

The Role of Electronic Management in Improving the Job Performance of Employees at Najran University

دور الإدارة الإلكترونية في تحسين الأداء الوظيفي للموظفين في جامعة نجران

Fatima M. Al Salem^{1*}

¹ Lecturer, Najran University, Saudi Arabia.

* Corresponding Author: Fatima Al Salem (Fmalyamy@nu.edu.sa)



This file is licensed under a
[Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/)

Accepted

قبول البحث

2025/3/9

Revised

مراجعة البحث

2024/12/22

Received

استلام البحث

2024/10/8

DOI: <https://doi.org/10.31559/GJEB2025.15.3.8>

Abstract:

Objectives: This study aims to assess the current state of electronic management at Najran University, Saudi Arabia, and assess the extent of its application in impact on enhancing job performance among employees.

Methods: A descriptive and analytical approach was employed, utilizing a structured questionnaire for data collection and analysis. The study sample consisted of 80 employee, randomly selected from both Najran University and the Ministry of Education in Najran city.

Results: The findings revealed no significant differences in the impact of electronic management on job performance based on gender, qualifications, or years of experience. Most participants agreed that electronic management enhances both job performance and employee productivity, particularly in the context of technological advancement and digital transformation.

Conclusions: The study recommends that Najran University adapt to global trends and evolving accessibility requirements by offering comprehensive services within an integrated model. Regular risk management, employee performance monitoring, expert recruitment, and future-focused training are essential for fostering innovation and strengthening electronic management systems. Adequate funding for electronic management is also critical to ensure faster and more efficient service delivery.

Keywords: Electronic management; job performance; employees; digital transformation; Najran University.

الملخص:

الأهداف: تهدف هذه الدراسة إلى تقييم الوضع الحالي للإدارة الإلكترونية في جامعة نجران، المملكة العربية السعودية، وتحديد مدى تطبيقها في تحسين أداء الموظفين.

المنهجية: استخدمت الدراسة منهجًا وصفيًا تحليليًا، مع الاعتماد على استبانة مُنظمة لجمع البيانات وتحليلها. تكونت عينة الدراسة من 80 موظفًا تم اختيارهم عشوائيًا من كل من جامعة نجران ووزارة التعليم في مدينة نجران.

النتائج: أظهرت النتائج عدم وجود فروق ذات دلالة إحصائية في تأثير الإدارة الإلكترونية على أداء الموظفين فيما يتعلق بالجنس أو المؤهلات أو سنوات الخبرة. وقد اتفق غالبية المشاركين على أن الإدارة الإلكترونية تحسن من الأداء الوظيفي وإنتاجية الموظفين، خصوصًا في ظل التقدم التكنولوجي والتحول الرقمي.

الخلاصة: توصي الدراسة بأن تتكيف جامعة نجران مع الاتجاهات العالمية والمتطلبات المتغيرة من خلال تقديم خدمات شاملة ضمن نموذج إداري متكامل. ويُعد كل من إدارة المخاطر المنتظمة، ومتابعة أداء الموظفين، وتوظيف الخبراء، والتدريب الموجه نحو المستقبل عناصر أساسية لتعزيز الابتكار وتقوية نظم الإدارة الإلكترونية. كما أن توفير التمويل الكافي لمشاريع الإدارة الإلكترونية أمر ضروري لضمان تقديم الخدمات بسرعة وكفاءة.

الكلمات المفتاحية: الإدارة الإلكترونية؛ أداء الموظفين؛ الموظفون؛ التحول الرقمي؛ جامعة نجران.

Citation

Al Salem, F. M., & Shambour, M. K. (2025). The Role of Electronic Management in Improving the Job Performance of Employees at Najran University. *Global Journal of Economics and Business*, 15(3), 383-389. <https://doi.org/10.31559/GJEB2025.15.3.8>

1 Introduction

Modern communication networks have revolutionized information technology and knowledge dissemination, enabling humanity to thrive in the information age. Consequently, we now inhabit a world driven by knowledge and technology, where access to information and technical tools underpins both practical and scientific advancements. This interconnected environment fosters continuous innovation for a better future, irrespective of time or location (Alkhaffaf, 2012). Considering economic, political, social, and technological factors, information transformation has emerged a vital tool for institutions seeking strategic and competitive advantages. It enhances operational efficiency, work quality, and supports the effective implementation of strategies across both public and private sectors (Kraus et al., 2022; Abuallooush et al., 2016).

The digital revolution of the 21st century presents a significant opportunity for organizations to enhance their creative capacities and integrate more effectively into the global digital economy (Cunningham & Friedrich Fröschl, 2013). By leveraging modern technologies, maximizes—organizations can maximize operational efficiency, accelerate processes, and human error in dynamic and constantly evolving environments (Cascio & Montealegre, 2016).

As a contemporary management trend, many countries are embracing electronic management by investing in advanced information and communication technologies to transform business and government governmental organizations. This transformation involves the digitizing digitization of managerial functions including planning, organizing, directing, and controlling operations, such as marketing, production, finance, and investment (Mudholkar et al., 2020; Kraus et al., 2022).

According to Yaseen (2010), electronic management is "the practice of many forms of work and processes utilizing contemporary electronic methods and instruments." It is regarded as one of the modern systems developed to improve operations through the use of communication networks. Electronic management systems across various institutions facilitate greater interdependence in completing transactions and executing functions in a way that promotes increased collaboration across sectors. These systems aim to enhance service credibility, ensure transparency, and deliver services equitably in alignment with legal frameworks. Furthermore, electronic management systems represent a comprehensive strategy for resource allocation, service delivery optimization, and stakeholder satisfaction (Khirmeed, 2023).

Since the vast majority-of citizens already use computers and have successfully engaged in electronic transactions, implementing this new system appears to be a pressing priority, especially given that electronic management-is well-suited to meet the needs of most citizens. According to experts and specialists, government agencies face numerous challenges, highlighting the importance of increased infrastructure investment (Mudholkar et al., 2020).

Electronic management can enhance human resource efficiency and productivity while reducing administrative burdens, presenting an valuable opportunity to improve overall performance. Modern electronic methods, known for their speed and efficiency, can also address and eliminate many challenges associated with traditional management. This makes electronic management a promising solution for enhancing organizational performance (De Alwis et al., 2022).

Adding the term "electronic" to management signifies the government's intention to accelerate processes and make services more accessible. Developing a robust infrastructure that aligns with societal trends and values regarding government services and their relationship to the workforce is essential for achieving the ideal of electronic management. This transformation can begin by shifting from paper-based communication, which is often routine and time-consuming, to an electronic approach. Additionally, establishing a comprehensive database and information network can directly connect various government entities and ministries with the services and needs of the population (Bataineh, 2017).

Furthermore, electronic management is one of the modern administrative approaches that utilizes the high capacity of the Internet and business networks to perform administrative duties such as planning, guiding, and monitoring internal resources to achieve specific objectives (Aboud, 2004).

Despite the growing emphasis on digital transformation in organizational management, the extent to which electronic management systems impact job performance among employees at Najran University remains unclear. Many organizations have adopted digital management practices, but challenges such as insufficient infrastructure, resistance to change, and limited technological skills hinder effective implementation. This study seeks to determine whether the adoption of electronic management systems at Najran University has a significant impact on job performance. Thus, this study hypothesizes that electronic management systems positively influence the job performance of employees at Najran University.

2 Literature Review

AlAwamleh (2003) conducted a study that explored electronic management by analyzing the quality of electronic government systems and examining trends in electronic management practices among employees in both the public and private sectors in Jordan. The research utilized descriptive and analytical approach, gathering data through a questionnaire. A total of 700 employees from 20 government and private institutions were surveyed, and 581 responses were collected, resulting in an 83% response rate. The findings indicated that only 62% of the organizations made extensive use of computers in their operations, while 67% integrated digital technologies into their workflows. One of the major barriers identified was *legislative limitations*, with legislative shortcomings ranked as highly significant. The study suggested that a gradual shift toward electronic governance should be adopted, with a phased implementation strategy supported by adequate human, financial, technical, informational, and legislative resources.

Moreover, AlRasasi (2016) assessed how electronic management systems affect knowledge management practices within the banking sector. The study employed an applied research design, using a descriptive-analytical methodology to explore the relationship between electronic management (independent variable) and knowledge management (dependent variable). The results revealed that electronic management had a significant positive effect on improving knowledge management in banks. Based on these findings, the study suggested implementing electronic management strategies at various organizational levels to improve administrative performance, service quality, and overall efficiency in management processes.

In another study, Abualoush et al. (2018) explored the relationships between knowledge management (KM), information systems (IS), and employee empowerment (EE), and how these factors collectively influence employee performance (EP). The findings revealed that both KM and IS have a significant positive impact on EE, which in turn positively influences EP. However, direct relationships between KM and EP, as well as IS and EP, were not statistically significant. Furthermore, EE was found to significantly mediate the effects of KM and IS on EP. This study is among the few that **explore** the interactions between KM, IS, and EE in relation to EP, and it is the first to apply this model within Jordan's pharmaceutical sector.

3 Method

In this descriptive-analytical study, we designed a questionnaire to collect and analyze data, test the research hypotheses, and clarify the core objective of assessing the impact of electronic management on employees' performance.

3.1 The population of the study

The study population for this study consisted of 2,000 administrative employees, based on the human resources database of Najran University and the Ministry of Education in Najran city. The participants were drawn from both Najran University and the Ministry of Education. random sampling method was employed. An electronic survey was distributed among the employees, and 80 responses were received, constituting the final sample size.

3.2 Study tools and information sources:

According to the research's primary objective to assess the influence of electronic management on employee performance, various secondary sources, such as books, references, and previous studies, were employed to gather data for the study. The questionnaire was the primary source of information on the independent variable (electronic management) and the dependent variable (employee performance). For the questionnaire, administrative literature related to the study's topic was used to develop the items, and responses were measured on a five-point Likert scale with a range of 1 to 3 (1= agree, 2= neutral, and 3= disagree). Statistical Package for the Social Sciences (SPSS) software, version 24, was used to analyze the findings.

The first section of the questionnaire included the demographic data, job level, qualifications, and job position, while the second section assessed the independent variable, measuring electronic management across the following dimensions: electronic planning, electronic knowledge, electronic documents, customers, electronic meetings, electronic correspondence, and electronic services. Finally, the third section assessed the dependent variable, which measured decision-making effectiveness.

4 Results

The analysis of the participants' characteristics ($n = 80$) revealed that the majority of the managers, 50, hold a bachelor's degree (62%), 21 have a master's degree (26%), and 10 have a Ph.D. (12%). Thirty-eight participants were from Najran University, and forty-two were from the Ministry of Education in Najran. Regarding experience, most of the managers (28) have 20 or more years of experience (35%). Seventeen had between 10 and 20 years of experience (21.3%), and eleven participants had less than five years of experience (13.8%).

To assess the level of knowledge of electronic management, the participants were asked to select their level of knowledge about electronic management from four different levels: excellent, very good, good, and weak. Out of the 35 participants, 44.3% chose "very good", 21% chose "good", 17.5% chose "excellent", and only 7.6% chose "weak" (Figure 1).

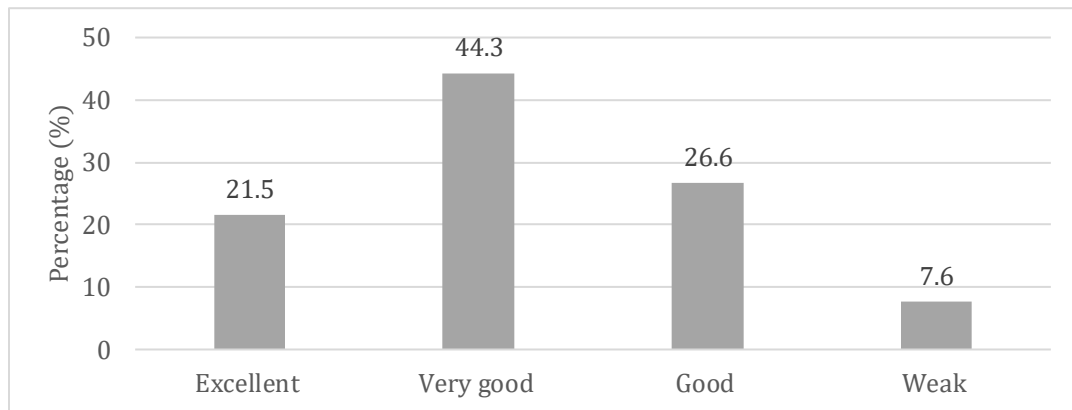


Figure 1: The level of knowledge of electronic management

All participants were asked to indicate the source of their knowledge of electronic management, and they selected from the following: self-learning, courses, and practice. Forty-two of the participants selected self-learning as their source of knowledge of electronic management, which was 53.2%; courses were the source of knowledge of 23 participants (28.6%) and only 15 participants (18.2%) selected practice as their source to get the electronic management knowledge (Figure 2).

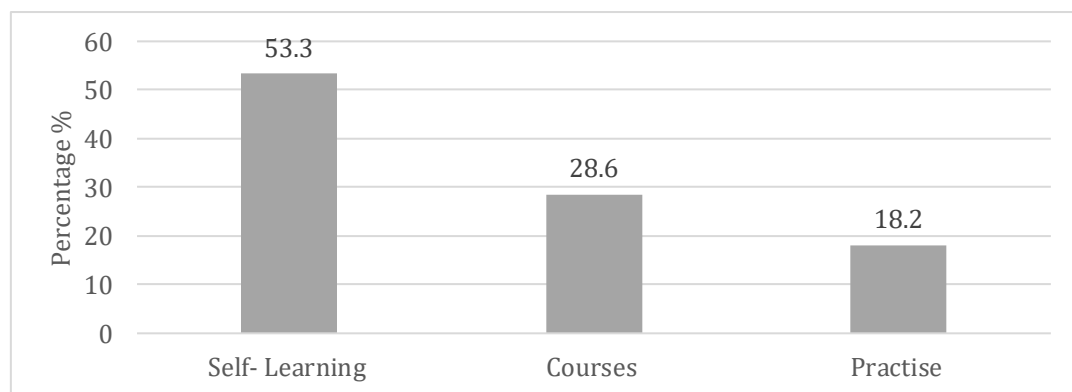


Figure 2: The sources of knowledge of electronic management

To analyze responses from sections two and three, arithmetic averages and percentages were used for each paragraph of the second and third parts of the questionnaire. Phrases with positive content "agree" were given 5 points, 4 points for each neutral response, and 3 points for each disagree response (**Table 1**).

Table 1: Scale the percentages of responses

The Percentage (%)	The Response Level
Less than 50%	Very Low
50-59%	Low
60-69%	Moderate
70-79%	High
Above 80%	Very high

Table 2 shows that the participants' responses in this study for the role of electronic management within the organization were average for item 9, where it was 60%. It was high for items 1, 2, and 8, and moderately high for items 3, 4, 5, 6, 7, and 10.

Table 2: The average and the percentage of the section two responses

Sentence	Average Response	Percentage (%)	The response level
1. Reduce the procedure time.	4.81	71%	High response
2. Improve the performance	4.81	71%	High response
3. Assisting the organization in planning, implementing, assessing, and using.	4.78	66%	High response
4. Managing and accessing the various departments of the organization as if it were a one central unit.	4.85	67%	High response
5. Immediate providing data and information to be beneficiaries.	4.78	68%	High response
6. Save and document all activities and basic data.	4.71	68%	High response
7. Accommodating more client at the same time.	4.77	68%	High response
8. Electronic link between all organizations departments.	4.86	71%	High response
9. Reducing the impact of the personal relationship.	4.73	60%	High response
10. Optimum use of the organization resource.	4.78	66%	High response

Table 3 reveals that the participants' responses to the study on the impact of electronic management on employees' job performance were moderate for items 1 and 2, with a range of 51–58%. The responses were high for items 6, 7, and 9 and moderately high for items 3, 4, 5, and 8. The findings of this study indicate a high overall level of agreement among participants on the role of electronic management in improving job performance, particularly in the era of the technological revolution, digitization, and automation of many administrative tasks, which is a logical outcome of technological advancement in the field of business administration.

- There are no statistically significant differences at the significance level ($p > 0.05$) in the effect of electronic management on performance based on gender.
- There are no statistically significant differences at the significance level ($p > 0.05$) in the effect of electronic management on performance based on qualification.
- There are no statistically significant differences at the significance level ($p > 0.05$) in the effect of electronic management on performance based on years of experience.

Table 3: The average and the percentage of the section three responses

Sentence	Average Response	Percentage (%)	The response level
1. The trend towards decentralization in decision- making.	4.75	58%	High response
2. Engage the employee in the decision-making process.	4.58	51%	High response
3. Redistribute tasks according to the qualification and capabilities of the employee.	4.75	64%	High response
1. Upgrading management skills.	4.70	66%	High response
2. Develop trust between the employee and their managers.	4.73	62%	High response
3. Improving communication techniques.	4.87	72%	High response
4. Quickly access the information and instruction to the departments.	4.90	74%	High response
5. Reduce work mistakes.	4.71	61%	High response
6. Reduce effort and cost.	4.81	72%	High response

5 Discussion

This study aimed to identify the (current state) of electronic management in the Kingdom of Saudi Arabia, assess the extent of its application within organizations, determine its impact on employee performance, and provide ideas and recommendations based on the research findings to facilitate the transition to electronic management in service provision. The results showed that the average viewpoint of the sample regarding electronic management and its crucial role in enhancing employee job performance was high, regardless of the participants' gender, qualifications, or years of experience.

In addition, the results indicated that the level of knowledge about electronic management at Najran University was moderately high, with approximately 45% of the total sample confirming awareness among Najran University members regarding electronic management. The third question confirmed that this knowledge was primarily acquired through personal effort, self-learning, reading, and research. Approximately 53% of participants indicated that this knowledge resulted from self-education, followed by attending training courses in electronic management.

Although personal effort contributed significantly to participants' understanding, the results of the fourth question indicated that training courses also play an important role. About 19% of the sample received one training course in electronic management, 16% received two courses, and 10% attended more than two courses. The fifth question confirmed the importance of electronic management in effectively developing employee performance, with about 80% of participants responding "yes" when asked whether electronic management helps improve the work environment.

Regarding the results of the second section, the findings indicated that the role of electronic management within the organization is influential. Participant responses were high for items 1, 2, and 8, and moderately high for items 3, 4, 5, 6, 7, and 10.

These results suggest overall agreement that electronic management reduces procedure time, improves performance, assists the organization in planning, implementation, and assessment, manages and accesses various departments as if they were part of a central unit, provides immediate data and information to beneficiaries, saves and documents all activities and basic data, accommodates more clients simultaneously, enables electronic links between all organizational departments, and optimizes the use of organizational resources.

To examine the third question and the hypothesis stating that there is a correlation between the role of electronic management and the improvement of job performance at Najran University, the results revealed a positive relationship. As presented in Table 3, the findings indicate that electronic management positively impacts employee job performance. The correlation coefficient value was 0.50, indicating a moderate to strong association between electronic management and job performance improvement. This result reflects the significant transformation at Najran University toward adopting electronic management, computing, and digitization.

6 Conclusions

To summarize, this study aimed to assess the impact of electronic management on employee performance using a questionnaire designed for 80 randomly selected employees from Najran University and the Ministry of Education in Najran city. The questionnaire collected data along with secondary sources and utilized a five-point Likert scale to evaluate the independent variable (electronic management) and the dependent variable (employee performance). The results showed that the average viewpoint of the sample regarding electronic management and its crucial role in enhancing employee job performance was high, regardless of the participants' gender, qualifications, or years of experience. The level of knowledge about electronic management was moderately high at Najran University, with about 45% of the total sample confirming awareness of electronic management among Najran University members. Additionally, the results indicated that the role of electronic management within the organization is influential, and there is a positive relationship between electronic management and the improvement of job performance at Najran University. This is supported by a correlation coefficient of 0.50, indicating a moderate to strong relationship between electronic management and its impact on job performance.

6.1 Recommendations

- Adapt to changes in accessibility and globalization by implementing flexible policies and regularly updating digital platforms.
- Develop and implement comprehensive service models that address the specific needs of employees and stakeholders through integrated electronic systems.
- Enhance employee performance by setting measurable performance goals and carrying out consistent performance evaluations.
- Implement continuous training programs focused on the latest technological trends and essential practical skills for electronic management systems.
- Allocate dedicated funding for electronic management initiatives to ensure faster service delivery, including investments in infrastructure, software upgrades, and cybersecurity measures.

6.2 Acknowledgments:

I would like to express my heartfelt gratitude to my supervisor, Dr. Mounir Bellomi, for his steadfast guidance, insightful feedback, and unwavering support throughout this research. I also deeply appreciate my family and friends for their ongoing encouragement and emotional support during this journey.

References:

- Abualloush, S., Bataineh, K., & Aladwan, A. S. (2016). Impact of Information Systems on Innovation (Product Innovation, Process Innovation) - Field Study on the Housing Bank in Jordon. *International Journal of Business Administration*, 8(1), 95. [CrossRef]
- Abualoush, S. H., Obeidat, A. M., Tarhini, A., Masa'deh, R., & Al-Badi, A. (2018). The role of employees' empowerment as an intermediary variable between knowledge management and information systems on employees' performance. *VINE Journal of Information and Knowledge Management Systems*, 48(2), 217–237. [CrossRef]
- AlAwamleh, N. (2003). The Quality of Electronic Management and Government in the Digital World; Survey Study. *King Soud University Magazine, Administrative Sciences*, 15(2), 267–283.
- Alkhaffaf, M. (2012). *The Role of Information Systems in Decision Making: The case of Jordan Bank*. Online), 3(10). <https://core.ac.uk/download/pdf/234644548.pdf>
- AlRasasi, A. (2016). *The Impact of Applying Electronic Management of Achieving Knowledge Management in the Jordanian Banks*. Unpublished Master Thesis, Jadara University, Jordan
- Bataineh, K. A. (2017). The Impact of Electronic Management on the Employees' Performance Field Study on the Public Organizations and Governance in Jerash Governorate. *Journal of Management and Strategy*, 8(5), 86. [CrossRef]
- Cascio, W. F., & Montealegre, R. (2016). How Technology Is Changing Work and Organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, 3(1), 349–375. [CrossRef]
- Cunningham, P., & Friedrich Fröschl. (2013). *Electronic Business Revolution*. Springer Science & Business Media.
- De Alwis, A. C., Andrić, B., & Šostar, M. (2022). The Influence of E-HRM on Modernizing the Role of HRM Context. *Economies*, 10(8), 181. [CrossRef]
- Khirmeed, F. A. (2023, August 25). *Electronic management systems and their impact on the performance of information institutions*. unknown. https://www.researchgate.net/publication/373371372_Electronic_management_systems_and_their_impact_on_the_performance_of_information_institutions
- Kraus, S., Durst, S., Ferreira, J. J., Veiga, P., Kailer, N., & Weinmann, A. (2022). Digital transformation in business and management research: An overview of the current status quo. *International Journal of Information Management*, 63(4), 102466. [CrossRef]
- Mudholkar, Gajanan P., Murshed, M., & Al-Khasi, A. (2020). *The Role of Electronic Management in Improving Administrative Performance*. <https://www.semanticscholar.org/paper/The-Role-of-Electronic-Management-in-Improving-GajananP.Mudholkar-MohammedMurshed/8659127a58c8bf653347f2ad3f7e8c99f38553e6>