutions to many of their limitations. It is characterized by speed, accuracy, efficient use of storage space, and the ability to integrate multimedia content. Additionally, it allows for easy editing, updating, and distribution of information, often at lower costs for publishers and users alike.

Historically, just as writing represented a major technological revolution that transformed human societies and enabled communication across distances, electronic publishing has similarly

reshaped modern communication by allowing millions of individuals from diverse cultures and locations to interact and access information instantly (Ahmed, 2003).

2. The Nature of Employee Performance:

Employee performance is a fundamental factor in achieving organizational objectives and enhancing productivity. Understanding its concept and measurement is essential for evaluating organizational effectiveness. This section examines the concept of employee performance and its key dimensions.

A. Defining Employee Performance:

Employee performance has been defined from multiple perspectives in the literature:

It refers to the accomplishment of job tasks and responsibilities, reflecting the extent to which an individual fulfills job requirements (Hamed & Bourghda, 2017).

It can also be understood as the execution of various job-related activities, which can be evaluated through three main dimensions: the quantity of effort, the quality of performance, and the manner in which tasks are carried out (Ashour, 1986).

Nicholas defines job performance as the outcome of individual behavior, where behavior represents actions, and performance reflects the results generated by those actions (Ibrahim, 2003).

Similarly, Haynes describes job performance as the output achieved by an employee when carrying out tasks within an organization, emphasizing that performance is a continuous process rather than a one-time result (Ali, 2007).

From a more analytical perspective, job performance is viewed as the interaction between behavior and achievement. Behavior refers to the activities performed by individuals (such as planning, organizing, or supervising), while achievement represents the outcomes or results of those activities. Performance, therefore, encompasses both elements, provided that the results are measurable (Boubker, 2021).

Sonnentag (2008) defines job performance as “the overall expected value to the organization of the discrete behavioral episodes carried out by an individual over a period of time.”

This definition highlights two key aspects:

- **Behavioral dimension:** Job performance is based on observable and recurring behaviors rather than general traits.
- **Value dimension:** Performance is evaluated based on the extent to which these behaviors contribute to organizational goals.

Furthermore, job performance is often defined as the set of actions and behaviors under an individual’s control that contribute to achieving organizational objectives. These behaviors vary in effectiveness and impact organizational outcomes differently (Rotundo & Sackett, 2002).

In a narrow sense, job performance refers to employee productivity. In a broader sense, it represents a combination of effort, skills, and achieved results, making it a critical factor for both individual and organizational success. Ultimately, employee performance reflects the expected value of employees’ contributions within the organization.

In its narrow sense, job performance is described as employee productivity. In a broader sense, it encompasses a combination of effort, skills, and achieved results, which are critical for both individual employees and the organization. In essence, job performance reflects employee behaviors

that significantly impact the achievement of organizational goals. Therefore, individual employee performance represents the expected value of employees' contributions, which in turn enhances overall organizational effectiveness.

Individual job performance can also be defined as "those actions or behaviors under an individual's control that contribute to achieving organizational goals and can be measured according to the individual's level of competence." This definition accounts for both productive and unproductive behaviors, which can either facilitate or hinder the attainment of organizational objectives (Jex, 1998).

Previous studies have often treated job performance as a multi-dimensional construct. Common frameworks include:

Two-dimensional construct: Task performance and contextual performance.

Three-dimensional construct: Task performance, organizational citizenship behavior, and anti-productivity behaviors.

These frameworks allow for a more nuanced understanding of employee contributions within organizational settings.

B. Definition and Methods of Employee Performance Evaluation:

Employee performance evaluation refers to the systematic assessment of an employee's execution of the tasks and responsibilities assigned to them within the organization. It examines both the outcomes achieved and the degree of adherence to organizational standards and procedures, whether performed individually or collectively (Boualala, 2021).

Performance evaluation offers significant benefits to both employees and the organization. For employees, it provides motivation to excel, as they recognize that their work is subject to continuous assessment and acknowledgment by supervisors. It also fosters greater adherence to organizational rules and systems, as employees become more conscious of their actions and behaviors being monitored and evaluated (Ramdani, 2022).

In addition, performance evaluations support strategic decision-making by providing managers with accurate data on employee capabilities and productivity, ultimately contributing to improved organizational effectiveness.

Employee performance is evaluated using specific tools, and the results are compared to predetermined standards. Performance measurement can therefore be defined as the assessment of an individual's or organization's achievements relative to required or attainable levels, providing a clear picture of success in achieving objectives and implementing plans.

Performance evaluation methods are the tools and approaches used by evaluators to assess employee efficiency. The scientific literature in human resource management identifies several commonly used methods for evaluating individual performance:

- Forced Distribution Method

The forced distribution method aims to reduce personal bias in the evaluation process and prevent evaluators from giving uniformly high or low ratings to subordinates. Supervisors are required to distribute their ratings across employees according to a predetermined normal frequency distribution, often in percentages such as 10%, 20%, and 40%.

Although this method is simple to apply, it assumes that all employee groups can be categorized into "excellent," "acceptable," and "weak" performers, which is not always accurate. For example, a

marketing research team may perform exceptionally, yet the evaluator is forced to classify some as “weak” or “acceptable,” which may be unfair and hinder motivation, initiative, and healthy competition among employees (Thabit, 2001).

- **Forced Choice Method**

Developed by industrial psychologists during World War II to assess the performance of US Army officers, the forced choice method was later adopted by industrial companies for employee evaluation.

In this method, evaluation forms consist of several sets of statements, each containing four items: two describing desirable qualities and two representing undesirable qualities. The manager selects only two statements—one positive and one negative—without knowing which describes good or poor performance. This design minimizes evaluator bias and requires little training.

However, this method has limitations: it does not allow managers to assign relative weights to statements, prevents discussion with subordinates to develop improvement plans, and can be complex in content.

- **Written Report Method**

The written report method involves the supervisor or manager preparing a detailed report describing the employee’s strengths, weaknesses, skills, potential for development, and career advancement opportunities.

While this method provides rich qualitative information, it has drawbacks: there is no standardized format, its quality depends on the evaluator’s skill, and it is time-consuming, particularly when assessing a large number of subordinates. Moreover, it emphasizes descriptive assessment over quantitative measurement, making comparisons across employees more difficult.

Digital Considerations in Employee Evaluation

With the proliferation of digital culture, advancements in computing, and the evolution of communication technologies, evaluation methods are increasingly being adapted to electronic systems. These changes require updating job roles and evaluation processes to ensure accuracy, efficiency, and alignment with modern organizational practices.

- **Checklist Method**

The checklist method evaluates behaviors necessary for successful job performance, focusing on functional actions performed at work. These checklists assume that specific behaviors lead to effective job performance and provide insight into subordinates’ work quality and required competencies.

The process begins with job analysis, which identifies job dimensions, responsibilities, and duties, as well as effective and ineffective behavior patterns for each responsibility. Each behavior is then rated on a scale—excellent, very good, acceptable, weak, or very weak—based on its contribution to fulfilling assigned responsibilities. After analyzing and assessing the relevance of different behavior patterns, only behaviors directly related to the job are retained for evaluation (Sultan, 2003).

- **Management by Objectives (MBO) Method**

The MBO method focuses on results rather than behavior or personal qualities. It involves the following steps:

Defining Objectives: Setting measurable goals as performance metrics.

Monitoring Progress: Tracking the achievement of these objectives during the implementation period.

Evaluation: Comparing actual results with planned outcomes to identify uncontrollable delays and areas for improvement.

In this method, each employee establishes a set of short-term operational goals and identifies strategies to enhance their performance (Al-Aqra, 2019).

III. METHOD AND PROCEDURES:

To achieve the objectives of this study, a **questionnaire** was selected as the primary data collection tool due to its widespread use and reliability in scientific research within this field. The questionnaire was carefully **designed based on theoretical literature and previous studies**, ensuring alignment with the study's objectives and comprehensive coverage of all relevant variables and dimensions.

The study targeted employees of the **National Social Security Fund for Salaried Workers in Mascara**, highlighting the relevance and applicability of the research to the organizational environment. The questionnaire consists of **two main sections**:

Part One – Personal Data:

This section collects demographic and professional information about respondents, including:

- Gender
- Age
- Educational level
- Years of service
- Job title

Part Two – Study Variables:

This section contains **32 items** divided into two axes:

E-Management: 16 items measuring the extent of activation and utilization of e-management technologies within the institution.

Employee Performance: 16 items assessing various aspects of employee performance and evaluating its relationship with e-management.

Respondents' answers were analyzed using a **five-point Likert scale**, ranging from “strongly disagree” to “strongly agree.” The **arithmetic mean** of each item was calculated to interpret the data and determine the overall trends in the responses.

Table (01): Five-Point Likert Scale – Determining Importance Based on Mean Scores

Response Options	Score	Weighted Mean Range	Importance Level
Strongly Disagree	1	1.00 – 1.79	Very Low
Disagree	2	1.80 – 2.59	Low
Neutral	3	2.60 – 3.39	Medium
Agree	4	3.40 – 4.19	High
Strongly Agree	5	4.20 – 5.00	Very High

IV.STUDY RESULTS (ANALYSIS AND DISCUSSION) :

After completing the transcription of the collected questionnaires, the data were processed and analyzed using **SPSS software**. Prior to conducting the statistical analyses, the **validity and reliability** of the measurement tool were verified to ensure the accuracy and credibility of the results.

To assess **reliability**, **Cronbach's Alpha coefficient** was calculated for each axis of the questionnaire. The following table summarizes the Cronbach's Alpha values obtained, indicating the internal consistency and reliability of the questionnaire items.

Table (02): Results of the Cronbach's Alpha Test

Cronbach's Alpha Coefficient	Number of Items	Axes
0.721	16	Electronic Management
0.776	16	Employee Performance
0.840	32	Overall Questionnaire

The results of the reliability analysis using Cronbach's Alpha coefficient indicated that all axes of the questionnaire exhibit a high degree of internal consistency and reliability. The values for all axes exceeded the minimum acceptable threshold of 0.721, and the overall reliability coefficient for the questionnaire was 0.840.

These results demonstrate the strength and credibility of the research instrument, confirming that the questionnaire is reliable and suitable for data collection and analysis. Consequently, the study can confidently rely on this tool to achieve its research objectives

A.Analysis of Attitudes Toward the E-Management Axis

The results for the items related to e-management are summarized in the following table, which shows the arithmetic means and standard deviations of respondents' attitudes toward each item of this axis:

Table (03): Means and Standard Deviations of Electronic Management

No.	Items	Mean	Std. Deviation	Importance Level
01	Does the organization provide you with a personal computer for work?	4.04	0.828	High
02	Your organization provides modern computer equipment	3.80	0.899	High
03	The available computers meet the necessary requirements for service delivery	3.92	0.825	High
04	Computers are updated continuously and regularly	3.84	0.813	High
05	Your organization provides a sufficient number of computer accessories (printers, scanners)	3.87	0.837	High
06	You face difficulties in using computers to perform tasks	2.49	0.201	Low

07	Accessing electronic management systems is easy	3.82	0.744	High
08	Your organization has a website that provides essential electronic services	3.88	0.820	High
09	Your organization has advanced automated protection systems and data security	4.01	0.689	High
10	You face difficulties in using electronic systems	2.30	0.937	Low
11	The management of your organization adopts user-friendly systems and software	3.83	0.697	High
12	Your organization relies on software systems that enable control over its data	3.87	0.734	High
13	Customer records are managed and stored electronically instead of paper archives	4.42	0.171	Very High
14	You receive material and moral incentives for using electronic management	2.62	0.982	Medium
15	Your organization has specialized staff for maintaining computers and their accessories	3.85	0.757	High
16	Your organization provides training courses in information and communication technology	2.67	1.111	Medium
—	Electronic Management (Overall)	56.23	6.085	High

The data presented in the table, based on the responses of the study sample to the statements related to the "e-management" dimension, indicate that the overall mean score for this dimension was 56.23, with a standard deviation of 6.09. This suggests a high degree of homogeneity in the respondents' answers and an absence of significant variation.

The analysis further reveals that the mean scores for all items measuring this dimension fell within the "agree" category on the five-point Likert scale, with values ranging from 2.30 to 4.42. Statement No. 13 ranked first, with a mean score of 4.42, reflecting strong agreement among respondents, whereas Statement No. 10 ranked last, with a mean score of 2.30.

These findings indicate that the sample generally agrees that the implementation of e-management contributes to improving employee performance within the organization.

B. Analysis of Individual Attitudes Toward the Employee Performance Dimension

The results related to the items in this dimension are summarized in the following table:

Table (04): Means and Standard Deviations of Employee Performance

No.	Items	Mean	Std. Deviation	Importance Level
01	You have freedom in performing your tasks	3.30	0.916	Medium
02	You consistently strive to make the best use of your time	3.91	0.726	High
03	Your working conditions are good and supportive	3.37	1.041	Medium
04	You make decisions related to your work effectively	3.63	0.861	High
05	Receiving incentives, encouragement, and recognition motivates you to exert greater effort	3.52	1.185	High
06	You complete your tasks accurately and meticulously	4.26	0.525	Very High

07	You communicate and collaborate with colleagues in a team spirit	4.08	0.706	High
08	Receiving training makes you more competent and able to perform your work effectively	3.88	0.935	High
09	Your organization evaluates employee performance continuously	3.17	1.146	Medium
10	Your organization uses transparent standards for recruiting human talent	2.89	1.014	Medium
11	Your organization provides a suitable environment that helps employees perform their tasks	3.49	0.784	High
12	There is a lack of coordination among individuals in administrative units	3.15	0.936	Medium
13	You strive to provide faster and more accurate services to clients	4.07	0.655	High
14	Clients feel satisfied when using electronic management to receive services	3.90	0.759	High
15	You exert effort to resolve clients' issues quickly and efficiently	4.19	0.581	High
16	You explain information and electronic services to clients clearly and easily	4.02	0.681	High
—	Employee Performance (Overall)	59.28	6.248	High

The data presented in the table, based on the responses of the study sample to the statements related to the "Employee Performance" dimension, indicate that the overall mean score for this dimension was 59.28, with a standard deviation of 6.25. This reflects a high level of homogeneity in the respondents' answers and indicates the absence of significant variation in their views.

Furthermore, the analysis shows that the mean scores for all items measuring this dimension fell within the "agree" category on the five-point Likert scale, with values ranging from 2.89 to 4.26. Statement No. 6 ranked first, with a mean score of 4.26, reflecting a high level of agreement among respondents, whereas Statement No. 10 ranked last, with a mean score of 2.89.

These findings suggest a positive level of employee performance as perceived by the study sample.

C. Simple Linear Regression Analysis

Main Hypothesis:

- **Null Hypothesis (H_0):** There is no statistically significant effect of e-management on employee performance.

Alternative Hypothesis (H_1): There is a statistically significant effect of e-management on employee performance.

Table (05): The Effect of Electronic Management on Employee Performance

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	22.391	5.070	—	4.416	0.00

Electronic Management	0.646	0.090	0.588	7.205	0.00
$R^2=0.436$		$F=51.906$		$\text{sig}=0.00$	

The table shows that the calculated t -value is 7.205, with an associated significance value (Sig.) of 0.000, which is lower than the adopted significance level of 0.05. This indicates that the regression coefficient is statistically significant, and therefore, the regression model is appropriate for analyzing the relationship between e-management and employee performance.

Based on these findings, the null hypothesis is rejected, and the alternative hypothesis is accepted, indicating that e-management has a statistically significant effect on employee performance.

The results also reveal that the coefficient of determination (R^2) is 0.436, suggesting that 43.6% of the variance in employee performance can be explained by e-management, while the remaining 56.4% is attributable to other factors not included in the model.

Furthermore, the coefficients table shows that the unstandardized regression coefficient (B) is 0.646. This implies that a one-unit increase in the level of e-management is associated with an expected increase of 0.646 units in employee performance, confirming the positive effect of e-management on improving employee performance.

We reject the null hypothesis and accept the alternative hypothesis, indicating that electronic management has a statistically significant effect on employee performance.

V.CONCLUSION:

This study aimed to examine the role of e-government in improving employee performance, using the National Social Security Fund for Salaried Workers (CNAS) in Mascara as a case study. The findings indicate that e-government contributes significantly to enhancing employee performance by streamlining administrative procedures, accelerating task completion, and improving internal communication within the organization. The study also highlights the importance of digital infrastructure and continuous employee training in ensuring the successful implementation of e-government initiatives.

Furthermore, the results emphasize the necessity of adapting electronic applications to the specific characteristics of Algerian public administration. Such adaptation enhances the work environment and increases employee productivity, making e-government a critical component of modern administrative reform.

The findings demonstrate that e-government represents a qualitative shift in organizational management practices, as traditional approaches alone are no longer sufficient to cope with the rapid transformations of the contemporary work environment. Through the use of digital tools and advanced communication systems, e-government facilitates workflow, supports faster and more effective decision-making, and strengthens organizational communication. Its impact extends beyond technical improvements to include the development of human resources and the creation of a more efficient and supportive work environment.

Moreover, e-government contributes to reducing administrative errors and promotes transparency and objectivity in performance evaluation, thereby encouraging continuous improvement among employees. However, the successful implementation of e-government depends on several organizational and human factors, requiring sustained attention from institutional leaders and decision-makers.

Finally, e-government plays a pivotal role in enhancing public administration performance and advancing administrative reform. By delivering services electronically, it improves efficiency, reduces costs, and saves time and effort. It also enhances employee skills, clarifies responsibilities, and facilitates access to information, which in turn fosters job satisfaction and organizational commitment. Given the critical importance of employee performance as a key determinant of organizational success and competitiveness, it is essential to adopt effective performance evaluation systems based on appropriate measurement tools and criteria. Such systems enable organizations to identify weaknesses, address performance gaps, and achieve higher levels of efficiency and effectiveness.

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