THE OPINIONS UNIVERSITY OF GHARDAIA EMPLOYEES ON THE DEGREE OF ELECTRONIC PRACTICES IN THE ALGERIAN UNIVERSITY

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Abstract

This research paper came to identify the extent to which electronic management contribution to digital transformation at the University of Ghardaia. This paper relied on the descriptive approache, and the population's study consisted a group of administrative employees at the University of Ghardaia, where the number of distributed reached 60 questionnaire. The analysis of the obtained data was done using the Statistical Package for Social Sicences (SPSS) version 19, where the results showed a significant requirements of electronic management and digitization at the University of Ghardaia. A statistically significant effect relationship between the requirements of electronic management and digitization at the university, and also the presence from the point of view of the study sample members.

Keywords: electronic management, digital, transformation, university of ghardaia, employees.

Résumé

Ce papier a pour objectif la contribution de la management électronique à la transformation numérique, Elle a basé sur les approches descriptives et l'étude de cas en utilisant la performance de l'enquête, où la population d'enquête était constituée d'un groupe de personnel administratif à l'Université de Ghardaia, Où distribués a atteint 60 questionnaires, ont été analysées les données à l'aide du (SPSS) version 19, où les résultats ont montré une relation significative entre les exigences de la management électronique et de la numérisation. ainsi que l'existence d'une relation d'impact significative une statistique entre eux du point de vue des membres de l'échantillon d'étude.

Mots-clés : management électronique, transformation numérique, Université de Ghardaia, des employés.

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Introduction:

The Algerian University is living today like other global administrative organizations, especially with the wide spread of modern global information and communication technology, including Internet networks that provide services and information to students, professors, employees, and even citizens, which obliged it to restructure its functions and employees as required by the administrative need to improve administrative process.

The university's digital transformation has resulted in a number of changes from improving performance, speed of achievement, and effectiveness of implementation, ultimately establishing the end of traditional management argument. Dealing with electronic management provides many opportunities for success, increase proficiency, reduce costs, simplify procedures and achieve transparency.

1. The problem of the study

Based on the above, the following problem crystallizes: *"**What is the contribution of electronic management to the digital transformation of the University of Ghardaia**?"*.

1.1. Sub-questions

Based on the problem of the study, it was divided into a set of sub-questions:

- What's the concept of electronic management? And what're its characteristics?
- What's the concept of digitization? What're its most prominent organizational contributions?
- Is there a statistically significant impact relationship between electronic management and digitization at the University of Ghardaia from the point of view of the study sample members.

1.2. Study hypotheses:

Based on the problem and sub-questions, we put forward the following hypotheses:

The primary hypothesis: There's a statistically significant relationship between electronic management requirements (administrative, human, technical) and digital transformation of the University of Ghardaia.

- It's the transformation of all the traditional administrative works and services of the institution into those that are characterized by high implementation speed, accuracy, and delivery effectiveness. As for digitization's a process that uses technological means to convert paper files or documents into digital copies, on which the organization relies to modernize its operations and improve the quaity of its services.

- There's a statistically significant impact relationship between electronic management and digitization at the University of Ghardaia from the point of view of the study sample members.

1.3. The importance of studying

The significance of this study lies in the fact that it measures the impact of digital transformation on the requirements of applying electronic management among the employees of the University of Ghardaia in order to provide recommendations that can benefit university officials. In addition to identifying the most important points related to university's electronic management requirements.

1.4. Study Objectives

This research seeks to achieve the following objectives:

- Knowing the most prominent electronic management requirements available at the University of Ghardaia;
- Measuring the impact of the electronic management requirements available at the university on digital transformation;

1.5. The limits of the study

The limitations of this study are :

- Spatial boundaries: the theoretical aspect of this study was projected onto the reality of the Algerian University through the case study of the University of Ghardaia;

- Human limits: the study was limited to a sample of 60 administrators and professors at the University of Ghardaia.

1.6. Study Approach

To test the hypotheses' validity, we used two approaches in this study : the descriptive approach for the theoretical side, which was extracted from the most important studies, scientific articles, and the case study approach on a random sample of employees for the applied side, which was used to diagnose the reality of the contribution of electronic management to the digital transformation of the Algerian university, at the level of the University of Ghardaia.

2. Theoretical framework of the study

2.1. Electronic management concept

The concept of electronic management has received wide attention among writers and researchers, which was positively reflected on the multiplicity of definitions presented for this concept, including: Electronic management's defined as "*the sum of administrative processes through which you can use electronic means and apply them with high efficiency, which leads to the development of administrative organization, improving the technical capacity for the level of performance of electronic devices and enhancing the effectiveness of information exchange to reach the desired goals*." (Akram Al-Maddah Dania & Mohamed Mofdi Al-Kasaisa, 2016) It's defined as "*the completion of public services over the Internet without the customers having to go to the departments in person to complete their transactions with what corresponds to a waste of time, effort and energies*." (Mahmoud Al-Hassan Hussain, 2011)

From it, a definition of electronic management can be drawn as: "***Transforming all the traditional administrative works and services of the institution using electronic devices and means into electronic works and services characterized by high speed of implementation, accuracy and effectiveness in delivery***".

2.2. Electronic management features

Electronic management's characterized by a number of characteristics, including:

1. Increasing proficiency: The electronic management as a modern mechanism in the processes of administrative development and organizational change, as it represents a decisive turning point in the form of traditional administrative tasks and activities, has advantages, the most important of which is the immediate processing of requests, accuracy and clarity in the completion of transactions;

2. Reducing costs: If electronic management initially requires significant financial projects in order to advance the transformation process, then adopting the electronic organizations model will provide huge financial budgets, as the large number of labor's no longer needed in those stages;

3. Simplifying the procedures: in the front of the need for modernization, and administrative modernization as most departments worked to introduce information to their interests, and were keen to use it optimally, because of its capabilities and capabilities in meeting the needs of customers in a simple and fast manner, especially in light of the diversity of groups targeted by the activities of public institutions Among them're undergraduate;

4. Achieving Transparency: Complete transparency within electronic organization's the result of the existence of electronic control, which ensures periodic accountability for all services provided. (Abbasi Karima, 2021)

Accordingly, electronic management's characterized by a set of essential characteristics, encouraging its adoption to improve the level of services provided by the organization in line with its customers on the one hand, and the trend towards administrative modernization to face changes and ensure its continuity on the other hand.

2.3. Principles of electronic management

Electronic management's based on several principles, including:

- Providing quality services: dealing with the client with a great deal of sensitivity, as the situation requires creating a work environment of high quality and efficiency by focusing on the use of information, drawing conclusions, proposing appropriate solutions, localizing weaknesses and eliminating them, extracting strengths, continuing and developing them;
- Focusing on results: It's based on the embodiment of ideas on the ground, because the client does not care about the philosophy of ideas as much as he cares about the tangible ones, by alleviating his administrative burdens, providing an administrative service around the clock and completing the work with high efficiency;

- Easy and accessible services for everyone: electronic management techniques are available to everyone in the home, office and school, and therefore each customer can communicate to meet his needs in terms of ease of use and linking communication between the public and the administration;
- Continuous development: It's a basic principle in electronic management since it always seeks to keep pace with the times, and therefore continuous development and renewal would make an effective contribution to improving the level of performance for the purpose of customer satisfaction and achieving superiority in administrative competition and thus generalizing the benefit to all parties;
- Reducing effort and costs: the multiplicity of competitors and investment in information technology to serve the customer at the lowest costs and on the widest scale are among the basic principles adopted by electronic management. (Baghris Yasmine, 2017)

Based on the foregoing, the electronic management's governed by a set of important principles for the institution, the most prominent of which's the need to pay attention to the needs of customers and the quality of services provided to them and to ensure that they are obtained continuously and at the lowest cost, and to keep pace with everything that's new in its sectors to improve its performance.

2.4. Electronic management application requirements

The application of modern electronic management and the completion of the process of transformation from traditional management to electronic management, requires the necessity of providing a number of human, organizational, technical, security and legal requirements, among the most important of these requirements are:

a) Administrative requirements: To achieve the desired goals, electronic management requires a good administration that supports development and change and supports modern administrative methods. Administrative requirements may include the development of strategies and plans for the establishment, development of administrative organization, administrative reform, competencies and specialized skills. (Owaid Attia Al-Uqabi Nasser, 2018)
b) Human requirements: The large size of the administrative organization, the increase in their tasks and the expansion of their activities led to an increase in these organizations interest in computers, and that this huge expansion in the size of institutions requires, in turn, an increase in the number of employees in them, which prompted those organizations to establish policies and administrative procedures to ensure proper utilization of the resource. human resources in it, and to search for good cadres who can manage those resources and benefit from them. (Farhan Jedi Al-Obaidi Firas, 2015)
c) Technical requirements: They are represented in the set of physical components through which electronic management applications can be implemented, and it's linked to the creation of electronic computers, integrated data systems, telephones and faxes. Depending on the size of the organization targeting the total or partial automation of its functions and administrative activities. (Nadem Jawad Abdel Zaidi Khalil & Mustapha Zaineb, 2015)

It must be emphasized that the process of complete transformation from traditional administration to electronic management takes place gradually between the activities of the

institution, with the need to provide its various requirements, both material and human, to achieve the best results.

2.5. Obstacles to applying electronic management inside the university

Many researchers presented the obstacles facing the application of electronic management at the university, we will try to mention the most important of them :

1) Human obstacles : They're : Weak qualification of employees and their training on the application of electronic management, Inefficiency in the use of computer programs especially : Exel, SPSS, Access and others by employesses at all levels which depries them of the capabilities of the databases available to them ;

2) Material and technical obstacles : They're : Lack of hardwere and equipment necessary for the use of databases by many employees, Delayed maintenance of the devices nessary for the application of electronic management ;

3) Administrative and organizational obstacles : They're : Absence of appropriate rules and regulations to her, Weak incentive system that encourages employees to apply electronic management. (Oubbiche Samir, 2021)

And from it, we can say that the electronic management within the university has many human, technical and orgnizational obstacles that the managers must emphasize to ensure the smooth running of this trasformation.

2.6. Definition of digitization: Definitions related to digitization vary according to the field and framework in which this term is used, including:

The Digital Preservation Coalition defines digitization as: "*The process of creating digital files, either by scanning or converting analogue materials to digital, with a digital copy or a digital alternative classified as digital*. "(Abbasi Yazid & Hafedi Salima, 2022)

Digitization's also defined as: "*The adoption or increase in the use of digital or computer technology by an institution, industry, country...etc*." (Schumacher Andreas & Others, 2016)

As a result, a definition of digitization can be drawn as: **" *Is a process that uses technological means to convert paper files or documents into digital copies, on which the organization relies to modernize its operations and improve the quaity of its services..*"**

2.7. Digitization goals

Digitization has a number of goals, including:

- Managing files, viewing contents instead of saving them, reviewing document content instead of writing it;

- Shifting towards reliance on e-mail correspondence rather than incoming and outgoing email;

- Shortening the time and speeding up the completion of transactions, as the electronic transaction takes place simultaneously without waiting;

- Orientation towards the transparency of administrative work, the transparency of information and its presentation to the various stakeholders with it. (Boudiaf Malika, 2022)

Moreover, digitization aims to expand the use of information technology in the various activities of the institution and its dealings, reduce the burden of paper files of the institution, and facilitate its storage and review process at any time and at the required speed.

2.8. The contribution of digitalization to achieving organizational effectiveness

Administrative functions are the basis for the continuity of institutions, including the university, and they have become highly effective due to their reliance on digitization. Below we will explain the various functions of these functions in their modern form and how digitization contributed to the process of their development:

1) The contribution of digitization to the development of the planning process: As a result of the tremendous developments in the fields of information technology, planning has become a new form known as electronic planning, which is based on defining what is to be done immediately and in the future, depending on the flow of information from inside and outside the institution with joint cooperation between the top and the base, benefiting from the electronic network To keep abreast of various developments and according to long-term plans;

2) The contribution of digitization to the development of the organization process: As a result of the great changes and developments in the field of information technology, the organization has become known as the electronic organization, which is characterized by flexibility as it allows communication and cooperation between all employees through the internal network in the institution;

3) The contribution of electronic management to the development of the guidance process: It can be summarized in the following points:

- Providing a huge amount of information daily all the time in order to direct the efforts and activities of the employees;

- Providing continuous communication between the manager and subordinates through the internal network;

- Increased ability to motivate and complete tasks;

4) The contribution of electronic management to the development of the control process: As a result of the great development in the field of information technology the control process has become well and efficient, so that it has come to be called electronic control, as it allows immediate control with the help of the institution's internal network and then reduces the time gap between the deviation and its correction. (Haftari Samir & Al Hamzaoui Soha, 2016)

Based on the foregoing, digitization contributes to achieving organizational effectiveness by facilitating the process of forecasting work and keeping pace with its developments, the speed

and flexibility of information access among employees within the organization, the possibility of directing their efforts and activities at any time by managers, and reducing the time gap of control between deviation in work and its correction.

2.9. The reality of digitization at the Algerian University

The higher education and scientific research sector like other sectors, is an important and essential sector. Therefore, the political leadership had to work on developing and promoting it. Therefore this sector was the first to benefit from information technology. When we talk about the higher education and scientific research sector, we're talking about the university, which worked The Algerian state on the generalization of the use of information technology and digitization were among its most prominent applications, and among the first and most important efforts made in this field; Its beginning was the electronic registration of new students who obtained a baccalaureate degree, and then the electronic registration of those wishing to continue their studies in the master and doctorate. It allows all professors, students and users to contact their institutions and benefit from their various services, such as distance education for students, including the follow-up of their lessons and the completion of the duties required of them, or the follow-up of newly hired professors for their scientific and pedagogical training and evaluation (Aidi Djamal, 2022).

In general, it appears that what the Ministry of Higher Education was able to initiate or actually achieved, compared to the urgent challenges in this field, came at a relatively fluctuating level, as we mention, for example:

- **Distance education system:** Since 2005 and the process of controlling it has been continuous, by continuing its efforts to integrate the peculiarities of e-learning and television facilities, within a vision that goes beyond the university's borders to the external environment in order to benefit a wide audience more than the educated people who are seeking social promotion and eager to increase knowledge, such as: employees at Institutions in continuing education, hospitalized patients, persons in rehabilitation centers;
- **The Algerian Research Network (ARN) :** Which's directed at strengthening the distance education system, has witnessed a fluctuating and dispersed development to meet the delicate and urgent needs, especially those related to Internet access;
- **Integrated media system (Progress):** It consists of the distance education system and various management applications (registrations and online services);
- **The Media Higher Education and Scientific Research System:** It undertakes the establishment of a set of new and integrated services in the service of students, professors, researchers, employees and even citizens, through the following software: Online services directed to the citizen, such as : online registration for baccalaureate holders based on the Tasjeel com application (application tesdjil.com) developed in the Android environment, which allows access to various disciplines and university institutions based on the mandate of the successful in the certificate and his original division, the management of the national service file, or the request for accommodation and residence ... etc (Sassi Najat & Ben Rajdal Amal, 2020).
- **The standard library management system (SYNGEB) :** It's a digital system for the management of university libraries through the establishment and devlopment of the

Research Center for Scientific Information and Technology « CERIST », which works on local informatics networks and Internet ;

- **The Algerian platform scientific Journals (ASJP):** It's a digital Platform for publishing scientific journals, was created by the Research Center for Scientific Information and Technology « CERIST », and it's management by the university or college specialized in publishing the journal ;
- **The professional email :** It's an electronic means used for communication between instituation of higher education among themselves, as well as between sector administration and olse its users are professors & administrators. (Azzedine Mebrek, 2020)

In line with what has been mentioned about the reality of the digital transformation of the Algerian university and the challenges it poses, the Ministry of Higher Education and Scientific Research in Algeria seeks to modernize its sectors, especially the important ones, in order to improve the quality of its services provided, and thus encourages the use of technology and dealing with it to reduce the burdens of its clients, both They were students, teachers, employees, or even citizens.

3. The applied framework of the study

The reality of electronic management and digital transformation at the University of Ghardaia

3.1. Study variables

The study variables're :

a) The demographic variables: Gender, Age, Educational level, and Occupational level;
b) The independent variable: Electronic management;
c) The dependent variable: Digitization.

3.2. Study tool

A questionnaire was prepared, which in its entirety consisted of three parts:

The first part: The statements related to the personal data of the study sample members, consisting of 04 paragraphs related to (gender, age, educational level, occupational level).

The second part: related to the statements related to the hypotheses of the study and explains the requirements of electronic management that were adopted in the study. It consists of 09 statements and was divided as follows: The first axis: included phrases related to administrative requirements, and it included 03 phrases. The second axis: included phrases related to human requirements, and it included 03 phrases.

The third axis: included phrases related to technical requirements, and it included 03 phrases. **The third part:** included phrases related to digitization, and it included 06 phrases.

Most of the answers had specific answers, and the questionnaire contained 03 pages, which included five paragraphs related to the first part of the personal data of the study sample members 09 phrases for the second part, and 06 phrases related to the third part related to the study hypotheses.

A five-point Likert scale was used to determine the degree of relative importance of each of the questionnaire's phrases so that:

Table 1. Likert's pentagonal scale

Classification	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The points	1	2	3	4	5
Degree	1 – 1,79	2,59 – 1,80	3,39 – 2,60	4,19 – 3,40	5 – 4,20

Source : (Djamal Medhat, 2022)

Note. The field of the arithmetic mean was also determined by calculating the range, that's setting an ordinal scale for these numbers to give the arithmetic mean a significance using the ordinal scale, in order to benefit from it in analyzing the results.

The values of the arithmetic averages'll be dealt with to interpret the data according to the level of importance, as follows:

Table 2 . Analysis scale

High	Medium	lower
And more 3,67	3,66 – 2,34	2,33 – 1

Source : (Djamal Medhat, 2022)

3.3. Validity and reliability of the tool: In order to ensure the validity of the questionnaire as a tool for collecting data necessary for the study, it was tested and presented to a number of arbitrators from the faculty members of the Faculty of Economics, Commercial and Management Sciences. According to the steps of the stability of the questionnaire axes on the study sample, stability coefficient was used Cronbach's Alpha:

Table 3 . Reliability coefficients for the average of each axis of the study with the total average for all items of the questionnaire.

Axes title	Number of phrases	Cronbach's Alpha Value
Administrative requirements	03	0,692
Human requirements	03	0,824
Technical requirements	03	0,596
Electronic Management axes	09	0,864
Digitization axis	06	0,809
All paragraphs	15	0,914

Source : Prepared by the researchers based on the outputs of SPSS prg v 19.

Note. Through Table 03, the general reliability coefficient of the questionnaire reached (0.914), and the reliability coefficients for the axes ranged between (0.864) and (0.809), where it was greater than the minimum acceptable reliability coefficient of 60%, and this indicates that the questionnaire in all its axes has a degree of Stability can be relied upon in the field application of the study.

3.3. Study Population

The study population consists of all employees of the University of Ghardaia, who're related to the subject of the study, distributed as follows: High frame, frame, Controlling assisstant, Executive assisstant, and the study sample consisted of 60 employees inside the university.

3.4. Study procedures

Were distributed (60 questionnaires) for all categories at the university level, of which (60 questionnaires) were retrieved, (06 questionnaires) were excluded from them, and this's due to their inability to analyze due to a lack of answers, and thus the number that can be analyzed and used's (54 questionnaires) which represents the end sample for the study.

3.5. Presentation and discussion of the results

The Statistical Package for Social Sciences (SPSS) version (19) was used to unload and process the questionnaire data, based on the following statistical tests: Cronbach's Alpha coefficient to check the stability of the questionnaire items; The arithmetic mean and the measure of dispersion standard deviation to determine the relative importance of the study of the responses of the study sample members towards the study axes; Frequencies and percentages to describe the personal and functional characteristics of the sample members; Pearson correlation coefficient to reveal the relationships between the study variables, the validity of the paragraphs, and to measure the strength of the correlation and the relationship between the two variables: if the coefficient's close to +1, the correlation is strong and positive, and if it is close to -1, the correlation's strong and negative, and whenever it approaches 0, it weakens until it's absent; One way ANOVA statistical test to find out the effect between the two study variables.

3.6. Characteristics of the study sample

We used the Colmgrove-Smirnov test to find out whether the data follow a normal distribution or not, as it's necessary in the case of hypotheses testing because most parametric tests require that the data distribution be normal, where we'll define the alternative zero theory as follows:

- Null hypothesis H0: the data follow a normal distribution;
- Alternative Hypothesis H1: The data do not follow a normal distribution, and the following table shows the test results:

Table 4 . One-Sample Kolmogorov's Normal Distribution Test

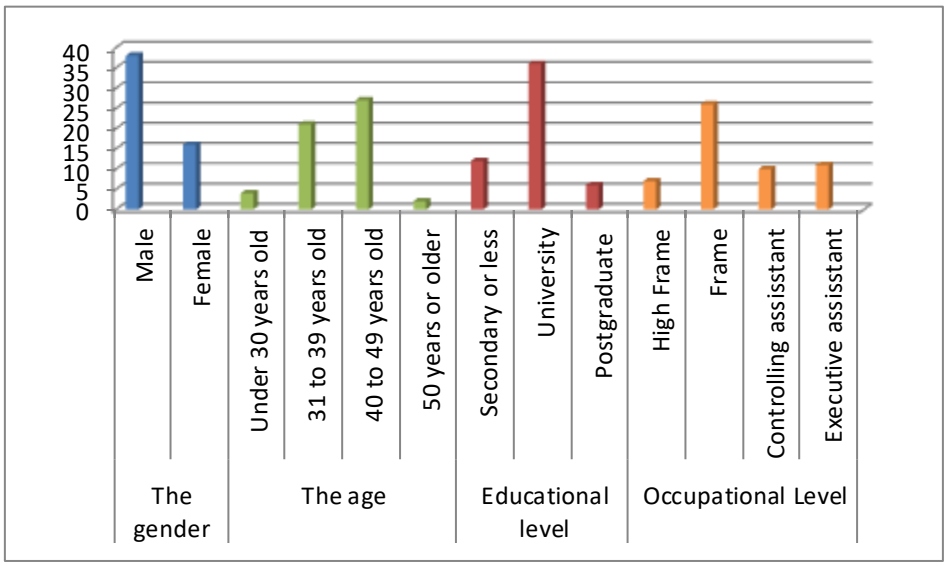
Section	Axis title	Number of paragraphs	Z . value	Significance level value
The first	Electronic Management	09	0,696	0,750
The second	Digitization	06	0,901	0,391

Source : Prepared by the researchers based on the outputs of SPSS prg v 19.

Note : Through Table 04 it becomes clear to us that since the value of Z is greater than (0,05) and the significant value is high, we say that the data follow the statistical distribution and this indicates that we will use parametric tests in our study.

The results of the characteristics of the study sample can be explained as follows:

Figure 1 . The characteristics of the study sample



Source : Prepared by the researchers based on the outputs of SPSS prg v 19.

Note. According to Figure 01, we note that most of the sample members are males, numbering (38), meaning in a percentage 70.4% of the total respondents, as well as the dominant group (40 to 49 years) with (27) individuals, meaning in a percentage 50%, and according to the educational level We note that (36) individuals are of university level, or 66,7%, and we also note that the majority of the study sample according to the job level represents the frame level and their number is (26) individuals, or 48,1%.

3.8. Analysis of study axes and hypothesis testing

The presentation and analysis of results with arithmetic averages and standard deviations was used to show the relative importance of the phrases from the point of view of the employees at the university, and the degree of their approval, through the following table:

Table 5 . The results of the opinions of the study sample on the axis of electronic management

Axes title	Mean	Std. Deviation	Approval degree	Rank
Administrative requirements	3,7346	0,78609	High	3
Human requirements	3,7407	0,89177	High	2
Technical requirements	4,1358	0,59881	High	1
Electronic Management	**3,8704**	**0,65955**	High	/

Source : Prepared by the researchers based on the outputs of SPSS prg v 19.

Note. The above table shows the respondent's perceptions that the sample members at the University of Ghardaia have shown their agreement about the general conditions of electronic management at the university in accordance with the following three requirements: administrative requirements, human requirements, and technical requirements; It's also clear to us that the general average of the electronic management axis was high, as the arithmetic mean value was estimated at (3,8704) and a standard deviation of (0,65955), and in detail in the electronic management requirements, we find that the technical requirements ranked first with a high arithmetic average value estimated at (4,1358) and a standard deviation of (0,59881), followed in the second place by the human requirements with an arithmetic mean (3,7407) and a standard deviation (0,89177), which's a high percentage in terms of the degree of approval, followed in the last rank by the administrative requirements with an arithmetic average (3,7346) and a standard deviation (0,78609), which's a high percentage in terms of the degree of approval.

3.9. Hypothesis Test

These results confirm that the level of electronic management at the University of Ghardaia is high from the point of view of the study sample members. The following's a discussion of the axes of the study.

Table 6. Respondent's perceptions of the variables in order of importance

	Mean	Std. Deviation	Rank
Electronic Management	3,8704	0,65955	1
Digitization	3,7778	0,69590	2

Source : Prepared by the researchers based on the outputs of SPSS prg v 19.

Note. It's clear from the table that the total arithmetic mean of the electronic management axis, which was estimated at (3,8704) and a standard deviation (0,65955), has a high degree of approval. Standard (0.69590). This explains the university's keenness on digital transformation by providing the most important requirements for electronic management.

So, after presenting the results and answers of the study sample members to the study questions regarding the most important requirements of electronic management and digitization, we'll now test the hypotheses that measure a set of influencing relationships between the independent and dependent variables of the study.

Test the main hypothesis: which states "**there is a significant relationship between the requirements of electronic management (administrative requirements, human requirements, technical requirements) and technology at the University of Ghardaia**."

Table 7. Pearson correlation coefficient between the requirements of electronic management and digitization among employees

Axle	Electronic management	Statistics	Relationship type
Digitization	Pearson Correlation Coefficient	**0,834	Positive Direct Relationship
	Significance level	0,000	
	N	54	

The value of R^2 at the 0.05 level of significance is 0.696

Source : Prepared by the researchers based on the outputs of SPSS prg v 19.

Note. Table 08 shows that the value of the Pearson correlation coefficient is (0,834) and the value of R^2 is (0,696), which is an average value indicating that 69,6% of the variables in the dependent variable are explained by the independent variable, and 30,4% of the variables in the independent variable are explained by the dependent variable when The significance level is equal to (0,000) which is less than (0,05), which means that there is a positive direct relationship between the requirements of electronic management and digitization, and thus accepting the hypothesis that states that "there is a statistically significant relationship between the requirements of electronic management (administrative, human, technical) On digitization at the University of Ghardaia.

Which explains that the more the university works to reduce the use of paper and make changes to its organizational structure to achieve efficiency, and provide a sufficient number of cadres necessary to implement and maintain its technologies and train its employees, and the presence of the latest technology means, necessary programs and protection systems to facilitate work, the more this contributes to the complete digital transformation of the university.

Testing the Second hypothesis: which states that "**There is a statistically significant impact relationship between electronic management and digitization at the University of Ghardaia from the point of view of the study sample members**".

To verify the effect of electronic management on digitization, a regression variance test was conducted to test the validity of the model to test the hypothesis, and the following table illustrates this:

Table 8 . Analyze the validity of the model to test the hypothesis

	R	R Squares	B	Beta	df	F	Sig
Electronic management	0,834	0,696	0,587	0,834	1-53	119,124	0,000

Statistically significant at the level less than or equal to (0,05)

Source : Prepared by the researchers based on the outputs of SPSS prg v 19.

Note. Table 08 shows that the axis of electronic management affects digitization, as the results of the analysis showed a statistically significant effect between the two variables, as the interpretation coefficient reached R2 (0,696), which's statistically significant at a level less or equal to (0,05), meaning that the axis of electronic management It explains 69,6% of the variations in the dependent variable, and therefore the electronic management axis has a relative importance in influencing this relationship, as the value of β reached (0,587), and the calculated F value reached (119,124) with a significance level of (0,000) that is, it's statistically significant when The level's statistically at the level less than or equal to (0,05), and this proves the validity of the model. Based on the validity of the model, the hypothesis of the study can be tested by using multiple regression.

In order to show the impact of electronic management requirements (administrative, human, technical) on digitization, the multiple regression coefficient was calculated and the following table shows the results of this test:

Table 9 . The results of the regression analysis among the study variables

Electronic management	B Constant	B	BETA	Std. Erorr	R	R Squares	T	Sig
Administrative requirements	8,046	1,305	0,737	2,84876	0,737	0,543	7,865	0,000
Human requirements	9,443	1,178	0,755	2,76399	0,755	0,570	8,303	0,000
Technical requirements	3,491	1,545	0,665	3,14850	0,665	0,442	6,420	0,000

Source : Prepared by the researchers based on the outputs of SPSS prg v 19.

Note. Table 09 shows the results of the statistical analysis of the impact of electronic management and its requirements on digitization, where the analysis showed a statistically significant effect between electronic management and digitization, as the correlation coefficients R respectively (0.737, 0.755, 0.665) at the significance level (0.000), which's a

medium value, The coefficient of determination (interpretation) R^2 was (0.543, 0.570, 0.442), that is, human requirements explain (57%) of the variations in the dependent variable, and administrative requirements explain (54.3%) of the variations in the dependent variable, and requirements Technology explains (44.2%) of the variations in the dependent variable, and therefore human requirements have the highest importance in influencing this relationship, which indicates that this requirement affects more than other requirements on digitization, as the value of β (0.737, 0.755, 0.665, and the calculated T value's (7,865, 8,303, 6,420), which's a statistically significant value at the level less or equal to (0,005). Therefore, the electronic management with its various requirements in the study affects the digital transformation (digitization).

Based on the foregoing, the hypothesis that states that "there's a statistically significant impact relationship between the requirements of electronic management (administrative, human, technical) and digitization at the University of Ghardaia is accepted from the point of view of the study sample members", as the parameter of the regression of electronic management requirements is Significantly came from Table 10, which shows the regression analysis between the variables of the study, which means that the requirements of the mentioned electronic administration affect the digital transformation of the university, and therefore we accept the hypothesis.

Conclusion

Finally, it can be said that electronic management's a sophisticated administrative method that enables the university to provide the highest level of quality and efficiency as it shortens the routine procedures that its customers suffer and achieves speed in administrative transactions, as well as maintaining the confidentiality and integrity of information in addition to reducing the percentage of errors and negligence arising from quantity. The huge number of documents and files, cost reduction and other advantages that enable it to achieve customer satisfaction and keep pace with the developments of the times to ensure its survival and continuity. Digitization also allows the process of managing files, reviewing the contents instead of saving them, reviewing the content of the document instead of writing it, moving towards transparency of administrative work, transparency of information and presenting it to various actors with it. The study reached a number of results, the most important of which are:

- The electronic management is the transforming all the traditional administrative works and services of the institution using electronic devices and means into electronic works and services characterized by high speed of implementation, accuracy and effectiveness in delivery ;
- The digitization is a process that uses technological means to convert paper files or documents into digital copies, on which the organization relies to modernize its operations and improve the quaity of its services.. ;
- The result showed that most of the repondents who were subjecte to this study were men, aged between (40-49 years), university level, and high executives at the university;
- The arithmetic averages and standard deviations of the electronic management requirements (administrative, human, technical) came within a high degree of agreement, where the total arithmetic mean was (3,8704) and the standard deviation was (0,65955), which indicates the convergence of the sample answers;

- The arithmetic averages and standard deviations of digitization also came to a high degree of agreement, as the total arithmetic mean was (3,7778) and the standard deviation was (0,69590), which indicates the convergence of the sample answers;
- The existence of a significant relationship between the requirements of electronic management (administrative, human, technical) on digitization at the University of Ghardaia;
- There's a statistically significant impact relationship between the requirements of electronic management (administrative, human, technical) and digitization at the University of Ghardaia from the point of view of the study sample members.

Recommendations

In light of the findings of the study, the following recommendations can be made:

- ✓ The university administration should work to change its organizational structure and develop its information centers in line with digital transformation, and strive to reduce the use of paper in a progressive manner;
- ✓ The necessity of determining the training needs of leaders and employees to implement electronic management, and providing a sufficient number of human cadres, including managers and engineers specialized in programming to maintain technologies;
- ✓ Providing the means of digitization, including hardware, equipment, software and necessary supplies, including automated protection systems and maintenance programs for the internal network, and ensuring that the university's website is constantly updated.

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