

Received: May 2023 Accepted: June 2023  
DOI: <https://doi.org/10.58262/ks.v11i02.029>

## The Reality of E-Management in the Health Sector Case Study on Al-Kafeel Specialized Hospital

Haider Basil Ali<sup>1</sup>

### Abstract

*The purpose of this study is to investigate the current state of e-Management in the healthcare industry. Case study on Al-Kafeel Specialised Hospital, and the research has discovered that Al-Kafeel Specialised Hospital has a Medium degree of e-Management (Medium level of electronic recruiting, e-training, and electronic performance assessment). The findings of the research suggest that Work to increase the capabilities of employees in all departments within the Al-Kafeel Specialised Hospital to use technology in performing the required tasks, by providing appropriate training programmes and courses; Attention to the implementation of all tasks and functions in all institutions working in the health sector in particular and the rest of the sectors in general through technology to achieve the goals of the Iraqi development plan; Increasing the technological capabilities of the hospital; and Work to increase the technological capabilities of the hospital. Increasing the technological capabilities of the hospital, and workers should be trained on electronic management using a technique that is based on straightforward fundamentals and systems. This will make it easier for workers to depend on these systems in an applied way at work, and it will also be characterised by flexibility and simplicity, so that everyone will be able to understand and use it.*

**Keywords:** e-Management - health sector - Iraq

### Introduction

The real revolution in the development of the administration was strongly associated with the beginning of the emergence of the computer, which was a major shift in the field of machine-reliance. As a result, the administration became familiar with new patterns in the management of its affairs through computer digital control, computer-aided design and manufacturing, then computer-integrated manufacturing, and applications of artificial intelligence in production and services, amongst other thin One of the patterns in which the computer not only replaced the human element in its management but also replaced the managers in providing automated directions and instructions based on the downloaded programmes was the "replacement" of the human element in its management by the computer (Ahsan, 2022; Shen et al., 2023; Loureiro, 2023).

It is not a road of luxury to make the transition to E-management; rather, it is an unavoidable forced by global developments. The concept of integration, involvement, and utilisation of information has become one of the criteria of success for every organization (Donyavi et al.,

---

<sup>1</sup> Department of Materials Engineering, University of Technology- Iraq  
Email: [haider.b.ali@uotechnology.edu.iq](mailto:haider.b.ali@uotechnology.edu.iq)  
Orcid: <https://orcid.org/0000-0002-4744-4851>

2023; Qiu, 2022). All of the issues that called for administrative growth towards E-management have been imposed as a result of the progression of scientific and technological knowledge as well as the ongoing need to improve the quality of outputs and guarantee the safety of operations. When comparing different institutions' levels of competitiveness, the element of time is among the most significant to consider. It is no longer acceptable to postpone the execution of operations under the excuse of improving and refining them. This is due to the fact that the possibilities accessible to institutions are tied to the element of time (Barba-Sanchez et al., 2022).

## **Research Problem**

This shift from conventional business and administrative services to electronic ones, along with the emergence of electronic management, which aims to safeguard the administrative entity, enhance its performance, and achieve the best possible use of services with lightning-fast accuracy, represents a genuine revolution in management. Communications, computers, and information technology have all aided in the management revolution. The ability of departments to plan effectively and efficiently to take advantage of work requirements and to provide high-quality electronic services in accordance with technical and technical standards that keep up with the times is made possible by communications within the administration, which helps to support and assist in order to simplify administrative procedures, facilitate and expedite the decision-making process, and enable these departments to communicate with one another effectively and strategically (Evi et al., 2023; Hernández-Ascencio & Angel-Alvarado, 2022).

E-management got its name since current administrations rely heavily on cutting-edge technology to carry out their duties and attain their goals quickly, precisely, and affordably. Information technologies, which are developing at an astounding pace, are the most vital components of this sort of management, which is referred to as "E-management." Eliminating paper-based transactions and replacing the E-office with information technology is the core concept underlying electronic management. the conversion of services offered by the government into administrative tasks completed in line with a predetermined order of phases (Abd Alhasan et al., 2023; Jánský & Tomášek, 2023).

The study's main question is: "What are the Determinants of the Success of e-Management in the Health Sector in Iraq?" From the facts provided above, this question may be formed.

## **Research Objective**

- Attempts to convert the hospital that was the subject of the study to E-management while realistically exposing the extent to which there are important factors in technology organisations.
- It is necessary to identify and diagnose the factors that, in one way or another, contribute to the hospital under consideration's divergence from the adoption and execution of E-management projects, as well as to provide a number of effective ways to resolve this deviation.
- Defining e-management and describing how it functions within the context of community service.
- Find out the fundamental differences between traditional management and electronic management (e-Management); the most important features and cutting-edge capabilities of current E-management systems in private hospitals.

- Clearly state the requirements and components of the modern E-management project that are thought to be the most important.
- Describe in detail the key features and elements of modern E-management systems.

## Research Questions

- Exactly what is meant by the phrase "e-Management," and how much does it advance social good?

What significant differences do traditional management and e-management have?

- Which elements of the existing e-management system in private hospitals are considered to be the most important, and what are the attributes of these elements?
- What conditions and components make up a cutting-edge electronic management project that are absolutely necessary?
- Which traits and elements of modern e-management are regarded as being the most crucial ones?
- To what extent are there difficulties with the switch to computerised management at the hospital that was surveyed?
- What aspects of the adoption and usage of the E-management initiatives in the hospital at issue differ from one another, and how?
- Where can effective solutions be discovered to get through the barriers preventing the hospital from adopting and putting E-management ideas into practise?

## Literature Review

- According to Kassab, M. K. I., Naser, S. S. A., and Al Shobaki, M., it is the transition from traditional administrative work to the application of information and communication technologies in organisational construction and the use of modern technology, including computer networks, to link organisational units with one another to facilitate obtaining data and information for making appropriate decisions, finishing work, and efficiently providing services to beneficiaries. And with the least amount of delay. This refers to the change from a conventional administration to an electronic administration.
- Additionally, Luz, C. F., Vollmer, M., Decruyenaere, J., Nijsten, M. W., Glasner, and Sinha (2020) demonstrate that e-management can be characterised as executing a series of actions that rely on information technology to provide goods and services to clients via computers while attempting to resolve issues that arise from the product requester's interaction with people in a way that promotes efficiency and effectiveness.

### • The concept of E- management

- According to Hitpass, B., and Astudillo, H. (2019), it is an integrated E-system that strives to convert typical administrative tasks from manual administration to computer-based management. It does this by depending on potent information systems that facilitate the speedy and economical decision-making necessary for administrative tasks. The use of information and communication technology by administrative institutions is known as "e-management."
- Ismail, H., and Hanafiah, M. M. (2017) demonstrate that the idea of e-management transcends the idea of automating work departments within an organisation to the idea of

integrating data and information between various departments and using that data and information to direct the institution's work policy and procedures towards achieving its goals and providing the necessary flexibility to respond to successive changes, whether internal or external. To put it another way, the idea of e-management transcends the idea

- E-management, as defined by Rosa, A. T. R., Pustokhina, I. V., Lydia, E. L., Shankar, and Huda (2019), includes all facets of management, such as motivation, planning, and execution. However, it differs from conventional management in that it has the ability to continuously create new information and use it to achieve goals.

- **Objectives of E- management**

- According to Amuna, Y. M. A., Al Shobaki, M. J., Naser, S. S. A., and El Talla, S. A. (2017), some of the objectives of electronic management are as follows:
  - 1. The development of public administration, namely the decrease in paperwork and the recycling of current solutions.
  - 3. Getting closer to citizens (employees) by offering an easy-to-follow process, a unified perspective of citizens (employees), and a single interface for citizens (workers).
  - 2. Improving the services offered, including decreased mobility, connection at any time and location, and simplified access to information.
  - 4. Increasing economic competition through the use of the internet for international trade and giving small and medium-sized businesses the chance to compete in this market;
  - 5. Reducing costs through the integration of systems to support both internal and external procedures; and
  - 6. Simplifying administrative procedures so that they can be completed electronically.
  - 7. The accessibility of information and the manner in which it is communicated to customers, locals, and other stakeholders, etc.
  - 8. Making administrative services available in the most geographically diverse areas possible.

- **Benefits and gains of applying E- management:**

- According to Kassab, M. K. I., Abu-Naser, S. S., and Al Shobaki, M. J. (2019), using E-management has the following advantages and benefits:
  - 1. Managing and overseeing the establishment's many departments as though they were one big, centralised organisation.
  - 2. concentrating the decision-making process on the key action items while concurrently increasing monitoring support.
  - 3. Standardising the process of obtaining data from the original sources.
  - 4. Removing obstacles to decision-making by providing information and creating connections between it.
  - 5. Cutting down on some expenses related to monitoring different management processes.
  - 6. Making use of information technology to promote a positive workplace culture and provide assistance in its growth among all employees.
  - 7. Providing the beneficiaries with the relevant information and facts as soon as possible.
  - 8. Continuing education and the acquisition of new knowledge.
  - 9. Monitoring and managing all available resources, as well as increasing the dependence between top management and employees.
- The benefits and consequences of electronic management

- The use of the concept of "E-management" provides a wide range of advantages and positive effects, which may all be distilled into the following points:

1. The speed at which services are provided to customers without compromising the quality of such services.
2. Improve the effectiveness of the electronic paper transfer procedure.
- 3. Reducing expenses through simplifying procedures, reducing paperwork, and limiting time spent on real work.
- 4. Reduction in the number of employees needed to provide the service, especially when paper transactions are involved.
- 5. The development of an objective, cutting-edge system for detecting irresponsible people and for evaluating the performance of the workforce.
- 6. Using the electronic system, which has a reduced error rate, to ensure there are as few errors as possible.
- 7. A reduction in the number of violations as a consequence of the system's ease of use, convenience, and accuracy.
- 8. The beneficiaries must be able to understand the required papers, which must be clear.
- 9. reducing the amount of money spent on buildings, real estate, and associated investments.
- 10. Reducing the impact that interpersonal interactions have on the accomplishment of company objectives.

- **Dimensions of E- management**

- The following variables, according to Abdullah, F. M., Mohammed, A. A., Maatuk, and Elberkawi (2019), best explain the dimensions of E-management:
- Paperless management uses digital tools including voicemail, e-mail, directories, electronic diaries, and voicemail systems as well as electronic archives, e-mails, and automated follow-up application systems.
- - Remote management, which uses new international phones, electronic communication, mobile phones, and online conferences, among other modern forms of communication.
- An open-time management system allows work to be done whenever it is needed, day or night, without being restricted by conventional shift schedules.
- - Work is conducted via networked and intelligent organisations that are reliant on the information industry, rather than conventional hierarchical hierarchies.
- - Being in charge of carrying out a range of organising, planning, and monitoring tasks.
- - Carrying out administrative chores with a disproportionate dependence on diverse information technology platforms.
- - Providing the E-service in a respectable way by balancing the appropriate amounts of human, informational, technological, and automated resource groupings.
- - Provide customers with the ideas, goods, and services they want, at the degree of excellence they desire.
- - Make an effort to do activities quickly and effectively.

- **Reasons for switching to E- management**

- The shift towards E-management is not a road of luxury but rather an obligation forced by global developments. The time factor is one of the most crucial areas of competition between institutions, and the transition to E-management is a must. The following points may be used as a summary of the reasons for E-transformation

(Kislov, D. E., Bakalin, V. A., Pimenova, E. A., Verkholat, V. P., and Krestov, P. V., 2017:)

1. Complicated procedures and processes and the effect that they have on driving up the cost of doing business.
2. Decisions and suggestions that must be made immediately and have the potential to create an imbalance in the implementation.
3. The need to ensure that data at the company level are standardised.
4. It is challenging to identify the rates of performance measurement.
5. It is essential that the information that has been disseminated to the staff members of the institution be provided.
6. A commitment to the utilisation of technology advancement and a dependence on information in the decision-making process.
7. The growing level of rivalry between institutions, as well as the need of establishing internal mechanisms for excellence at any institution that aspires to be competitive.
8. The unavoidable need of establishing and maintaining open lines of communication amongst workers about the many aspects of their employment.

• **Succeed in the Transition to E- Management**

(Rod, Y. S., Shagieva, R. V., Kryukova, N. I., Kvon, G. M., Vaks, V. B., Masalimova, A. R., & Khudzhatov, M. B., 2017). For the company to successfully make the switch to E-management, the following are some of the most crucial considerations that must be made:

1. Paying close attention to administrative sectors, since the current issue is not only technical but also—and most importantly—administrative in nature, necessitating the use of advanced management techniques and the leadership of knowledgeable administrative officers.
2. Relying on scientific approaches to shift into an e-organization, which demands knowledge and pioneering disciplines, and requiring time to prepare and plan for this transition.
3. Making use of communication and information technologies to open up opportunities for the use of modern management systems built on software that identifies and prevents inconsistencies and satisfies requirements for high-quality and effective performance.
4. Establish procedures for operating the different internal and external components of the e-organization and creating linkages between them.
5. Provides an electronic payment system that may be used to pay for the fees associated with obtaining a range of services. This is a natural result of doing business online.
6. Improving service quality, decreasing resource waste, and successfully tracking and controlling performance. This transformation also involves the use of fewer individuals who are more qualified and have undergone advanced training, as well as the simplification of organisational structures and a decrease in the number of open jobs.
7. Educating customers on everything related to business practises and how to obtain services to ensure that they can interact with the demands of E-management.
8. Create laws and regulations that control how work is done inside the company in order to make them simpler and more in line with the demands of doing business electronically across networks. This need a legal revolution that eliminates all complexities and employs safeguards to prevent fraudulent internet transactions.
9. You must develop a comprehensive strategy at the organisational level in order to achieve this aim.

## Research Methodology

The analytical methodology was used in the current study as a way to employ statistical techniques in the analysis of the data collected via the questionnaire survey in order to achieve the research's objectives.

### Study population and sample

The study's population consists of Al-Kafeel Specialised Hospital personnel. The researchers decided to use the sampling strategy, which included selecting a small random sample of these employees, since it was impractical to conduct an exhaustive inventory of every member of the study population. Working people make up the study's population. The link to the electronic questionnaire form has been posted on social media websites and groups where Al-Kafeel Specialised Hospital employees are present as a consequence of the preventative measures and processes that are currently in place. There are 109 distinct volunteers in all that make up the study sample.

### Data Analysis

The data collected from the questionnaire will be examined using SPSS25 for the objectives of this research utilising statistical techniques such the Pearson relation, Alpha coefficient, frequencies, percentages, mean, and standard deviation.

### Study tool

As a tool for the field study, the research will employ an electronic questionnaire form. The theoretical underpinnings of the inquiry as well as prior studies that are pertinent to the issue of the study will be used by the researchers to produce the questionnaire, its axes, and its phrases. The five-point Likert scale was used for responding to the study instrument's questions.

### The limits of the study

- **Objective limits:** Investigate the current state of e-Management in the healthcare industry.
- Case study on the Al-Kafeel Specialised Hospital
- • Limits on location: the Al-Kafeel Specialised Hospital in Iraq
- • Limits on human resources: personnel working at the Al-Kafeel Specialised Hospital
- • Limits on time: 2023

### Applied framework

#### Validate the study tool

**Table (1)** Correlation between each phrase and axis

Phrases	Correlation coefficient	P-value
electronic recruitment		
Public notices of employment opportunities may be found on the organization's website.	**0.817	0.00
On the website of the Foundation, prospective employees may find both paper and electronic applications for jobs.	**0.589	0.000



Phrases	Correlation coefficient	P-value
A specialised database in the organisation stores the information of people who apply for open jobs so that it may be accessed in the event that it is required.	0.824**	0.00
Email or e-mail is used by the organisation to convey the appointment decision to job applicants who have been successful.	**0.672	0.000
In interviews for open positions in the institution, the interview is carried out via the use of video.	0.589**	0.00
E-recruitment strategies are beneficial to the organisation since they help choose candidates with the most relevant skills to fill open positions.	0.790**	0.000
e-training		
The organization's staff members get training in the use of modern communication tools including computers and the internet. The training is carried out via video clips that are sent to the participants.	0.665**	0.000
Employees have access to the essential training materials through a link on the organization's website, which also functions as an internal network.	0.682**	0.00
Using electronic simulation technologies that accurately reflect the working environment as it exists in the institution, training is provided for staff members.	**0.774	0.000
The staff of the organisation receives training on the software that is particular to each department, division, or division that is located inside the organisation. The training courses are evaluated by the learners, who are also given an electronic survey to complete at the end of each session. This is done in order to keep the questionnaire's credibility intact.	0.759**	0.000
The organization's staff members get training in the use of modern communication tools including computers and the internet. The training is carried out via video clips that are sent to the participants.	0.763**	0.000
Electronic performance appraisal		
The true levels of performance of employees in the company serve as the evaluation criterion for electronic performance assessment systems.	**0.836	0.000
The organisation uses a computerised system to provide feedback to employees on the degree of performance they have attained while working for the organisation.	0.812**	0.000
The use of electronic performance assessment inside the company helps contribute to the creation of training programmes that are intended to bridge performance gaps amongst workers.	**0.903	0.000
The staff members of the organisations are responsible for developing electronic performance assessment models on a regular basis and in a manner that is proportional to the job requirements.	0.875**	0.000
The organisation uses electronic performance assessment, which involves keeping the outcomes of performance reviews in databases that can be accessed on an ongoing basis. This allows for the reviews to be read at any time.	0.928**	0.000

All relation for questionnaire items was statistically significant in 0.01 and the tool has structural validity.



## The stability of the study tool

**Table (2)** Questionnaire stability

axes	Alpha Cornbach	number of elements
Total questionnaire	0.982	16

Because the stability coefficient Alpha for the questionnaire is more than 0.6, it illustrates both the validity and relationship of the statements that comprise the questionnaire axis, as well as the stability of the instrument employed in the study.

## Analysis of the questionnaire

### First: Personal characteristics

**Table (3)** sample according to Personal characteristics

	Categories	N	%
Gender	Male	35	32.1
	female	74	67.9
Age	Less than 30 years	37	33.9
	From 30 to less than 40 years	58	53.2
	From 30 to less than 40 years	9	8.3
	50 years or more	5	4.6
Educational level	High School	4	3.7
	Bachelor	70	64.2
	Master	34	31.2
	PhD	1	0.9
Years of experience	Less than 5 years	51	46.8
	From 5 years to less than 10 years	32	29.4
	From 10 years to less than 15 years	17	15.6
	15 years and over	9	8.3

Second: the dimension of study

**Table (4)** Phrases of the questionnaire

Table 1. Phrases of the questionnaire											
N.	Phrase	Strongly agree %	Agree% Neutral%	Disagree%	Strongly disagree%	Mean	S. D	Relative weight	Degree	Arrangement	
electronic recruitment											
1	Vacancy announcements are published on the company's website	21.1	45.0	24.8	7.3	1.8	3.761	0.932	0.752	High	1
2	Electronic job applications are accessible on the Foundation's website.	17.4	45.0	22.0	11.9	3.7	3.606	1.028	0.721	Medium	3
3	The institution maintains a specific database with the information of candidates for open jobs for future use.	13.8	44.0	22.0	14.7	5.5	3.459	1.076	0.692	Medium	6
4	Through email or email, the organisation notifies people selected for positions of the appointment choice	16.5	41.3	24.8	11.9	5.5	3.514	1.077	0.703	Medium	5

N.	Phrase	Strongly agree %	Agree%	Neutral%	Disagree%	Strongly disagree%	Mean	S. D	Relative weight	Degree	Arrangement
5	In interviews for positions at the institution, the interview is performed through video.	20.2	37.6	24.8	12.8	4.6	3.560	1.092	0.712	Medium	4
6	By choosing the finest skills to fill positions, e-recruitment practises benefit the organisation.	16.5	46.8	22.9	10.1	3.7	3.624	0.998	0.725	Medium	2
e-training											
7	Computers and the Internet are used in the institution's training programmes for its staff members. The trainees are trained through video clips that are sent to them.	18.3	45.0	27.5	8.3	0.9	3.716	0.893	0.743	High	1
8	Through a connection on the company's internal website, workers may access training materials.	11.0	46.8	22.0	13.8	6.4	3.422	1.065	0.684	Medium	5
9	The institution's staff members get training using computer simulation systems that include the actual work environment that occurs there.	18.3	45.0	18.3	12.8	5.5	3.578	1.100	0.716	Medium	3
10	Each department, department, or department within the organisation has its own software that the staff members of the organisation get training on. To confirm the validity of the questionnaire, the trainees assess the training programmes by completing an electronic survey at the conclusion of the course.	13.8	41.3	27.5	10.1	7.3	3.440	1.084	0.688	Medium	4
11	Computers and the Internet are used in the institution's training programmes for its staff members. Training is done by sending video snippets to the participants through email.	22.9	41.3	17.4	11.0	7.3	3.615	1.170	0.723	Medium	2
Electronic performance appraisal											
12	The criteria used in electronic performance assessment models are based on how well workers are really doing for the company.	21.1	41.3	15.6	15.6	6.4	3.550	1.174	0.710	Medium	2
13	The organisation employs an electronic system to provide its personnel feedback on how well they are doing.	15.6	40.4	19.3	14.7	10.1	3.367	1.207	0.673	Medium	3

N.	Phrase	Strongly agree %	Agree %	Neutral %	Disagree %	Strongly disagree %	Mean	S. D	Relative weight	Degree	Arrangement
14	The organisation uses electronic performance assessment to help create training programmes to close performance gaps among its personnel.	22.0	31.2	17.4	16.5	12.8	3.330	1.334	0.666	Medium	5
15	Electronic performance assessment models are regularly and proportionally developed by the institutions' staff.	17.4	37.6	16.5	19.3	9.2	3.349	1.235	0.670	Medium	4
16	The goal of the organization's implemented electronic performance assessment is to save the evaluation's findings in databases that can be continually reviewed.	24.8	37.6	16.5	12.8	8.3	3.578	1.227	0.716	Medium	1

The medium level of electronic recruiting had a mean dimension of 3.587, as shown by the expressions of the dimension, which comprised 1 expression at the high level and 5 expressions at the medium level.

One expression at the high level and four expressions at the medium level were found for the e-training dimension, showing that the medium level of e-training has a mean dimension of 3.554.

The electronic performance assessment dimension has a total of five expressions at the medium level, meaning that this level is comparable to an electronic performance appraisal mean dimension of 3.435.

The e-Management system of Al-Kafeel Specialised Hospital is at the medium level, with a mean dimension of 3.525.

## Conclusion

- ✚ The median dimension of the medium level of electronic recruiting is 3.587. The level of e-training known as the Medium level, with a mean dimension of 3.554. The middle tier of the electronic performance evaluation, with a mean size of 3.43. e-Management at the Medium level at Al-Kafeel Specialised Hospital, where the mean dimension is 3.525.
- ✚ Recommendations Make an effort to improve the capabilities.
- ✚ ties of employees in all departments within the Al-Kafeel Specialized Hospital to use technology in performing the required tasks, by providing appropriate training programs and courses
- ✚ Attention to the implementation of all tasks and functions in all institutions working in the health sector in particular and the rest of the sectors in general through technology to achieve the goals of the Iraqi development plan
- ✚ Increasing the technological and informational capacity of all bodies and institutions working in the health sector in particular and the rest of the sectors in general inside Iraq
- ✚ The method of training on electronic management for employees should be based on

uncomplicated basics and systems, contributing to the ease of relying on them in an applied manner at work and characterized by flexibility and simplicity for everyone to be able to

## References

- Abdullah, F. M., Mohammed, A. A., Maatuk, A. M., & Elberkawi, E. K. (2019). Application of electronic management system in governmental institutions: An empirical study on the Libyan civil registration. In *Proceedings of the Second International Conference on Data Science, E-Learning and Information Systems* (pp. 1-5).
- Abd Alhasan, S. A., Alghazali, T., abed Almoussawi, Z., Abdullah, A. M., Braiber, H. T., & Al-Shafeay, A. H. A. (2023). The Effect Of Transnational Marketing Strategies, Dynamic Capabilities On Perceived Market Performance Of The Manufacturing Industry Of Iraq. *Transnational Marketing Journal*, 11(1), 106-116. <http://transnationalmarket.com/menu-script/index.php/transnational/article/view/283>
- Ahsan, S. S. (2022). Association of IsocitrateDehydrogenase1 Mutation with Various Tumor types in Brain Tumor Patients. *Archives of Clinical Psychiatry*, 49(2), 11-24. <https://archivespsy.com/menu-script/index.php/ACF/article/view/1371>
- Amuna, Y. M. A., Al Shobaki, M. J., Naser, S. S. A., & El Talla, S. A. (2017). The Reality of Electronic Human Resources Management in Palestinian Universities-Gaza Strip. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(3), 37-57.
- Barba-Sanchez, V., Gouveia-Rodrigues, R., & Martinez, A. M. (2022). Information and communication technology (ICT) skills and job satisfaction of primary education teachers in the context of Covid-19. Theoretical model. *Profesional de la información*, 31(6). <https://doi.org/10.3145/epi.2022.nov.17>
- Donyavi, S., Flanagan, R., Assadi-Langroudi, A., & Parisi, L. (2023). Optimising the use of Materials for Construction MSMEs: Building a Comprehensive Framework for Decision-Making and Resource Allocation through an Analytic Hierarchy Process. *INTERNATIONAL JOURNAL OF CONSTRUCTION SUPPLY CHAIN MANAGEMENT*, 13(1), 50-74. <https://ijcscm.com/menu-script/index.php/ijcscm/article/view/194>
- Donyavi, S., Flanagan, R., Assadi-Langroudi, A., & Parisi, L. (2023). Optimising the use of Materials for Construction MSMEs: Building a Comprehensive Framework for Decision-Making and Resource Allocation through an Analytic Hierarchy Process. *INTERNATIONAL JOURNAL OF CONSTRUCTION SUPPLY CHAIN MANAGEMENT*, 13(1), 50-74. <https://ijcscm.com/menu-script/index.php/ijcscm/article/view/194>
- Evi, S., Hasrita, L., Sapta, K., Ikbar, P., & Imamul, K. (2023). Factors Affecting Engineering Institutes Operational Efficiency: Exploring Mediating Role of Digital Technologies Adoption in Teaching/Learning. *Operational Research in Engineering Sciences: Theory and Applications*, 6(1), 252-273. <https://oresta.org/menu-script/index.php/oresta/article/view/533>
- HB Ali, (2023), The role of e-Management in enterprise resource planning case study on Industry Sector in Iraq. *JOURNAL FOR EDUCATORS, TEACHERS AND TRAINERS* 14 (2), 25-35.
- HB Ali, (2023), Adoption of Electronic Management in the Banking Sector a Case Study on Babel Bank in Iraq. *International Journal of Professional Business Review* 8 (4), e01104-e01104.

- HB Ali, (2022), The Impact of E-Management On the Process of Business Processes Reengineering in Iraq. *Journal of Positive School Psychology* 6 (3583-3597).
- Hernández-Ascencio, D., & Angel-Alvarado, R. (2022). Ideología patriarcal en la educación musical: una mirada a las escuelas para hombres. *Revista Electrónica de LEEME*, (50), 01-15. <https://doi.org/10.7203/LEEME.50.21856>
- Hitpass, B., & Astudillo, H. (2019). Industry 4.0 challenges for business process management and electronic-commerce. *Journal of theoretical and applied electronic commerce research*, 14(1), I-III.
- Ismail, H., & Hanafiah, M. M. (2017). Management of end-of-life electrical and electronic products: the challenges and the potential solutions for management enhancement in developing countries context. *Acta Scientifica Malaysia (ASM)*, 1(2), 5-8.
- Jánský, J., & Tomášek, P. (2023). On Complex Trinomial Roots Distribution. *Mathematics for applications*, 12, 49-58. <https://doi.org/10.13164/ma.2023.03>
- Kassab, M. K. I., Abu-Naser, S. S., & Al Shobaki, M. J. (2019). The Role of Policies and Procedures for the Electronic Document Management System in the Success of the Electronic Document Management System in the Palestinian Pension Agency. *International Journal of Academic Multidisciplinary Research (IJAMR)*, 3(1).
- Kassab, M. K. I., Naser, S. S. A., & Al Shobaki, M. J. (2017). An Analytical Study of the Reality of Electronic Documents and Electronic Archiving in the Management of Electronic Documents in the Palestinian Pension Agency (PPA). *European Academic Research*, 4(12).
- Kislov, D. E., Bakalin, V. A., Pimenova, E. A., Verkholat, V. P., & Krestov, P. V. (2017). An electronic management system for a digital herbarium: development and future prospects. *Botanica Pacifica: A Journal of Plant Science and Conservation*, 6(2), 59-68.
- Kvon, G. M., Vaks, V. B., Masalimova, A. R., Kryukova, N. I., Rod, Y. S., Shagieva, R. V., & Khudzhatov, M. B. (2017). Risk in implementing new electronic management systems at universities. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(3), 891-902.
- Loureiro, M. F. (2023). El mundo artístico rendido ante la jota. La jota aragonesa y cosmopolita: de San Petersburgo a Nueva York (Marta Vela, 2022, Ediciones Pregunta). *ARTSEDUCA*, (35), 217-220. <https://artseduca.com/wp-content/uploads/2023/06/7486.pdf>
- Luz, C. F., Vollmer, M., Decruyenaere, J., Nijsten, M. W., Glasner, C., & Sinha, B. (2020). Machine learning in infection management using routine electronic health records: tools, techniques, and reporting of future technologies. *Clinical Microbiology and Infection*, 26(10), 1291-1299.
- Qiu, S. (2022). Minority Writing across Cultures: From 彝 (Yi) Literature to World Literature (s). *Cultura International Journal of Philosophy of Culture and Axiology*, 19(2), 87-103. <https://culturajournal.com/article-detail/?id=173>
- Rosa, A. T. R., Pustokhina, I. V., Lydia, E. L., Shankar, K., & Huda, M. (2019). Concept of electronic document management system (EDMS) as an efficient tool for storing document. *Journal of Critical Reviews*, 6(5), 85-90.
- Shen, Z., Liu, Z., & Tang, J. (2023). An Improved Mask-Guided Glaucoma Screening Method Based on Convolution Neural Network. *Archives of Clinical Psychiatry*, 50(6), 38-50. <https://archivespsy.com/menu-script/index.php/ACF/article/view/1338/1855>