Human & Social Sciences Journal

Volume 11, Issue 03, March 2026, P.P. 88-104.

The Reality Of Digitization Between Electronic Platforms And Digital Education In Algerian Universities.

واقع الرقمنة بين المنصات الإلكترونية والتعليم الرقمي في الجامعات الجزائرية

La Réalité De La Numérisation Entre Les Plateformes Electroniques Et L'Enseignement Numérique Dans Les Universités Algériennes.

Ali, Ahmed Boumaza[*1] (AHMED BOUMAZA)

Date of submission 29/06/2025 - Date of acceptation 04/01/2026 - Date of edition : 30/03/2026

ملخص:

في ظل التطورات التكنولوجية الهائلة أصبحت الرقمنة واجبة لاغني عنها حيث تمثل التقنية الرقمية جزءا لا يتجزأ من حياتنا لهذا سعت الدولة الجزائرية لمواكبة هذه التطورات والتغيرات خصوصا في قطاع التعليم العالي فقد سعت لرقمنة الجامعات من خلال استخدام منصات الكترونية مخصصة لذلك من اجل تحسين الخدمات وتسهيل الحصول عليها في إي زمان ومكان من اجل هذا قامت الوزارة المعنية برقمنة الخدمات الجامعية تحت شعار صفر ورقة وهو الهدف التي تسعى هذه الأخير إلى الوصول اليه تدريجيا من خلا توفير كل متطلبات ومستلزمات الرقمنة خصوصا ما يتعلق بتكوين الموارد البشرية في قطاع التعليم العالي خصوصا الطلاب لان تكوين الطلبة على الرقمنة واستخدام المنصات الالكترونية يعتبر عنصرا أساسيا في العصر الحالي وذلك بتوفير برامج ودورات تكوينية وتدريبية لتعلم كيفية استخدام التقنيات الرقمية بفعالية وجعلهم قادرين على التفاعل مع المنصات الالكترونية بسهولة وبسلاسة في العديد من العمليات كالتعليم ومختلف الأنشطة التي تقوم بها الجامعة سواء العلمية او البيداغوجية أو الإدارية.

الكلمات المفتاحية: الرقمية، المنصات الرقمية، التكوين الرقمي، الجامعة الجزائرية

Abstract:

In light of the tremendous technological developments, digitization has become an indispensable necessity, as digital technology represents an integral part of our lives. Therefore, the Algerian state has sought to keep pace with these developments and changes, especially in the higher education sector. It has sought to digitize universities through the use of dedicated electronic platforms in order to improve services and facilitate access to them at any time and place. For this purpose, the concerned ministry has digitized university services under the slogan “Zero Paper”. This is the goal that the latter seeks to achieve gradually by providing all the requirements and requirements for digitization, especially with regard to the formation of human resources in the higher education sector. Especially students, because training students on digitalization and the use of electronic platforms is considered an essential element in the current era. This is achieved by providing training programs and courses to teach students how to use digital technologies effectively, enabling them to interact with electronic platforms easily and smoothly in a variety of processes, such as education and various university activities, whether academic, pedagogical, or administrative.

Keywords : Digitalization; Digital Platforms; Digital Training; Algerian University

Résume:

*** Ali Ahmed Boumaza.**

[1]علي احمد بومعزة,**University Of Abdelhamid Mehri Constantine 02, Laboratory of Economic Sociology and Social Change: Algeria, boumazafaysel@hotmail.com**

Face aux formidables avancées technologiques, la numérisation est devenue une nécessité incontournable, car le numérique fait partie intégrante de nos vies. L'État algérien s'est donc efforcé de suivre ces évolutions et changements, notamment dans le secteur de l'enseignement supérieur. Il a cherché à numériser les universités grâce à des plateformes électroniques dédiées afin d'améliorer les services et d'en faciliter l'accès, à tout moment et en tout lieu. À cette fin, le ministère concerné a numérisé les services universitaires sous le slogan « Zéro papier ». Cet objectif vise à atteindre progressivement en répondant à toutes les exigences de la numérisation, notamment en matière de formation des ressources humaines dans le secteur de l'enseignement supérieur. En particulier, la formation des étudiants à la numérisation et à l'utilisation des plateformes électroniques est considérée comme un élément essentiel de notre époque. Cet objectif est atteint grâce à des programmes et des cours de formation visant à enseigner aux étudiants à utiliser efficacement les technologies numériques, leur permettant d'interagir facilement et efficacement avec les plateformes électroniques dans divers processus, tels que l'enseignement et les diverses activités universitaires, qu'elles soient académiques, pédagogiques ou administratives
Mots clés : Numérisation ; Plateformes Numériques ; Formation Numérique ; Université Algérienne

Introduction :

When talking about the reality of digitizing university organization and its role in activating performance, achieving development, and moving away from traditional management procedures, this is what enables it to deal with environmental emergencies and the continuous changes in its factors, and enables it to create permanent competitive advantages that guarantee its stability and survival. t also enables them to choose the appropriate location during service. The need to digitize the university organization has become an inevitable necessity in this era characterized by rapid change, as it enables officials to guide the administration in a sound direction, as it is considered a basic and important stage of the administrative process. As a method of thinking and comparing between methods and ways of working in order to choose the best alternatives suitable for the available capabilities on the one hand, and the nature of the goals desired to be achieved on the other hand, digital management of university organization is considered one of the most important methods that studies have focused on in the field of improving performance. Through which the university institution can overcome many problems and difficulties, management is considered an important basic system of institutional systems. It is the nerve and axis of all administrative operations, including planning, organizing, directing, auditing, and performance evaluation, and is an effective device for achieving goals. It is concerned with nourishing the organisational climate of the institution and providing it with information and means of communication and contact of all kinds and their modernity. The methods of development and renewal in institutions lie in By equipping departments with the latest computer equipment and linking them to advanced automated software that takes into account the requirements of administrative advancement and development, which leads to the quality of higher education through its interaction with the virtual space based on the best automated systems in education, teaching, assessment and evaluation. With the presence of electronic media in university education, its automated systems and software provide lessons and lectures remotely. Information, data and information reach users at the appropriate speed and time without any errors or shortcomings. Traditional procedures in preparation, performance and service can be eliminated with quality recorded internally and externally in the surrounding environment. Also, the organizational communication between the parts and units that make up the institution and its technologies and tools were characterized by routine and slowness in the delivery of information to its users. With the movement of electronic media, it began to accelerate in an immeasurable circumstance in institutions, work offices, departments and lecture halls, and university education took priority in terms of preparation and

modernization, and a new organizational culture was introduced that is characterized by the quality of work life and the quality of actual performance and thus the quality of electronic education, based on automated information systems that are proven by modern technologies and means

- The problem

The work to introduce electronic media and information technology into the university in university education, management and guidance entails many financial and administrative considerations and future plans, especially since the field of information technology is in continuous and rapid development. Hence, the Information Technology Unit plays a key role in supervising the use of computer laboratories, monitoring their maintenance and development, and connecting them through the university's central network, which was established with funding from UNESCO and meets the latest specifications.

Since the university colleges in various specializations require the presence of laboratories equipped with a sufficient number of devices to train students on the use of computers through computer courses in the university colleges, the Information Technology Unit's management can coordinate with the various colleges at the beginning of each semester to allocate times for using the laboratories in a manner that suits And the requirements of each college.

There is no doubt that the success of any institution is based primarily on a basic pillar, which is the equipment of information technology and the forms of effective communication between the various university units that make up this institution on the one hand, and between it and the environment and the surrounding society on the other hand. In this context, it can be said that the importance of electronic media and its role in university education is very important, as it combines internal administrative communication in all its forms and the communication of the university institution with the university community in all its categories and classes. It is carried out between the administration of the university institution and its interests in order to communicate the plan and work program of teaching methods, and the distribution of costs to professors, groups, study degrees and mechanisms. This is the way that electronic media greatly helped in activating, so lessons appeared on the line.

Hence, the central question that reflects the title of this study can be posed: - What are the objective indicators of the digitization of administration in Algerian universities?

This question was divided into three sub-questions: 1- What is the role of electronic platforms in Algerian universities? 2- What is the benefit of digital training in the higher education sector? 3- Is there a relationship between digitization, electronic platforms, and digital training in the higher education sector?

- Formulating hypotheses

Main hypothesis: "Digitization in Algerian institutions is linked to objective indicators of digital formation and the availability of electronic platforms for this purpose."

A - The first partial hypothesis: "The electronic platforms in Algerian universities, with their mechanisms and systems, activate the digitization of the higher education sector."

B - The second partial hypothesis: "Digital training contributes to controlling and empowering students with the requirements of the higher education sector in Algerian universities."

C - The third partial hypothesis: "There is a statistically significant correlation between electronic platforms, electronic human resource training, and the digitization of the higher education sector in Algeria."

- Study objectives:

The current study attempts or aims to achieve the following objectives:

1. To uncover the correlation between the study variables, particularly the independent and dependent variables, given that "the reality of organizational digitization between electronic platforms and digital education" is a concept related to intertwined indicators and data in academic education, with the involvement of many disciplines.

2- Attempting to highlight the reality of digitization in Algerian universities and to determine the extent of the application of electronic platforms within the institution.
3- Knowing the real benefit of electronic training for the student.

- Conceptual Construction
- Basic concepts:
A - The Concept Of Digitization:

(Digitization): It is the process of converting information into data and a digital format that can be processed by a computer, with the aim of representing an image, sound, document, or signal. This process is called digitization or digital representation and occurs without making any changes to the basic content (Harvard Business Review) International encycmlopedia of information and Library science - 2nd ed-London, Routledge, 2003, P 18.)

B - The concept of Digital Mnagement:

Digital Management is defined as: "The administrative process based on the distinct capabilities of the Internet and business networks in planning, organizing, directing and controlling the resources and essential capabilities of the organization and others without limits in order to achieve the organization's goals" (Abdul Jawad, Sameh: 2006, p. 46)

C - The Concept Of Organization:

1 - The language of organization is a word derived from the triliteral verb nazam. It is said that he nazam al-lu'lu', meaning he gathered and organized it, and organization is consistency) (Muhammad ibn Abi Bakr al-Razi: 1920, p. 667.)

2 - The technical definition: We find many definitions, including the following: A.etzioni defined it as a social unit created to achieve a specific goal. (Talat Ibrahim Lutfi: 2007, p. 23.).

Stephen Robbins also defines it as a consciously coordinated social entity with clearly defined boundaries that operates on a permanent basis to achieve a specific goal or set of goals. (Muhammad Qasim Al-Qaryouti: 2008, p. 49)

D - The Concept Of E-Management:

E-government did not only come with the commercial use of the Internet and its use for general purposes in the mid-nineties, but rather it has been present since the seventies of the last century through the use of office automation tools such as fax, telephone, automatic archiving, microfilm, etc. In addition, digital computer control, the use of computers in manufacturing, and artificial intelligence applications in production and services are all models for replacing those working in operational activities with automated and computer systems in management, as well as managers in automated directions and instructions based on pre-programming. The term "paperless" first appeared in a headline published in a commercial publication of a telephone company about a quarter of a century ago, between the years (1974-1975), where the company was talking about the office of the future (the digital office) that would be equipped with computers. (Muhammad bin Hilal bin Fazaa: 2017, p. 39)

E - The Concept Of Electronic Platforms:

It is difficult to define and define electronic platforms due to the divergent views surrounding their concept. Among these definitions are the following: Electronic platforms are "a group of electronic services available over the internet that facilitate interaction between two or more groups of users, whether institutions or individuals. These services include marketplaces, search engines, etc." (Bodroumi Abdel Nour and Fatima Ben Abdel Aziz: 2022, p. 52).

F - The Concept Of Digital Formation:

A type of formation that refers to the use of everything digital in the formation or education process, whether the formation is in-person (in classrooms) or distance formation (via the Internet), in its two types, synchronous and asynchronous (Mustafa Oumria and Ben Abbou Al-Jilali: p. 80).

G - The Concept Of Digital Platforms:

These are modern technological applications that transmit content using various communication methods to deliver information anytime, anywhere, without restrictions. It is an easy-to-use business model based on the use of technology that facilitates the exchange of information and

services between different parties and allows for electronic communication between multiple people. (Wafaa Harmah, Saif El-Din Tali: 2022, p. 44)

H - The Concept Of The University:

Modern universities are the natural resurgence of ancient educational institutions that have specialized in teaching the principles of science and knowledge since time immemorial and for centuries, and which have continued to develop and renew themselves constantly according to the requirements of the times and the needs of individuals and society. The university as an organization and educational institution goes back to the schools of wisdom in ancient China, according to which the foundation stone of civilization was laid for Chinese civilization and a pole paving the way for the development of human thought. (Omar Muhammad al-Tumi al-Shaibani: 1982, pp. 48-49.)

1 . First: The Socio-Organizational Approach To Digitization:

1 . 1. The Emergence Of Digitization:

Some believe that digitization began with the emergence of the Internet in the mid-nineties of the twentieth century. In fact, it appeared with the emergence of artificial intelligence applications, computer-integrated manufacturing, computer-aided digital control, computer-aided design, and others, which represented models for replacing automated and electronic systems in administrations and replacing workers in the operational systems of administrations and also replacing managers in directives and instructions, which is called electronic (digital) administration.

The concept of digitization goes back to many historical developments in information facilities and institutions to manage some library activities after the introduction of computers in both the United States and Britain since the 1950s, according to Herter, through the results achieved by eliminating paper energy records and replacing them with electronic records, which allow libraries to participate in record networks and exchange them in the field of cooperative cataloging, as well as in loans from libraries, according to the Global Library Project, which means unifying catalogs and their texts in all libraries of the world by the Western superpowers, or what is known as the Group of Seven, as a space for information and knowledge in July 1994, with the aim of making all sources searchable via the Internet. Libraries, then extended to numerous meetings between the superpowers to digitize libraries by intensifying digital connections between various libraries with the intention of expanding knowledge to the broadest borders. It came after many meetings between these powers, the most important of which was the Brussels 1995 meeting to support development in the economic, social, scientific and cultural fields, which was adopted by the United States of America with funding from the National Science Foundation and the NASA space agency. This project included the establishment of six digital libraries that contribute to scientific research. For higher education with the support of active institutions in the United States of America. (Bedouaf Zuhair: pp. 70-71)

Digitization is a transformation that came as a result of the challenges faced by information and communication technologies, which enabled libraries to support the development of their performance. This tremendous development in the field of information and communication is due to the use of software and the Internet.

We can say that digitization is the result of technological developments brought about by modern technologies for managing administrative activities. Among the most important technologies is the emergence of computers and the introduction of applications and networks into administration to organize documents, manage information, and improve citizens' relationships with institutions, bringing them closer to them.

1-2. The Importance Of Digitization:

Digitization is of great importance as an indispensable mechanism for modernizing and updating public administration. This importance is represented in a number of points that can be summarized as follows: (Amal Tawhariya and Adel Bin Omar: 2023, p. 88)

Reducing the cost of administrative and financial procedures and related operations, and increasing the efficiency of the administration's work through its dealings with citizens, companies and institutions, administratively and financially.

Accommodating a larger number of customers at one time, as the traditional management's ability to process customer transactions remains limited and often forces customers to wait in long lines.

Eliminating the direct relationship factor between the two parties to the transaction or reducing it to the greatest extent possible, which leads to limiting the impact of personal relationships and influence in various business-related transactions.

Relatively eliminating bureaucracy.

Simplify procedures as transactions are conducted electronically.

A. Digitization Objectives:

There are many goals that digitization seeks to achieve at the organizational level. These goals may be direct or indirect, as researchers see them. They are as follows: (Hanan Abu Dayya: Management Journal, Issue 57, p. 62) Direct goals that achieve financial gains:

Accomplish work quickly with minimal time and cost

Reducing working hours within the organization

Performing work remotely.

Reducing the use of papers in administrative work.

B - Indirect General Goals That Are Difficult To Translate Into Tangible Material Gains:

Reducing errors related to the human factor

Increase and enhance the organization's competitiveness.

Speed in providing data and information

. Characteristics Of Digitization:

The characteristics of digitization are as follows: (Kwal Rovia, 2022, p. 101) Reducing time: Technology makes all places electronically adjacent. Reducing space: It allows storage devices that can accommodate a huge amount of stored information and that can be easily accessed.

Sharing intellectual tasks with machines: As a result of the interaction between machines and human resources, information technology contributes to knowledge development and enhances user training opportunities. Mobility: Users can benefit from its services while on the move, anywhere, using a variety of communication methods, including computers, mobile phones, etc.

. Benefits Of Digitization:

With technological advancements and the shift toward digitization to deliver services in the shortest possible time and at the lowest cost, there is no longer any room for management to delay completing tasks in light of the ongoing acceleration of the age of technology and knowledge. This requires keeping pace with these developments and shifting toward digitization, given the benefits this will have for both the organization and the citizen. Digitization has many benefits aimed at improving performance and providing quality services, as follows: (Abu Diya Nour: previous reference, pp. 62-63.)

- On The Economic Level:

Significantly saving effort and cost for all parties dealing electronically.

Facilitating all administrative transactions.

It provides opportunities for new jobs such as operation, maintenance, information security, and data entry.

Enhancing work within a single system and avoiding duplication of work.

- On The Administrative Level:

Eliminate bureaucracy at work

Enhancing transparency in work by eliminating nepotism and favoritism.

Teamwork

Shorten work procedures.

Improve quality and simplify procedures for obtaining services.

- On The Social Level:

An information society that has the ability to keep pace with information technology.

Speed of social communication through the use of electronic applications and e-mail.

- Internationally:

Keeping pace with international developments in information technology

Second: Justifications and requirements for digitization and the most important Obstacles It Faces:

1. Justifications For Resorting To Digitization:

Resorting to the digitization process was based on basic justifications that led to its adoption as a priority, and among these justifications are the following: (Fawzia: 2020, p. 22.)

Departments are under constant pressure to improve their services due to the many complexities in dealings across various departments.

Bureaucracy is increasing daily, as institutions suffer from poor performance in providing citizen services due to routine procedures and manual methods.

Business disruption and document damage.

The large number of offices that citizens are forced to go to to obtain services.

Technological developments have led to the necessity of keeping pace with and adapting to these surrounding developments. Therefore, adopting digitalization in many organizations and societies is inevitable.

2. Digitization Process Requirements:

Organizations seek to transform their management from the traditional paper-based model to a modern digital model. This requires the capabilities and requirements that must be met to carry out the digitization process. These requirements can be summarized as follows: (Ali Hamdoush and Hamid Bouzid: 2020, p. 47). Legal requirements: These include all the legislation and laws that must be enacted to create the necessary legal environment for work.

Organizational and administrative requirements: These include all the changes that must be made to the organizational structures, procedures, and administrative structures of state agencies, with the aim of streamlining them, increasing their flexibility, and enhancing their effectiveness. Technical requirements: These can be divided into three main categories:

Infrastructure requirements for the telecommunications network and the Internet.

Information infrastructure requirements, i.e. those related to the existence of effective information systems.

Able to collect data from its sources and quality.

Requirements related to software tools, including the availability of qualified human resources capable of handling these tools efficiently and effectively.

3. Effects Of Digitization:

Digitization has both negative and positive effects that can be summarized as follows: (Halasi, Amina Rasha: 2022, pp. 28-29)

A - The positive effects of digitization:

The application of digitization has many positive effects, which can be summarized in the following points:

Ease of access to information, i.e. various automated searches using keywords.

Remote viewing capability.

Speed and ease of access to information.

Information security: The digitization process ensures the complete and total transfer of data during the conversion process.

Delays and reduces the deterioration of originals, which is mainly due to increased use.

The ability for several researchers to view the same document at the same time.

Preserving original copies for as long as possible and reducing their deterioration as a result of using digitized documents instead.

B - Negative Effects Of Digitization:

Despite the positive effects of digitization, it is not without negatives, including:

Creating unemployment: The implementation of digitization may lead to an increase in unemployment rates due to the dispensing of workers' services due to the expansion of technology use, or at least the elimination of the need to hire new workers given the ease, speed, and simplicity of completing tasks that digitization provides.

Loss of privacy: Digital transactions allow people to access other people's private information, such as: Learning about gas and electricity bill consumption by entering a phone number or the number used for any electricity bill.

4. Obstacles Fcing The Digitization Process:

The shift to digitalization is not an easy, smooth path that allows us to implement it easily, smoothly, and properly. This is because there are many obstacles and problems that will face its implementation, including the following: Administrative obstacles: These are represented by the following: (Amina Ben Jeddou: 2020, p. 6).

Lack of planning and studies on applications before adopting them.

Lack of follow-up, oversight, and evaluation of technology projects, and the absence of a legal framework.

Adherence to traditional administrative procedures prevents the implementation of technologies within the administration, which will create a new administrative style that requires reengineering organizational structures and making them flexible to accommodate changes in the work environment. This inevitably leads to difficulties in the distribution of tasks.

- Organizational And Legislative Obstacles:

The most important organizational and legislative obstacles are: (Abdul Malik bin Al-Sabti and Ibtisam Saidi: 2016, p. 12)

Lack of planning and coordination at the senior management level for digital transformation programs.

Lack of follow-up by higher authorities on the implementation of the digitization project in smaller departments.

Lack of coordination between other agencies involved in administrative activity to ensure they have the same types of tools and software.

The scarcity of providing specialized training on a wide scale.

The lack of a central authority to adopt digitization projects at the state level, which leads to weak system compatibility.

- Technical obstacles:

These are: (Abdul Malik Bin Sabti: previous reference, p. 13)

The scarcity of unified specifications and standards for devices used within institutions.

The obsolescence of computer hardware and software used in institutions despite their rapid development.

The weak infrastructure of many departments and their lack of readiness to receive such technology.

Weak communication network infrastructure in many areas.

- Human obstacles: These are:

(Abdul Malik Bin Sabti: previous reference, p. 13)

Lack of cultural awareness of information technology at the social and organizational levels.

Lack of training programs in the field of modern technology.

Lack of sufficient knowledge of computer technologies.

Lack of confidence in the protection and confidentiality of personal information and transactions within the digital environment

Employees' resistance to applying technology, lack of desire for it, reluctance to use it, lack of conviction, and the human tendency to resist change.

- Financial obstacles: These are as follows:

(Abdul Malik bin Al-Sabti: previous reference, p. 13) Lack of financial resources allocated to developing the infrastructure necessary to implement the digital project, especially establishing networks, connecting sites, and developing devices.

Lack of resources available in institutions due to the association with fixed and specific spending budgets.

Lack of financial allocations for training and qualification processes to implement digital projects.

Third: Digital transformation

1- The importance of digital transformation

Digital transformation is the process by which an organization integrates digital technology into all areas of its business, fundamentally changing how it delivers high-value products or services to its customers in terms of use or impact, rather than monetary value. It also involves companies using innovative digital technologies to make cultural and operational shifts that better align with changing customer demands (Amazon).

Digital transformation helps implement the transformation of all procedures, processes, and new technologies to maintain competitiveness in a rapidly changing technological world. The COVID-19 pandemic has been a challenging period with significant impact on all societies, drawing global attention to the need for digital transformation and its importance in enabling some individuals and companies to carry out their operations without being affected by the events around them. Even in the post-pandemic period, other institutions and individuals have a strong passion and desire to keep pace with this technological change, avoid any future obstacles that might hinder their tasks, and replace them with a rapid, easier technological alternative.

- Here are some of the benefits of digital transformation initiatives:

Increase productivity - Improve customer marketing experience - Reduce operating costs - Keep pace with rapid change - Gain new job opportunities.

1- The difference between digitization and digital transformation

Digitization refers to creating a digital representation of physical objects, such as scanning a paper document and saving it as another digital document on a computer. Digital transformation, on the other hand, is the complete change in business processes and the transformation of all businesses through digitalization. This distinction revolves around leveraging modern technological knowledge and integrating it into all areas of business to enhance engagement and create new value for individuals or organizations. For example, companies can shift from local, physical control of their internal operations to remote monitoring, control, and execution of the same operations using a website or mobile app.

According to the World Bank's 2020 reports, the relative importance of the digital economy and its contribution to GDP in many countries has become apparent. Despite the difficulties of measuring the digital economy globally, estimates indicate that it contributes approximately 15.5% of global GDP. Global exports of digitally delivered communications services and technology have also grown over the past decade at a much faster rate than total exports of traditional services, reflecting the increasing digitization of the global economy and its significant impact on raising growth rates in the economies of various countries.

2- Individuals must be adaptable to modern technologies.

Various technologies have become an urgent necessity in today's world, especially in the lives of individuals and in various fields such as society, economy, culture, politics, education, and especially on the level of social networks. Since March 2020, with the spread of the COVID-19 virus, the trend of digitization has become inevitable and more urgent, especially in education and scientific research, becoming the only refuge in various countries and across various fields. This has

had a positive impact on institutions and individuals alike, as the rate of enrollment in online training courses has increased significantly, and modern applications have emerged that help facilitate communication and follow-up mechanisms for students and lecturers alike without disrupting the educational process. According to data issued by the Ministry of Planning and Economic Development (Egypt, 2022), more than 180,000 young men and women have been trained and qualified for the freelance labor market under the digital transformation program, and approximately 1.6 million Egyptian learners are registered in online courses.

Digital technology is currently witnessing tremendous development, and it has become difficult to keep up with it due to the abundance of inventions, innovations, and creativity that characterize this rich field of knowledge, which are reflected in the daily lives of individuals and societies. Perhaps the most important signs and indicators reflecting the digital communications revolution, primarily related to the world of the internet, are the spread of digital technology in human and social life and the rise in digital communications and modern communication technology, even in societies classified as poor. The rate of use of modern communication devices has increased widely, as has the rate of use of social networks with their various interactions and features for exchanging links.

3- The impact of digitization on working individuals:

Digitization and digital transformation have a profound impact on individuals and employees. With the introduction of new technologies, such as cloud computing, big data analytics, machine learning, and artificial intelligence, companies are demanding different skill sets from their employees to keep pace with such changes. This has forced employees to take on additional responsibilities, stay abreast of emerging technological trends, and acquire new skills to remain relevant in their field. Among the most in-demand jobs in Egypt specifically are the following (Software Engineer, Computer Specialist, Data Scientist), reflecting the importance of digital transformation in our lives and its direct impact on the employment market.

Individuals should be aware of the potential impact of digitization and digital transformation on their personal lives. For example, as businesses become more reliant on digital technology for communication, marketing, and customer service, it may be difficult for those without the necessary digital skills to find work. Additionally, individuals should consider how their personal data is used online and ensure that it is safe and secure from attacks from malicious sources.

The way we work is also changing due to digitization and digital transformation. Remote work has become increasingly common, meaning people must adapt to new ways of working, such as collaborating via video calls and various communication platforms instead of meeting face-to-face. This can present challenges for those unaccustomed to this type of work environment.

To stay ahead of the curve, it's crucial to stay proactive in developing skills in areas such as coding, analytics, artificial intelligence, machine learning, software engineering, and cybersecurity. This will enable individuals to maximize the opportunities presented by digital transformation. Additionally, organizations should be encouraged to provide employees with resources and training to help them develop their digital skills.

Ultimately, digitization and digital transformation have had an undeniable impact on individuals. As technology continues to evolve, it's important for people to stay informed and abreast of the latest trends to remain competitive in their fields. Individuals must also be aware of the potential impact of digitization and digital transformation on their personal lives and take steps to protect themselves from malicious online actors. With the right knowledge and skills, individuals can stay ahead of the curve and maintain their competitiveness in the digital world. Individuals should also look for ways to gain experience with digital technologies. This could include experimenting with new tools or participating in hackathons and coding competitions. Doing so will give individuals a deeper understanding of the capabilities of these technologies and how they can be used to make a real difference in their work.

Fourth: Mechanisms for the transition to digital management in Algeria

1 - The difference between traditional and digital management in local administration

raditional management differs from digital management in terms of the type of methods and tools used, through which the differences can be identified based on the following foundations and indicators:

- What is the nature of the means used when dealing between the parties:

The practices of the traditional concept of will revealed the nature of the means used through their reliance on the use of direct communications between the different parties to the transaction, or through some traditional means such as landline telephone, correspondence, or other traditional means, while the practices of the concept of digital management depend on completing all work and transactions between the parties to the transaction through an electronic intermediary so that data and documents are exchanged electronically through the use of electronic or digital communications networks. (Al-Zubaidi, Sahar, 2016, pp. 343, 374)

B- Documents used:

Digital management differs from traditional management in the management process, as the former carries out its tasks without using any papers, unlike traditional management, which relies primarily on the use of paper documents to carry out its tasks when implementing various tasks and transactions.

C - Preservation: Paper transactions in the traditional administrative style are subject to damage over time.

Unlike the digital administrative model, which includes the transaction within preserved content, it is safe from damage and obsolescence in the designated location on the electronic network of the organization that holds the file. Many organizations resort to securing their digital content using more than one digital storage medium as a precautionary measure.

D- Access to data:

Obtaining information or a transaction from a paper file in the traditional administrative style is extremely difficult, due to the large number of paper documents, as it takes a lot of time and effort. In contrast, in the digital administrative style, it is considered an easy process to access due to the availability of very large databases that allow obtaining any information or transaction quickly and at any time and without much effort. (Al-Sakarna, Bilal Khalaf, p. 203 14)

E- Protection: One of the advantages of the digital management style

What is not available in the traditional administrative style is securing digital networks with protection programs that ensure that no one can access them and tamper with their files and transactions by deleting or adding, as all of these things are no longer included in the calculations of the person dealing with digital administration who realizes that the reality of its transactions and data protected and stored on the digital administration network is not possible for anyone to access and that the accurate computer program of the network will give him an opportunity based on his data, away from human intervention. (Saeed Ali Rashid: 2008, pp. 6-15)

F- The degree of dependence on material and human capabilities:

The practices of the traditional concept of management depend on the best possible exploitation of the available material and human capabilities, while the practices of the concept of digital management depend on the use of virtual reality technology, where many material and human assets are often excluded (Afandy, Atiya Hussein: 2022, p. 261).

Or reduce its use to the minimum possible. Q - Interaction: Traditional management practices emphasize that interaction between parties is relatively slow, while in the case of digital management, it is extremely fast. (Abu Karim, Fathi, 2008, p. 32)

Y- Cost:

The traditional paper-based approach costs management a lot of money in terms of storing files and transactions and maintaining the location where they are stored. However, under digital or electronic management, the cost does not exceed the cost of the storage media or the network on which the data or information was previously stored. N - Type of organization: Management, in its traditional sense, is based on hierarchy and division based on planning, orders from above, and secrecy as a method and approach. Digital management, on the other hand, is management that

implements plans and orders from below, and is based on openness, transparency, alliances, and strategy. (Saeed Ali, Rashidi, op. cit., p. 17)

Z - Length of service:

Another advantage of digital administration is that it is difficult to find in traditional administration, which is the limited working hours of traditional administration, whose official working hours do not allow for receiving its clients except for a limited number of clients per week, while digital or electronic administration services are available 24 hours a day, as orders can be executed on its networks at any time throughout the day, as all of this is executed according to a pre-prepared program to respond negatively or positively to the orders that come to it according to the conformity of its data or its contradiction. (Manasir Shahrazad: 2019, p. 1215)

K-Quality of Service:

Digital management is distinguished from traditional management in terms of the quality of services provided. The former is characterized by high quality services, while services under traditional management are characterized by lower quality compared to the quality of digital management services. (Najm Aboud Najm, 2016, p. 345)

2 - Digitization objectives as a fundamental pillar for local administration reform in Algeria

As a result of a series of reforms initiated by governments, particularly at the local administration level, to improve public service delivery to citizens, increase transparency in administrative transactions, and involve citizens in the management of public affairs, and in an effort to develop local administration management methods to keep pace with contemporary changes and ensure efficient and high-quality performance of assigned functions, Algeria has resorted to changing the management style, reviewing methods, and restructuring administrative procedures to keep pace with the requirements of the digital or technical revolution by integrating information and communications technology into the core of administrative work through the digital model, or what is known as digital management in local administrations. Among the goals set by Algeria to develop its local administration in light of adopting the digital or electronic model, we mention the following:

1 **- Reducing negative phenomena in local administration such as bureaucracy, corruption, mediation and favoritism:**

Reducing the phenomenon of corruption has become an indispensable necessity in order to achieve development and achieve the goals of management, as well as improve the quality of services, such that the latter has become the main reason for the backwardness of local administration and a reason for the disruption of development work in it and a reason for the loss of citizen confidence towards it. A bureaucratic employee can reject a person's request to obtain a service only because he did not like the applicant (Al-Hamada Hamza Al-Dahi: 2016, p. 73). However, the actual embodiment of digitization leads to the cancellation of direct contact between the employee and the recipient of the service and the replacement of traditional services with electronic services that are performed remotely, which eliminates the personal influence of the employee while performing his duties, and also eliminates mediation and favoritism, which contributes to achieving and enhancing transparency in work. (Nim Ahmed Mohammed: 2008, p. 31)

2- Speed of public service delivery:

The introduction of digital services instead of traditional services contributes to improving the quality of services provided to the external public, as services are now provided in the shortest possible time, and citizens are no longer forced to stand in long queues. It is sufficient for them to open a computer while sitting at home or office to request a specific document or inquire about a specific service. Also, any citizen wishing to obtain any service, such as registering for Hajj, can fill out the registration application electronically via the website of the Ministry of Interior, Local Authorities and Urban Authority, 24 hours a day, 7 days a week, to facilitate citizens. In contrast, direct registration in the municipality of residence takes place during the working days and hours of the week (Amari Samir: 2018, p. 6)

3- Mastery and quality of service:

Digital management ensures quality in providing services in a way that meets the needs and desires of its users. Also, relying on the electronic environment provides a lot of accuracy and objectivity in the various operations within the administration by reducing personal efforts and recurring errors because the implementation of procedures is done electronically (Muhammad Al-Hassan Hussein: 2009, p. 9)

This results in avoiding many errors and reducing their occurrence. Under traditional administration, citizens often find themselves victims of clerical errors and lapses in their administrative documents, which are overlooked by local government employees when they are preparing citizens' documents, such as birth certificates, marriage contracts, and other documents.

4 - Reducing costs:

The public treasury of municipalities and states incurs a lot of expenses to meet the needs of local administration represented in supplying its various departments with supplies of papers and office supplies, as statistics revealed that the expenditures of one of the country's municipalities regarding office supplies such as pens, papers, etc. were estimated at about 300 million centimes, at a time when these additional expenditures do not provide anything to the national economy, except for providing a service to the citizen. Therefore, the local administration seeks to reduce its expenditures, rationalize the spending of public money, and close the channels of corruption, by finding mechanisms that contribute to reducing expenditures and protecting public money. The adoption of digital administration contributes to rationalizing local spending. (Abbas Al-Alaq Bashir: 2005, p. 17)

The shift towards digital administration is not limited to reducing the costs incurred by the treasury of municipalities and states, but it also works to reduce the burdens borne by the citizen. Through the applications provided to the Civil Status Department, it has become possible for the citizen to obtain a special birth certificate "KH 12" from any municipality in the country, after citizens were forced to travel to their original municipalities of birth to obtain a special birth certificate, thus bearing the costs of travel and the hardship of traveling long distances. In addition, the Vehicle Registration Department benefits from the services of the National Automated Vehicle Registration Registry, as the process of digitizing vehicle registration cards through a national registry at the level of the latter cancels the gray card held by the seller of the vehicle and issues another in the name of the buyer, regardless of the state of registration of this vehicle, and without the need to travel to the state of registration to carry out the process. Deletion.. (Tashma Boumediene: 2010, p. 8)

3 - First: General Results Of The Study. :

Through the academic progression of the study topic, through theoretical and field evaluation of the study, through our simulation of the office field, and through our theoretical enrichment on the subject of the reality of digitizing the organization between electronic platforms and digital training in the Algerian university institution.

1- General Results Of Digitization:

1 - Optimal control over an employee's career path in terms of: Promotions, qualifications, employment, and professional examinations.

2- Determine the real needs of the sector by limiting the number of vacant positions.

3- Speed in providing documents of interest to the employee: all services, work certificate.

4- Working to prevent and reduce errors that may occur with employees during their promotion processes.

5 - The digitization process allows the guardianship to deal with identification numbers rather than with individuals. The latter will also ensure transparency and speed in work, noting that each user's document will carry this number, similar to the postal account number, thus eliminating the need for paper files.

6 - Digital management enables the exchange of new ideas among management, employees, and the external public.
7 - Digital administration is an effective means of achieving modernity and development by bringing citizens closer to the administration and providing them with several advantages, such as speed in service delivery, accuracy, and reduced costs.
8 - Developing the information system within institutions contributes to raising the efficiency and effectiveness of the institution and thus eliminating the causes of the administrative apparatus' inability.
9 - Digital management is an integrated electronic system that aims to transform normal administrative work from manual management to computer-based management, relying on powerful electronic and digital information systems that help in making administrative decisions in the fastest time and at the lowest cost.
10 - Attention to the media aspects of the project and highlighting its importance, stages and achievements; Until the project obtains the moral and material support required by the decision - maker in the parent institution.

2 - General Results Of Digital 7ransformation:

The way we work is also changing due to digitization and digital transformation. Remote work has become increasingly common, meaning people must adapt to new ways of working, such as collaborating via video calls and various communication platforms instead of meeting face-to-face. This can present challenges for those unaccustomed to this type of work environment.
To stay ahead of the curve, it's crucial to stay proactive in developing skills in areas such as coding, analytics, artificial intelligence, machine learning, software engineering, and cybersecurity.
This will enable individuals to take full advantage of the opportunities offered by digital transformation.
In addition, organizations should be encouraged to provide employees with resources and training to help them develop their digital skills.
Ultimately, digitization and digital transformation have had an undeniable impact on individuals.
As technology continues to evolve, it's important for people to stay informed and abreast of the latest trends to remain competitive in their fields. Individuals must also be aware of the potential impact of digitization and digital transformation on their personal lives and take steps to protect themselves from malicious actors online.
With the right knowledge and skills, individuals can stay ahead and maintain their competitiveness in the digital world. Individuals should also seek ways to gain experience with digital technologies. This could include trying out new tools or participating in hackathons and coding competitions. Doing so will give individuals a deeper understanding of the capabilities of these technologies and how they can be used to make a real difference in their work.
1 - Digital transformation helps implement the transformation of all procedures, processes, and new technologies to maintain competitiveness in a rapidly changing technological world.
2 - The rest of the institutions and individuals have a strong passion and desire to keep pace with this technological change and avoid any future obstacles that prevent them from carrying out their tasks and replace them with a quick technological alternative that facilitates their implementation.
3- Increase productivity - Improve customer marketing experience
4- Reducing operating costs
5- Keeping up with rapid change
6- Obtaining new job opportunities

3 - General Results:

Any study aims to achieve the objectives set out at the beginning of the study and reach specific results. Similar to other studies, our study has reached the following conclusions:

The state and the relevant ministry have digitized the higher education sector and various university services through electronic platforms and ministry-specific websites for use in many areas (registrations, viewing lessons and lectures, viewing grades, etc.)
The scarcity of training programs offered by the university to students to keep pace with digitalization, and the failure to update their content to keep pace with current technological developments. Most students rely on self-education.
The implementation of digitization at the university faces numerous challenges, most notably students' lack of mastery of technology and their lack of mastery of computer science principles. This is what makes the success of digitization at the university contingent upon it.
Electronic platforms ensure the activation and success of digitization in the higher education sector.
The use of electronic platforms has not been generalized in all administrative, pedagogical and educational tasks to achieve the goal ((0) paper), as some tasks are still in their paper form.
Modern technologies help stimulate creativity and innovation, create a sense of electronic control for students, and enable them to use the digital tools used at the university.
Students sometimes face difficulties accessing platforms, such as frequent interruptions, slowness in use, and other technical problems...
Digitization saves time, effort, and money, and raises the level of services and administrative transactions at the university. This can only be achieved through the availability of competent human resources capable of mastering modern technology, based on their knowledge, skills, and technical and behavioral capabilities to implement digitization. This enables us to narrow the digital gap among students, professors, and administrators at the university. This can all be achieved through training, by raising the level of efficiency and capabilities, providing digital competence, reducing digital illiteracy, acquiring e-culture, and benefiting from various training programs related to adopting and learning modern technologies. Therefore, qualifying human capital (students) is crucial in the digital age.
Digitization is an inevitable necessity dictated by the changes that the world has witnessed in all fields. Algeria is one of the countries that seeks to embody the digitization project so as not to remain on the margins of the world. From this standpoint, we can examine the impact of digitization on Algerian institutions. Digitizing and modernizing administration and making it electronic is the essence of the modernization launched by the Algerian state to improve many sectors, especially the higher education sector. This is achieved by establishing a system that allows for the provision of services electronically via dedicated electronic platforms and the gradual elimination of paper supports. With the spread of communication technology and the increasing number of students, it has become necessary to adopt digitization in all university activities, whether scientific, administrative or pedagogical. Information technology has become closely related to the higher education sector, which has resulted in the digitization of higher education. It is based primarily on the quality of the Internet and the presence of technological means such as computers and smartphones, as they are a mechanism for accessing electronic platforms, which are the most prominent manifestations of the digitization of higher education.
We must not neglect the field of human resources training, as it is considered the primary element responsible for the success of digitization. Therefore, training programs must be developed, and efforts must be made to develop their qualifications and capabilities in the field of information technology, enabling them to master modern means of communication in order to adapt to the changes occurring in this field and keep pace with them to implement digitization effectively.
The developments brought about by the digital revolution are projects that many countries around the world are seeking to provide by ensuring the provision of all human, material and technical resources. Digitization or digital transformation has become an inevitable necessity, and Algeria is one of these countries, as it has made significant strides in the field of digitization so as not to remain on the margins of the world. This progress has affected many sectors, including the local communities sector. Digital transformation is considered one of the axes that the highest authorities focus on. However, despite some positive points that digitization has produced, the implementation

of the digital Algeria project has encountered a set of challenges that have prevented it from being achieved in the required form and level.

Conclusion:

If alphabetical illiteracy means the inability to read and write, which is widespread in developing countries, then digital illiteracy does not mean alphabetical illiteracy only, but rather extends to a more modern concept that is summarized in the inability to deal with and use computers, the Internet, and other digital products and benefit from them. It is therefore not only knowing that, but rather knowing it theoretically and how to apply it practically to access and obtain information and knowledge and communicate with others in any place and time Therefore, training and education are considered the first step in combating digital illiteracy. Regular employee training helps keep employees abreast of the ever-evolving technological developments taking place in the digital world. It also equips them with the necessary technical skills, which will help them overcome digital illiteracy by acquiring these skills, even if they are not of a high standard. In the same context, one should train on the use of electronic devices, such as computers and smartphones, and learn how to use communication methods through the Internet to gain complete knowledge of digital search operations and train on how to use digital file creation, and thus access digital transactions in various field.

Digitalization is an inevitable necessity dictated by the changes the world has witnessed in all fields. Algeria is among the countries striving to implement the digitalization project so as not to remain on the margins of the world. From this perspective, we can examine the impact of digitalization on Algerian institutions. Digitalizing and modernizing the administration and making it an electronic administration is the essence of the modernization launched by the Algerian state in order to improve many sectors, especially the higher education sector. This is achieved by establishing a system that allows for the provision of services electronically through dedicated electronic platforms and the gradual elimination of paper documents. With the spread of communication technology and the increasing number of students, it has become necessary to adopt digitalization in all university activities, whether scientific, administrative, or pedagogical. Information technology has become closely related to the higher education sector, resulting in the digitalization of higher education. It is based primarily on the quality of the internet and the availability of technological means such as computers and smartphones, as they are the mechanism for accessing electronic platforms, which are the most prominent manifestations of the digitalization of higher education**.**

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