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Electronic management and its impact on enhancing human resources governance: An experimental study of the opinions of a sample of workers at Tikrit University

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Abstract
This study seeks to illustrate the significance of electronic management and highlight its mechanisms for transitioning from paper-based processes to electronic processes that fully rely on information technology. It also examines the implications of this transition on human resources governance at Tikrit University. The investigation was restricted to a sample size of 150 academic and administration personnel. In order to achieve the intended objectives, a statistical analysis was conducted using the software program SPSS.V20. This analysis involved examining descriptive statistics for the variables in the research model, as well as conducting a series of tests to assess the robustness and reliability of the study model. To assess the effectiveness of electronic management in improving human resources governance at Tikrit University, a comprehensive analysis was conducted. This analysis included evaluating the validity and reliability of the data using Cronbach's alpha, as well as employing a simple linear regression model to evaluate the impact. The study determined that electronic management is a novel form of contemporary management that has the potential to bring about significant transformations in the university management landscape. Its impacts include streamlining services, optimizing employee performance, saving time, reducing expenses, and enhancing the university's operational efficiency and effectiveness. And all administrative functions contained inside. The suggested guidelines are crucial. Establishing network connections to facilitate the implementation of electronic management and enhance human resources governance in both universities. Additionally, providing state-of-the-art devices and equipment to ensure optimal implementation of electronic management. Furthermore, supplying devices and programs that are tailored to meet the specific needs of employees and configuring them accordingly.

Keywords: Electronic management, human resources governance

Introduction
At the beginning of the current century, human resources management played a driving and effective role in developing institutions of all types, through its endeavor to bring in the human element and employ it, which made the technological factor a major role in developing the state’s function and searching for issues that improve services in speed, vitality and transparency, as Most governments were quick to use modern technological means with the aim of bringing the administration closer to the citizen. One of these sectors is the national education sector, which provides education services through the use of the Internet in education and increasing the number of learners. This issue requires improving public service through electronic administration, which in turn requires specialized material and human means, in order to transform ordinary administrative work from manual administration to electronic administration, It uses computers and relies on an information system, which helps to sustain the provision of services with flexibility and adaptation that is consistent with the development of public service methods through the use of electronic management that will help and contribute to the quality and speed of service, as well as speed in decision-making at the lowest costs. This is represented by the development of management. General, reducing paperwork, improving services, reducing mobility, easy access to information, and getting closer to employees and beneficiaries. This requires a strong information structure and a human cadre that improves the use of modern

technologies and raises the level of performance, which leads to developing the work mechanism and raising the efficiency of employees in the administration.

The first section: research methodology

First: The problem of the study

Electronic administration, as one of the most modern schools of administration, has become an inevitable necessity that most universities seek to apply to keep pace with scientific and informational developments in educational, teaching and administrative systems and work, to create a pattern based on the technological dimension. It has had many impacts on traditional administration and its function in providing public services. Which has moved from its traditional paper form to the electronic service model. The results of its applications were to reduce distances, reduce time, and develop the type and level of public services through what modern devices provide. Based on the above, and in light of the applications of electronic management witnessed by universities in Iraq, the problem in this study is directed towards answering the central question:

To what extent does electronic management contribute to enhancing human resources governance at Tikrit University?

Second: The importance of the study

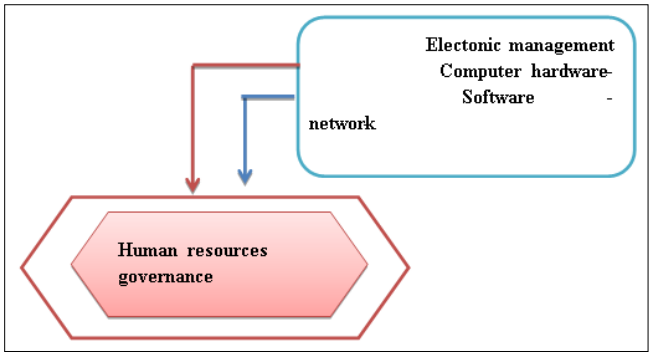
The importance of scientific research lies in identifying the basics of electronic management, from the concept, importance, characteristics, applications, etc., on the one hand, and the quality of service, its dimensions and elements. In addition to knowing the role of electronic management in human resources governance in universities. The importance also lies in the intellectual enrichment of previous studies that this research may contribute by tracing the theoretical literature related to the basic variables or trying to provide an integrated intellectual and conceptual framework for them, so that it contributes to enriching the thought of electronic administrations in general, and improving the chances of this framework in touching upon their practices in universities.

Third: Objectives of the study

This study seeks to illustrate the significance of electronic management and highlight its mechanisms for transitioning from paper-based processes to fully digital operations. The objective is to eliminate the use of physical documents and instead rely solely on information technology. This shift from traditional management methods to electronic management has become imperative. Contemporary. Which works to strengthen the governance of human resources by improving the service and its quality, especially educational services in universities, through connection to Internet networks, which has positive repercussions on the quality of education, as it brings about radical changes in the concept of administrative work and the shift to change management, especially on the work of the teaching and administrative staff. At Tikrit University.

Fourth: Research plan or model

The research adopts a hypothetical plan in light of the contents indicated in the current research problem and the directions of its objectives and as part of its attempt to translate the research problem into procedural variables. It adopted a plan that links the independent variable (electronic management) with its dimensions that were identified based on the opinions and proposals of the researchers, and the dependent variable resource governance was adopted. Humanity. Figure (1) Hypothetical diagram of the study.



Source: Prepared by the researcher.

Fig 1: Hypothetical diagram of the study.

Fifth: Study hypotheses.

The main hypothesis: There is a significant effect of electronic management on human resources governance.

The following hypotheses stem from it.

The first hypothesis: There is a significant effect of computer hardware on human resources governance.

The second hypothesis: There is a significant impact of software on human resources governance.

The third hypothesis: There is a significant effect of the communications network on human resources governance.

Sixth: Limitations of the study

1. Spatial boundaries: Tikrit University in Saladin Governorate, Iraq.
2. Human limits: represented by a poll of the opinions of the teaching and administrative bodies at the university. Time limits: The study was implemented during the year 2023.

The second section: The theoretical framework of the study.

First: The concept of electronic management

The concept of management includes many differences from electronic systems and is a broad concept. Therefore, the transition to electronic management requires wide-ranging changes from the organizational structure to business processes. Computerized information systems are sufficient to begin the transition to electronic management. Electronic management is known according to French definitions: "It uses technology." Information and communications, especially the Internet, with the aim of improving the management of public affairs." (Centre de documentation, 2015) It is also known as: "It is an integrated electronic system that aims to transform ordinary administrative work from manual management to management using computers and various modern technological means, relying on an information system." Strong." (Hamza, and Rabeh, 2019) [6].

Second: The importance of electronic management.

The importance of electronic administration lies in its

strategy, which is used by many governments in order to improve the services provided to citizens and business organizations by eliminating delays in completing transactions, paying obligations, reducing performance costs, as well as achieving and maintaining the satisfaction of individuals working in government organizations. (Al-Bayati, 2016) [14] Its importance is also increasing in its ability to facilitate the process of finding new markets, working to break into these markets, and increasing the capabilities of organizations to access these markets, as deals, Business and market information become available to those in charge of managing organizations. Electronic management also affects, to varying degrees, the performance of organizations, such as functions, product development activities, maintenance services, etc. (Al-Taleb and Al-Zaarir, 2019) [7] Through the above, the importance of electronic management is determined as follows:

1. Assist in decision making and provide information continuously and quickly to decision makers.
2. Electronic management reduces the costs of services and increases their quality.
3. Developing the skills of working individuals and increasing their efficiency using training programs based on information and communications technology.
4. Constant presence in the market and knowledge of developments and changes in the market, competitors, and the needs and desires of consumers.
5. Quick access to documents and information through the presence of an integrated electronic system at any time and any place. (Richard, 2003).

Third: Reasons for switching to an electronic management system.

1. There are a number of pressures faced by administrative agencies that use a paperbased work system to convert their work systems from the traditional system to an electronic work system. These are the most important of them. External pressures: They can be determined as follows.

- Political pressures: such as the increase in the trend towards democracy, which led to an increase in citizens' demands to improve the level of government service performance.
- Social pressures: Society began to operate twenty-four hours a day, and this required that service be available throughout the day.
- Economic pressures: working to save government expenses and change work patterns.
- Technological pressures: such as increasing the rate of Internet use among citizens and their demands to provide electronic government services.

2. Internal pressures: They can be determined as follows

- Scattering, abundance of information and its dispersion among government agencies.
- Too much routine, and the isolation of departments from each other. -
- The labor system does not encourage citizens to express their opinions in government service. (Al-Wafi and Stripe, 2017) [8].

Fourth: Obstacles to implementing electronic management

1. The application of electronic management has administrative obstacles, human obstacles, technical and technical obstacles, and material obstacles, the most important of which are the following: (Khalil, 2014) [1].
2. Financial obstacles: A huge project such as the project of implementing electronic management in public administrations requires allocating huge financial resources to achieve its desired goals. However, Arab countries also suffer from several difficulties regarding the financial component. (Bin Bakhita, 2016) [13] Among these obstacles are: With regard to financial obstacles, financial resources are very few, and are not sufficient to establish networks and establish the infrastructure needed for the process of implementing electronic management in terms of advanced hardware and software. (Ben Marouzq *et al*., 2018) [9].
3. Human obstacles: There are also several obstacles and negative human influences that lead to limiting the application of electronic management, and the most important of these obstacles are the following.

- Insufficient training for workers on electronic devices, as their training is limited to theoretical explanation without being linked to their actual implementation.
- Weak process of attracting and selecting those capable of dealing with computer technology and electronic transactions.
- Lack of training for workers in the computer field, commensurate with the needs and field of work.
- Huge resistance to change by government employees who fear for their future work after simplifying procedures and organizing government operations. (Mahmoud, 2011) [16].

4. Administrative obstacles: As for administrative obstacles, they can be represented as follows:

- Weak interest of senior management in following up on the application of electronic management.
- Among the obstacles that hinder the process of implementing electronic management are the lack of planning and the lack of coordination between the departments that supervise the process of electronic programs, due to their lack of some legislation and other regulations for electronic management programs, which need to be changed related to the process of merging some departments, which requires Distributing responsibilities and defining tasks, powers, authorities and relationships.
- Weak political support from senior political leaders for the electronic administration project.
- Different management systems and methods, even within one organization. (Omran, and Al-Houni, 2018) [15].

The third topic: Human resources governance in light of electronic management.

First: The concept of human resources governance.

Human resources, in addition to material capital, are among the most important wealth of people. Despite this importance, they are in dire need of competent and trained human resources who have been trained and well-prepared. The human resource, with its ability to invent, innovate, and develop, can overcome the scarcity of natural resources and expand society's productive capabilities. Likewise, the human being is the essence of human resource management. The human resource can achieve wealth and revenues through the use of his skill and knowledge, and not through

the conversion process that occurs. Material resources to achieve wealth. (Al-Aqraa, 2017) [5] Human resources management is the governance of employees in an organization. (Rouse, 2014) [19] It is defined as: "It is an administrative function concerned with all policies and applications of human elements within, The organization, which aims to achieve the goals of the organization, its individuals, and society, and this is done through a set of activities and programs for analyzing the organization's functions and then planning, attracting, selecting, training, evaluating, motivating, and developing human resources effectively."(Al-Qahtani. 2015) [2].

Second: The importance of human resources governance.

The importance of human resources governance is extremely important, like the other most important departments in the organization, which affect its financial profitability and economic standing. Its importance is demonstrated through the following elements: (Al-Mubaideen and Al-Aklabi, 2013) [3].

1. The human element is the primary driver of economic activity. It is responsible for the level of performance as it is the engine and common factor in mobilizing the material capabilities and capabilities of society. .
2. Human resources are one of the most important key elements in production, as the wealth of any country stems from its ability to develop its human resources.
3. The organization's competitiveness stems more from the efficiency and effectiveness of its human resources than the value of its equipment.
4. Considering it an important function of the organization.

Third: Objectives of human resources governance.

The objectives of human resources governance can be summarized as follows: (Al-Saadi, 2016) [17].

1. Controlling risks: This has multiple dimensions, the most important of which are responsiveness and harmony with external goals, protecting the reputation of organizations, reducing the exposure of the organizations' making process, limiting the exposure of the decision-making process to setbacks, and testing the extent of endurance.
2. Promoting values: This is a positive thing that leads organizations to special dimensions.
3. Ensuring consistency: achieving internal equality in dealing with individuals working in the organization and eliminating unfair discrimination among them.
4. Internal union of the organization: Especially with the presence of many trends, governance may be important to integrate the organization's activities and eliminate the influence of decentralized authority.
5. Compatibility and harmony: Especially following mergers and acquisitions, organizations want to participate and HR methods and arrangements are common. (Mohamed, 2016) [4, 10].

Fourth: Principles of human resources governance

The principles of human resources governance can be summarized in eight, which include: (Kaplan, and others, 2013) [18].

1. **Strategic vision and direction:** It helps determine the priorities and roles expected of the organization's actors, and sets standards for measuring performance over the short term.
2. **Accountability:** It is the recognition and assumption of responsibility for actions, production, decisions, and policies.
3. **Transparency:** refers to openness and clarity in the decision-making and resource allocation process.
4. **Generation of information:** Timely, accurate information enables stakeholders to make policies highly evident and take action when objectives and standards.
5. **Efficiency:** refers to the extent to which human resources policies are implemented.

The fourth section: applied field study

After this presentation of the theoretical aspect of applying electronic management, it is necessary to present the field study in a chapter that was divided into three sections. In the first section, the statistical tools that were used were studied, and in the second section, the statistics of the study and its results were talked about. The third section was devoted to analyzing The study hypotheses and their testing. Finally, the conclusion that talked about the most important conclusions, recommendations, and suggestions that could be reached, and in a general conclusion, it dealt with the entirety of what was talked about theoretically and practically.

1:- Study population and sample

The study population represents the teaching and administrative staff at Tikrit University in Salah Governorate. As for the study sample, an appropriate sample was chosen from them in a deliberate manner that serves the objectives of the research. A sample of 150 members of the teaching and administrative staff was chosen, in order to express their opinions about the impact of Electronic management in enhancing human resources governance at Tikrit University.

First: the study tool

In the field aspect of this study, it is necessary to rely on the questionnaire to identify the nature of the information and data to collect and analyze it, as the questionnaire is one of the important tools through which data and information are obtained, so 150 questionnaires were distributed to the previously mentioned sample. As a result, there were 104 questionnaires suitable for study and analysis. To complete the benefit and reach objective scientific research, the questionnaire was keen to clarify its scientific objective, and therefore it was very brief and limited to demographic data, and then moving on to the basic topics.

Second: The statistical tools used

In order for this study to achieve its objectives, the hypotheses were tested using SPSS, which is a program in the social sciences used to analyze the data collected in the field study of the sample previously mentioned, Such programs are used in many tests because they include several programs through which the analysis of most scientific research of various types can be achieved. After this process of analysis, the researcher used several statistical tools:

1. **Arithmetic mean:** It is the sum of values divided by their number.

2. **Standard deviation:** It is the square root of the squares of the deviations of values from their arithmetic mean.
3. **One-sample test:** A test that reveals the significance of statistical differences between the means of two samples.
4. **Linear regression:** It aims to predict the value of variable Y by knowing variable X and to study and analyze the effect of a quantitative variable on another quantitative variable.

Third: Presentation of statistics and results of the study.
After collecting the questionnaires and counting the answers using the aforementioned (SPSS) program, the data and tables are analyzed to identify the results related to the subject of the study, which is "Electronic management and its impact on enhancing human resources governance at Tikrit University." The five-point Likert criterion was used and the Accordingly, the answers will be limited to the following according to the following numbers: Number (1) strongly disagree, Number (2): Disagree, Number (3) Neutral, Number (4) Agree, and Number (5) Strongly agree. Accordingly, using a five-point Likert scale. Table 2. Shows the weighted average and its level.

Table 1: The weighted average and its level

The Level	Weighted Average
Strongly disagree	1.79 from 1 to
Not agree	259 from 1.80 to
Natural	3.39 from 2.6 to
Ok	4.19 from 3.4 to
Strongly agree	5 from 4.20 to

Fourth: Demographic data
Demographic data included gender, academic qualifications, job categories, and years of experience in the research sample:

Table 2: Descriptive statistics for demographic variables

Ratio %	Number Frequency	The Gender
76.9	80	Male
23.1	24	Feminine
100.0	104	Total
Ratio %	Number Frequency	Degree
24	25	Bachelor's
55.8	58	Master's
20.2	21	Ph.D
0	0	Diploma
0	0	Other than that
100	104	Total
Ratio %	Number Frequency	Functional
8.7	9	Head of the Department
21.2	22	Division official
18.3	19	Employee
51.9	54	Teaching
100	104	Total
Ratio %	Number Frequency	Years of Experience
10.6	11	From 1 year to less than 4 years
21.2	22	From 4 years to less than 10 years
68.3	71	10 years and more
100	104	Total

Source: Prepared by the researcher: based on SPSS.

It is clear from the above that the majority of the study sample members are males (76.9%), while (23.1%) are females. It is clear from the above that the majority of the study sample members hold a master's degree (55.8%), while 24% hold a bachelor's degree, and 20.2% hold a doctorate. It is clear from the above that the majority of the study sample members are at the teaching job level (51.9%), and that 21.2% are divisional officials, 18.3% are employees, and 8.7% are department heads. It is clear from the above that the majority of the study sample members have more than 10 years of experience (68.3%), while 21.2% have experience from 4 to 10 years, and the remaining 10.6% have less than 4 years of experience.

Second: The study focuses on electronic management and human resources governance
The first axis: The independent variable (electronic management) / the first dimension: computers.
The university provides computers with appropriate specifications that enable employees to access electronic management systems. Table No. (3)

Table 3: That enable employees to access electronic management systems

Standard Deviation	Arithmetic Mean	Ratio%	Number	Options
1.149	3.69	24	25	Strongly Agree
		45.2	11	Agree
		13.5	14	Neutral
		10.6	47	Not Agree
		6.7	7	Strongly Disagree
		100	104	The Total

The previous data show that the majority of the respondents agreed to a moderate degree that the university provides computers with appropriate specifications that enable employees to access electronic management systems, and their percentage reached 45.2%, 24% strongly agreed with that, 13.5% remained neutral in the answer, and 10.6% did not agree with that. However, 6.7% strongly disagreed. The average of the answers was 3.69 (following the agree level), with a standard deviation of 1.149. The results of the statistics of the first dimension of the first axis can be summarized as follows: The results of the statistics of the first dimension of the first axis can be summarized as follows:

Table 4: One-Sample Test for the first dimension of the first axis

One-Sample Test						
Test Value = 3						
95% Confidence Interval of the Difference		Mean Difference	Sig. (2-tailed)	Df	T	
Upper	Lower					
.92	.47	.692	.000	103	6.141	The university provides computers with appropriate specifications that enable employees to access electronic management systems
1.24	.82	1.029	.000	103	9.848	The university provides all computer accessories (printer, storage units, etc.) that an employee needs in his field of work
1.32	.98	1.154	.000	103	13.390	The computer helps transfer and exchange information inside and outside the university
1.41	1.07	1.240	.000	103	14.445	The computer facilitates the communication process between different departments
1.27	.98	1.125	.000	103	15.647	The computer provides the information necessary to make decisions in a timely manner and with the required accuracy
.95	.50	.721	.000	103	6.379	The computer reduces the phenomenon of administrative corruption
1.42	1.01	1.212	.000	103	11.675	Computer use reduces paperwork
1.1422	.9072	1.02473	.000	103	17.294	Computer hardware

Table No. (4) shows that all the moral significances of the items are smaller than the statistical significance of 0.05, and this means that the two universities use computers in their administration through the fact that the two universities provide computers as a contribution to enabling employees to access electronic management systems due to the importance of computers. In performing tasks and mastering work quickly, easily and flexibly, these devices are considered one of the most important educational tools as well, Its role in granting certificates via the Internet, which facilitates the performance of employees in accessing electronic management systems and transferring and exchanging information inside and outside the university, as well as storing it, which facilitates the process of finding it very quickly.

The second dimension: networks

The university provides fast and secure communication networks

Table 5: The university provides fast and secure communication networks.

Standard deviation	Arithmetic mean	Ratio%	Number	Options
1.23	3.10	11.5	12	Strongly Agree
		34.6	36	Agree
		19.2	20	neutral
		22.1	23	not agree
		12.5	13	Strongly Disagree
		100	104	the total

The previous data show that the majority of the respondents agreed to a moderate degree that the university provides fast and secure communication networks, and their percentage reached 34.6%, and 22.1% did not agree with that, and 19.2% remained neutral in the answer and 12.5% strongly disagreed with that. And 11.5% strongly agree with this. The average of the answers was 3.10 (following the neutral level) with a standard deviation of 1.23.

Table No. (6) shows that most of the moral significances of the items are smaller than the statistical significance of 0.05. This means that the two universities provide a fast and secure communication network that allows individuals to share information and participate in programs. This contributes to improving the governance of human resources at the university through Reducing the cost of resources, increasing storage space, and providing flexibility and ease of access to data, which contributes to simplifying the communications process, both in terms of sending and receiving messages, and accessing files easily through the use of e-mail, which is one of the most important modern developments, a wonderful technology, one of the most important technologies. To implement electronic management.

Table 6: One-Sample Test for the second dimension of the first axis

One-Sample Test						
Test Value = 3						
95% Confidence Interval of the Difference		Mean Difference	Sig. (2-tailed)	Df	T	
Upper	Lower					
.35	-.13	.106	.386	103	.871	The university provides fast and secure communication networks
.56	.09	.327	.007	103	2.737	Email is used for work and administrative communication
.38	-.07	.154	.174	103	1.368	The currently available network connectivity is practically sufficient to implement electronic management
-.01	-.53	-.269	.039	103	-2.086	The university has an internal network that connects all its departments and organizational levels
.62	.13	.375	.003	103	2.991	The university is connected to its external and internal surroundings through Internet networks that allow it to exchange information
1.43	1.03	1.231	.000	103	12.120	The university provides a website that shows its most important news
1.10	.69	.894	.000	103	8.599	The university aspires to intensify its sites on social networking sites to facilitate work
.5868	.2181	.40247	.000	103	4.330	Networks

The third dimension: software and databases.

The university provides software that covers all the university's work and activities.

Table 7: The university provides software that covers all the university's work. and activities.

Standard Deviation	Arithmetic Mean	Ratio%	Number	Options
1.146	3.42	18.3	19	Strongly Agree
		34.6	36	Agree
		24	25	neutral
		17.3	18	not agree
		5.8	6	Strongly Disagree
		100	104	the total

The previous data show that the majority of the respondents agreed to a moderate degree that the university provides software that covers all the university's work and activities, and their percentage reached 34.6%, and 24% remained neutral in the answer, 18.3% strongly agreed with that, and 17.3% did not agree with that. And 5.8% strongly disagree with this. The average of the answers was 3.42 (following the agree level) with a standard deviation of 1.146. The results of the third dimension statistics from the first axis can be summarized as follows.

Table 8: One-Sample Test for the third dimension of the first axis

One-Sample Test						
Test Value = 3						
95% Confidence Interval of the Difference		Mean Difference	Sig. (2-tailed)	df	T	
Upper	Lower					
.65	.20	.423	.000	103	3.763	The university provides software that covers all the university's work and activities
.70	.30	.500	.000	103	5.074	The university has the necessary computer programs for administrative business applications
.43	.01	.221	.036	103	2.126	The university provides software systems for electronic administrative communications
.65	.20	.423	.000	103	3.736	The university is keen to provide network security for the purpose of protecting information and data and maintaining its confidentiality
.69	.29	.490	.000	103	4.930	The programs at the university are easy to navigate and use
.67	.25	.462	.000	103	4.363	Any information can be accessed and retrieved easily
.86	.45	.654	.000	103	6.408	The university plans to generalize the use of electronic administration across all its departments
.6269	.2797	.45330	.000	103	5.178	Software and databases

Table No. (8) shows that all the moral significances of the items are smaller than the statistical significance of 0.05. This means that the two universities provide software that covers all work and activities, and this is what the majority of respondents showed, which helps employees carry out their tasks to the fullest extent because this software is concerned with updating the programs that High quality and efficiency would be able to meet all the requirements of employees' needs and help management to perform effectively in various departments. Also, according to most of the respondents, the university has computer programs and everything necessary for administrative work applications. In addition to providing software systems for administrative communications, which a high percentage of respondents reported.

The second axis: (dependent variable) human resources governance

1. Employees have the ability to invent new methods that lead to simplifying work procedures and speeding up their completion.

Table 9: Employees have the ability to invent new methods that lead to simplifying work procedures and speeding up their completion.

Standard Deviation	Arithmetic Mean	Ratio%	Number	Options
1.052	3.49	15.4	16	Strongly Agree
		42.3	44	Agree
		21.2	22	neutral
		18.3	19	not agree
		2.9	3	Strongly Disagree
		100	104	the total

The previous data show that the majority of the individuals interviewed agreed to a moderate degree that employees have the ability to invent new methods that lead to simplifying work procedures and speeding up their completion. Their percentage reached 42.3%, and 21.2% remained neutral in the answer, and 18.3% did not agree with that. 15.4% strongly agree with this, and 2.9% strongly disagree with this. The average of the answers was 3.49 (following the agree level), with a standard deviation of 1.052. The results of the second axis statistics can be summarized as follows:

Table 10: One-Sample Test for the second axis

One-Sample Test						
Test Value = 3						
95% Confidence Interval of the Difference		Mean Difference	Sig. (2-tailed)	Df	T	
Upper	Lower					
.39	-.04	.173	.118	103	1.578	The university has policies for recruitment, selection and appointment according to the required qualifications and skills
1.02	.69	.856	.000	103	10.378	There is a clear organizational structure at the university that includes all functional centers
.70	.34	.519	.000	103	5.604	The university has transparency and integrity related to all its work
.92	.60	.760	.000	103	9.606	Employee performance evaluation reports are subject to review by more than one party at the university to ensure objectivity, accuracy, and comprehensiveness
.52	.13	.327	.001	103	3.369	There is a principle of equal opportunities at the university and there is a commitment from senior management to it
.51	.11	.308	.003	103	3.034	There is a tightly prepared annual financial plan that addresses all issues at the level of human resources and services
.45	.07	.260	.008	103	2.714	The university responds to the employee's material and moral needs to stimulate development
.5970	.3179	.45742	.000	103	6.501	Human resources governance

Table No. (10) shows that most of the moral significances of the items are smaller than the statistical significance of 0.05. The field study showed that most of the respondents confirmed the availability of employees who have the ability to innovate new methods that lead to simplifying work procedures and speeding up their completion through training courses, and their knowledge of all New, to be able to use modern technologies hat deal with the human cadre of employees and exploit the capabilities and capabilities for the benefit of the university and the work environment, and motivate them to innovate and initiate new innovations through what is available.

Second: Analyzing and testing the study hypotheses

This section was devoted to demonstrating the stability of the questionnaire and the methods used in the research in order to demonstrate the reliability it enjoys and thus the results extracted from it and to prove the hypotheses that can be built upon seriously in addressing the topic of our research.

First: the stability of the questionnaire

In order to assess the reliability of the questionnaire, the "Cronbach's Alpha" coefficient was calculated using the SPSS statistical program.

This number helps estimate the correctness of the responses provided by the participants in the research sample. A Cronbach's alpha coefficient is considered statistically acceptable if it is equal to or greater than 0.66 (66%). This coefficient is contingent upon internal consistency and provides a lucid understanding of the coherence between the questions themselves and with all questions collectively.

The following table shows the value of Cronbach's alpha coefficient at the total level of variables:

Table 11: Stability of the overall level of variables

Reliability Statistics	
Number of items (Variables)	Reliability coefficient "Cronbach's alpha
35	0.961

The previous data show that the value of Cronbach's alpha coefficient is 0.961 (i.e. 96.1%) at the overall level of questionnaire questions, and thus gives a strong positive indication of reliability.

As for the total level of specific questions in each axis and dimension, they can be presented in the following tables.

Table 12: Stability of the variables of the first axis

Reliability Statistics	
Number of items (Variables)	Reliability coefficient "Cronbach's alpha
28	0.958

Table 13: Reliability of the variables of the first dimension

Reliability Statistics	
Number of items (Variables)	**Cronbach's alpha**
7	0.711

Table 14: Stability of the variables of the second dimension

Reliability Statistics	
Number of items (Variables)	**Cronbach's alpha**
7	0.904

Table 15: Stability of the third dimension variable

Reliability Statistics	
Number of items (Variables)	**Cronbach's alpha**
7	0.926

Table 16: Stability of the variables of the second axis

Reliability Statistics	
Number of items (Variables)	**Cronbach's alpha**
7	0.866

The results of the previous data show that the value of Cronbach's alpha coefficient at the level of all axes is good, and thus gives a strong positive significance as it is greater than 60.6 and confirms the stability and validity of the variables (questions), whether between the questions of each axis or between all axes.

Second: Analysis of correlation coefficients between the study variables

The researcher will present and assess the Pearson Correlation coefficient, a statistical tool used to quantify the strength and direction of the association between two quantitative variables in the researched sample. The table below displays the many forms of correlation and the corresponding direction of the relationship:

Table 17: Types of correlation and direction of the relationship

The meaning	Correlation coefficient value
Perfect direct correlation	1+
Strong direct correlation	From 0.70 to 0.99
Moderate direct correlation	From 0.50 to 0.69
Weak direct correlation	From 0.01 to 0.49
There is no connection	0

Table 18: Correlation coefficients between the study's axes.

Correlations		
Human resources governance		
.649**	Pearson Correlation	Human resources governance
.000	Sig. (2-tailed)	
104	N	
.742**	Pearson Correlation	Computer hardware
.000	Sig. (2-tailed)	
104	N	
.946**	Pearson Correlation	Networks Human resources governance
.000	Sig. (2-tailed)	
104	N	
.931**	Pearson Correlation	
.000	Sig. (2-tailed)	
104	N	
**. Correlation is significant at the 0.01 level (2-tailed).		

Table No. (18) shows the correlation coefficients between the study's axes, and the following was shown:

1. There is an average direct correlation of 64.9%, statistically significant (with a significant value of $0.000 < 0.05\alpha$) between human resources governance and electronic management.
2. There is a strong direct correlation of 74.2%, statistically significant (with a significant value of $0.000<0.05\alpha$) between computer hardware and electronic management.
3. There is a strong direct corr elation of 94.6%, statistically significant (with a significant value of $0.000<0.05\alpha$) between networks and electronic management.
4. There is a strong direct correlation of 93.1%, statistically significant (with a significant value of $0.000 < 0.05\ \alpha$) between software, databases, and electronic management.

Third: Testing the study hypotheses

The first hypothesis: There is a significant effect of computer hardware on human resources governance.

H01: There is no significant effect of computer hardware on human resources governance.

H1: There is a significant effect of computer hardware on human resources governance.

Table 19: Testing the first hypothesis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.424[a]	.180	.172	.65298
a. Predictors: (Constant), Computer hardware				

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.544	1	9.544	22.384	.000[b]
	Residual	43.492	102	.426		
	Total	53.036	103			
a. Dependent Variable: Human resources governance						
b. Predictors: (Constant), Computer hardware						

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	1.430	.433		3.300	.001
	Computer hardware	.504	.106	.424	4.731	.000
a. Dependent Variable: Human resources governance						

The results of the basic linear regression test indicate that the p-value is 0.000, which is less than the significance level of 0.05 (α), with a degree of freedom of 103. This finding indicates that there is a statistically significant impact of the independent variable (computer hardware) on the dependent variable (human resources governance) within the research sample. The coefficient of determination (R2) has a value of 0.180. This suggests that computer hardware explains 18% of the variation in human resources governance, while the remaining 82% is explained by factors other than the intervention regression model. Thus, these findings offer ample evidence to reject the null hypothesis and embrace the alternative hypothesis, which asserts a substantial impact of computer hardware. The fixed term value (= 1.430a) is statistically significant with a significant value of 0.000 < 0.05 α at a degree of freedom of 103. Similarly, the marginal slope value (b = 0.504) is statistically significant with a significant value of 0.001 < 0.05 α at a degree of freedom of 103. These results confirm the positive impact of computer hardware on human resources governance at Tikrit University.

The second hypothesis: There is no significant effect of the communications network on human resources governance.

H01: There is no significant effect of the communication network on human resources governance.

H1: There is a significant effect of the communications network on human resources governance.

Table 20: Testing the second hypothesis

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.529[a]	.279	.272	.61210
a. Predictors: (Constant), networks				

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	14.820	1	14.820	39.556	.000[b]
	Residual	38.216	102	.375		
	Total	53.036	103			
a. Dependent Variable: Human resources governance						
b. Predictors: (Constant), networks						

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	T	Sig.
		B	**Std. Error**	**Beta**		
1	(Constant)	2.096	.225		9.330	.000
	networks	.400	.064	.529	6.289	.000
a. Dependent Variable: Human resources governance						

The results of the basic linear regression test indicate that the p-value is 0.000, which is less than the significance level of 0.05 (α), at a degree of freedom of 103. This outcome indicates that there is a statistically significant impact of the independent variable (communications network) on the dependent variable (human resources governance) within the research sample. The coefficient of determination (R2) has a value of 0.371. This indicates that the communications network explains 37.1% of the variation in human resources governance, while the remaining 62.9% is attributed to factors not included in the intervention regression model. Thus, these findings offer ample evidence to reject the null hypothesis and embrace the alternative hypothesis, which posits a substantial impact of the communications network on human resources governance. The constant limit value (= 1.768a) is statistically significant with a p-value of 0.000, which is less than the significance level of 0.05, at a degree of freedom of 103. Similarly, the marginal slope value (b = 0.489) is statistically significant with a p-value of 0.000, which is less than the significance level of 0.05 α, at a degree of freedom of 103. The findings validate the existence of a beneficial influence of the communication network on the management of human resources at Tikrit University.

The third hypothesis: There is no significant impact of software on human resources governance.

H02: There is no significant effect of software on human resources governance.

H1: There is a significant impact of software on human resources governance.

Table 21: Testing the third hypothesis

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.609[a]	.371	.364	.57207
a. Predictors: (Constant), Software and databases				

ANOVA[a]						
Model		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	19.655	1	19.655	60.060	.000[b]
	Residual	33.381	102	.327		
	Total	53.036	103			
a. Dependent Variable: Human resources governance						
b. Predictors: (Constant), Software and databases						

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	1.768	.225		7.852	.000
	Software and databases	.489	.063	.609	7.750	.000
a. Dependent Variable: Human resources governance						

The results of the basic linear regression test indicate that the p-value is 0.000, which is less than the significance level of 0.05 (α), at a degree of freedom of 103. This outcome indicates that there is a statistically significant impact of the independent variable (software) on the dependent variable (human resources governance) within the research sample. The coefficient of determination (R2) has a value of 0.279. This implies that the software explains 27.9% of the variation in human resources governance, while the remaining 72.1% of the variance is explained by factors that were not included in the regression model. Thus, these findings offer ample evidence to reject the null hypothesis and embrace the alternative hypothesis, which asserts that there is a substantial impact of software on resource governance in humanity. The constant limit value (= 2.096a) is statistically significant with a significant value of 0.000 < 0.05 α at a degree of freedom of 103. Similarly, the marginal slope value (b = 0.400) is statistically significant with a significant value of 0.000 < 0.05 α at a degree of freedom of 103. The findings validate the existence of a favorable influence of software on the management of human resources at Tikrit University.

Main hypothesis: There is no significant effect of electronic management on human resources governance.

H0: There is no significant effect of electronic management on human resources governance.

H1: There is a significant effect of electronic management on human resources governance.

Table 22: Testing the main hypothesis

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.728	.529	.510	.50210
a. Predictors: (Constant), Computer hardware, software, databases, networks				

ANOVA[a]						
Model		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	28.078	4	7.019	27.843	.000[b]
	Residual	24.958	99	.252		
	Total	53.036	103			
2	Regression	27.815	3	9.272	36.762	.000[c]
	Residual	25.221	100	.252		
	Total	53.036	103			
a. Dependent Variable: Human resources governance						
b. Predictors: (Constant), Computer hardware, software, databases, networks						
c. Predictors: (Constant), (Human resources), software and databases, networks						

Coefficients[a]					
Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**T**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	1.458	.206		7.068	.000
networks	.234	.114	.309	2.055	.043
Software and databases	.270	.120	.336	2.257	.026
a. Dependent Variable: Human resources governance					

The results of the multiple linear regression test show that the significant value is 0.000 < 0.05 α at a degree of freedom of 103, and this result means that there is a statistically significant effect of the independent variable (electronic management with its dimensions: computers, networks, software and databases) on the dependent variable (human resources governance) , in the research sample. As for the value of the coefficient of determination (R2), it was (0.529), and this result indicates that (computers, networks, software and databases) explain (52.9%) of the variation occurring in (human resources governance), and that (47.1%) It is variance explained by factors that were not included in the regression model. Therefore, these results provide sufficient support, To reject the null hypothesis and accept the alternative hypothesis, which states that there is a statistically significant effect of electronic management (computers, networks, software, databases, knowledge makers) on human resources governance at Tikrit University. It turned out that the value of the constant limit (=1.458a), which is statistically significant, as the significant value is 0.000<0.05 α at a degree of freedom of 103. As for the value of the marginal slope for: (networks, software and databases, knowledge makers) it reached (0.541, 0.270, 0.234). b=) respectively, they are statistically significant as the significant values (0.000, 0.026, 0.043) respectively < 0.05 α at a degree of freedom of 103, and thus the following matrix can be obtained:

Y= 1.458 + 0.234 X1 + 0.270 X2

Y: Human Resource Governance.
X1: Networks.
X2: Software and database.

Conclusions

1. After conducting a theoretical and field study to identify the impact of electronic management in improving human resources governance at Tikrit University, a set of conclusions were reached. and the most important:
2. Electronic administration is regarded as an innovative kind of contemporary management that may have a significant impact on the university management landscape. One of its outcomes is the facilitation of services and the optimization of staff performance.
3. Creating a collective of components (personnel, networks, state-of-the-art gadgets and equipment, and diverse programs) and any other resources that aid the institution in executing its tasks, conducting its operations, and fulfilling its administrative duties.
4. Electronic management has brought about a major transformation in the functions of traditional management, in terms of planning, organizing and general control of performance.
5. It was found that the software used in electronic management directly affected the performance of human resources by estimating the necessary information at the appropriate time according to need and saving a huge amount of information while maintaining its security and confidentiality, and this is consistent with previous studies.
6. The results showed a clear impact of electronic management in improving human resources governance in the technology and software dimensions.

Recommendations

There are a set of recommendations that would contribute to the development of work in electronic management to improve the performance of human resources at Tikrit University, which will be reflected in the performance of each of them through the results that have been reached. Thus, the following can be suggested.

1. The need to establish network connections in order to adopt electronic management and enhance human resources governance at both universities.
2. Furnishing the two institutions with state-of-the-art gadgets and technology to effectively execute electronic administration.

3. Providing hardware and software and configuring them in a way that is compatible with the work required to be accomplished by employees.
4. Holding continuous training and training courses for human resources in the field of electronic management at the two universities.

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