

THE EFFECTIVENESS OF E-DIGITIZATION IN IMPROVING PUBLIC SERVICE WITHIN THE ALGERIAN ADMINISTRATION

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Abstract: Algeria's public sector has seen a big change. It's gone digital. Now, for different sectors, there are apps and online portals. These tools make it easy to get documents you need. It is simpler to follow official procedures. Better public services in education, job training, and healthcare. This write-up also explores how to tackle social and economic problems. This is done with ideas that boost job creation, investment, tax gathering, and money management. Such methods have hurried along the shift in public utilities. It has also quickened the change from paper to digital in official processes.

Keywords: E-Digitization, Effectiveness, Public Service, Algerian Administration

L'EFFICACITÉ DE LA NUMÉRISATION ÉLECTRONIC DANS L'AMÉLIORATION DES SERVICES PUBLICS AU SEIN DE L'ADMINISTRATION ALGÉRIENNE

Résumé : Le secteur public de l'Algérie a connu un grand changement. Il est devenu numérique. Maintenant, pour différents secteurs, il existe des applications et des portails en ligne. Ces outils facilitent l'obtention des documents dont vous avez besoin. Il est plus simple de suivre les procédures officielles. De meilleurs services publics dans l'éducation, la formation professionnelle et les soins de santé. Cet article explore également comment aborder les problèmes sociaux et économiques. Cela se fait avec des idées qui favorisent la création d'emplois, l'investissement, la collecte des impôts et la gestion de l'argent. De telles méthodes ont accéléré le changement dans les services publics. Cela a également accéléré le passage du papier au numérique dans les processus officiels.

Mots-clés : E-Digitization, Efficacité, Service public, Administration algérienne

Introduction

Many countries nowadays strive to keep up with global progress in order to face the challenges imposed by the current reality and the changes of the era. It is widely recognized that the public sector has realized the urgent need for continuous improvement in the field of service delivery and the relentless pursuit of progress in various areas, particularly in terms of information technology. The modern information and communication technologies have led to significant changes in both individual lives and their desire for more advanced

services, as well as in the institutions and organizations that provide these services. The introduction of information technology in all government operations has become the goal of many countries seeking progress and advancement. The use of information technology has become associated with digitization, which many public administrations have sought to implement in various aspects of their work. Thus, the focus on digitization and electronic management in Algeria has become one of the government's key objectives, as it has made numerous efforts to embody it in order to keep up with the times and achieve success in various sectors. (E-newspaper, 2023) However, there are also negative side effects that is immeasurable by quantitative indicators, which work to solidify different layers of “digital bureaucracy”. The problems encountered by those without access to technology and the underrepresentation of administrative officials in public facilities mechanisms are examples of this. These lead to the creation of false official indicators that are used to evaluate e-governance based on quantitative and selective indicators, such as website visits, automated responses, service volume, and files that are readily available. These indicators do not accurately reflect the efficacy and caliber of the services rendered or their responsiveness to the needs of the public in the nation. A solid scientific problem around the topic could be : "To what extent does the implementation of e-digitization improve efficiency, transparency, and accessibility in public services within the Algerian administration?, and what are the key challenges and opportunities associated with this transition ?" How easy is it for citizens to access and use digital services provided by the administration ? Are the platforms user-friendly and accessible to all users, including those with limited digital literacy ? Has e-digitization streamlined processes and made services more efficient? Are citizens able to complete tasks more quickly and with less effort compared to traditional methods? Does e-digitization promote transparency and accountability within the administration ? Are citizens able to track the status of their requests or applications online ? Are there clear laws and regulations governing e-digitization initiatives in Algeria? Is there alignment with international best practices and standards in terms of data protection and cybersecurity ? What efforts are being made to promote awareness and encourage the adoption of digital services among citizens? Is there a comprehensive communication strategy in place to inform the public about the benefits of e-digitization? The hypotheses that we put forward are as follows: Increased e-digitization in Algerian public administration will lead to greater efficiency and transparency in government processes. E-digitization in Algerian public administration may face challenges related to infrastructure, resources, and digital literacy among government officials and citizens. E-digitization initiatives in Algerian public administration have the potential to enhance citizen engagement and participation in governance. To answer these questions, we will discuss two fundamental points. Firstly, we will review the achievements of digital transformation in Algerian administrative systems in light of reports from national and international institutions. Secondly, we will explore new ways to guide this transformation towards achieving the goals of administrative reform and modernizing public administration by improving its efficiency, accessibility, and inclusivity for all users. This study will allow us to discover the impact of e-digitization on the efficiency and effectiveness of public service delivery in the Algerian administration. As we aim through this research paper to analyze the key factors influencing the successful

implementation of e-digitization initiatives in the Algerian context, as well as propose strategies for overcoming potential barriers and challenges to the successful implementation of e-digitization initiatives in the Algerian public sector.

1. Methodology

It is necessary to study the fundamental contexts that have led to the development of e-government in the public sector in Algeria. Previous studies have highlighted the potential benefits of e-digitization in enhancing public service delivery, including increased accessibility, efficiency, and transparency. However, there are also challenges associated with this transformation, such as cybersecurity risks, digital divide issues, and resistance to change among employees. Understanding these factors is crucial for designing effective e-digitization strategies in the Algerian context. To assess the effectiveness of e-digitization in improving public service within the Algerian administration, this study employs a mixed-method research approach. Quantitative data analysis will be used to measure the impact of digital technologies on service delivery metrics, while qualitative methods will provide insights into the challenges and opportunities associated with e-digitization.

2. Results

2.1. *The Algerian e-Government program (E-Gov):*

Traced back to the late 1990s and early 2000s, starting with the first program for information technology in public administration. Gradually, administrative procedures have been digitized through projects aimed at "eliminating the physical stamp" on essential services. These initiatives fall within the framework of Algeria's competitive strategy, which launched at the end of 2001 to experiment with e-government applications and adapt the institutional framework to meet the challenges of digitization. As a result, the State Secretariat for Post, Technology, Communications, and Information established in 2003. The Five-Year Plan (2006-2011) called for the integration of modern technologies and the acceleration of organizational transformation in public administration as a driver for institutions and sectors of the state. (Abdelkader, 2012) In the first decade of the 21st century, the pace of digital transformation accelerated with improvement of the primary countrywide software program application for e-government, which covered preliminary efforts to digitize public facilities. For example, courts have been equipped with information systems, and websites have been created to facilitate access to judicial services (such as obtaining a criminal record certificate and a nationality certificate), including the Ministry of Justice website and the Ministry of Justice's Electronic Services Portal in 2009. The government implemented an electronic digitization strategy for public sectors starting from 2010, which included the establishment of a national system for digital management, a portal for public services (service-public.dz), and a portal for spatial information and maps, similar to what exists in several sectors such as the Ministry of National Defense (Cartography and Geography branch). The goals of these initiatives seek to streamline administrative processes and address grievances from citizens (<https://mediateur.el-mouradia.dz/complaint>) in order to enhance the quality of governmental services provided. Furthermore, multiple websites have been designated for digitizing transactions, like submitting filings and paying

taxes through the national portal dedicated to public services (<https://bawabatic.dz>). The Ministry of the Interior, working together with the Ministry of Veterans, has launched a digital platform for the sixtieth anniversary of Independence Day and Youth Day. This helps preserve our national history and honor the bravery of those who died (1964-2022) (<https://www.gloriousalgeria.dz/Ar>). Additionally, the Ministry of Industry and Trade started the Digital Algeria Plan. The goal is to improve how the government responds to what citizens need through an ambitious e-government program. This program oversees 89 projects. The Joint Ministerial Committee is responsible for carrying out the Digital Algeria Program (2020-2025) (<https://portail.commerce.gov.dz>). Notwithstanding, the state's endeavors to initiate and grow the extent of e-government, this would prompt the send off of many sites that work with public help for people and residents, as well as the improvement of many public administrations that can be gotten to on the web, as shown by Teacher A. Belarbi. It has been recorded that remote admittance to managerial systems has expanded by 18% starting around 2022, provoking the improvement of another digitization plan in Algeria pointed toward making something like half of public administrations accessible online by 2027. As Algeria has likewise gone into various global organizations to improve its data framework, for example, the organization with the United Nations Advancement Program to upgrade electronic gathering structures and make manageable turn of events. Additionally to what the public authority has done in sending off the public authority gateway to empower clients to perform errands, for example, enrolling information for public personality cards, biometric travel papers, as well as business and criminal records under the Ministry of Justice. The public authority carried out a few functional plans during the period from 2015 to 2020, for example, the principal plan for computerized change in policy management in 2018. This plan intended to offer top-notch electronic types of assistance and work with information trade to further develop signs of admittance to public information, regulatory straightforwardness, foundation of managerial offices, and upgrade of public help. (Massa, 2023)

Starting around 2020, the clerical area liable for regulatory change has started executing the Advanced Algeria Improvement System 2020-2025. The objective is to situate Algeria among the main nations in the Center East and Africa (MEA) in the field of advanced public administrations by utilizing mechanical means and staying up with monetary and social changes. The technique intends to work on the nature of residents' lives through digitization across three key tomahawks: computerized organization to work with advanced change drives, development to speed up the advanced economy, and fighting social rejection while advancing human turn of events. The Coronavirus pandemic and the closure of public puts during the lockdown shed light on the significance of gear and electronic applications for remote work. This change was especially apparent in the medical services, lawful, and schooling areas. The advanced asset gateways, like the main training site in Algeria (<https://www.ency-education.com>), are pivotal in offering scholastic help and open doors for e-learning. Also, the Service of Advanced education and Logical Exploration's computerized stage entry (<https://www.mesrs.dz/index.php/plateformes-mesrs-ar>) intends to work with the progress of understudies all through their different phases of college schooling, beginning from direction to graduation and expert incorporation. It additionally endeavors to empower

instructive development and update administration in its different viewpoints. (Research, 2023)

The pandemic has revealed insight into the difficulties impeding the computerized change of public administrations. Subsequently, the new public methodology for computerized change means to address these difficulties by upgrading client trust in electronic exchanges and restoring the advanced foundation, all inside a computerized climate through a brought together connection point. The positioning of Algeria in the field of worldwide e-government has steadily improved, as it positioned thirteenth in the Center East and North Africa locale in the Advanced Preparation (DR) report gave by the Global Association for Computerized Economy, and fourth in Africa in the Computerized Economy File (DEI). As the positioning of Algeria further developed in the Unified Countries E-Government Improvement File (EGDI), moving from 156th spot in 2008 with a score of 40.29 to 145th spot in 2022 with a score of 0.591.12. This progress is a consequence of huge development in the field of e-government and the expansion in the Web-based Help Record (OSI) from 0.207 to 0.472 during a similar period. Comparative upgrades were likewise seen in different regions that add to the e-government file, for example, the Telecommunications Infrastructure Index (TII) and the Human Capital Index (HCI). (Platform, 2018)

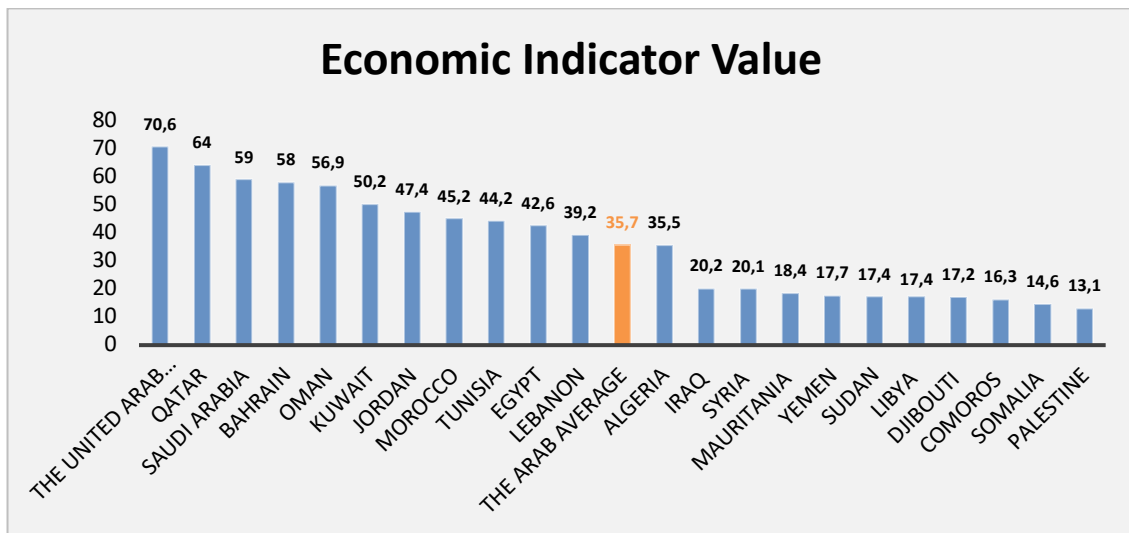


Figure 1: Digital Economy Index for Arab Countries. (Source: Arab Economic Unity Council, 2018)

2.2 Areas of application of e-government in Algeria:

-Interactive services

Interactive solutions have significantly improved communication between the government and citizens. The Public Grumblings Entryway, which has gotten over 1.2 million objections, has shown a general improvement in the reaction rate to client complaints, with roughly 49.13% of all out grievances being tended to. The data gateway has likewise shown a reaction pace of more than 56% to submitted demands. The regulatory gateway has improved on the most common way of acquiring data by distributing 2700 composed and worked on systems. The public authority is pursuing completely or somewhat digitizing this methodology by 2027.

-Digital remote services:

These sites permit clients to start regulatory exchanges on the web and get the last help either through an email message or through direct printing of the report. Instances of such administrations in Algeria incorporate the Managerial Archives Gateway (Public ID Card, Biometric Passport, Birth Certificate, Home Card, Criminal Record Certificate, etc.), which has effectively handled more than 700,000 solicitations for birth endorsements; the Biometric Visa Entry (passeport.dz) under the Service of Inside and Neighborhood People group, which empowers clients to finish up the structure and electronically track the application while going on with the actual application and assortment process. The Electronic Common Status Framework, which has gained huge headway in digitizing common status charges since its execution in 2018, building a data set of 45 million reports tracing all the way back to the pioneer time frame onwards. Furthermore, the Authorizing Entrance considers electronic organization of permitting demands in the development and monetary areas, despite the fact that it is not yet functional by and by. (Statistics, 2023)

-Transaction services

Digital Transformation has empowered the total digitization of certain administrations. This incorporates the send off of a committed entryway for distributing tenders and following public agreements for workers for hire. In addition, a trade entry permits remote admittance to authorizing and license administrations, as well as the administration of beneficial allotments for the travel industry. There are likewise a few devoted sites for mentioning government backed retirement allows and covering bills and expenses (power and gas bills, phone bills, Algerian Telecom), overseeing customs strategies, and a few computerized legal applications like the electronic legal record. Moreover, there has been progress in the electronic organization of the schooling and preparing framework through a constant global positioning framework. (Barre, 2013)

-Integrated Services

Digitization has extended cooperation potential open doors in the public area through different drives. For instance, the Common Data Framework for HR The board in Open Organizations (SIRH-AP) was sent off in 2019 in numerous areas. It plans to work on HR and their compelling administration by utilizing the capacities given by data and correspondence innovation. Electronic entrances have been intended to offer shared public types of assistance across numerous divisions, especially according to fostering the financial backer's UI. A few models incorporate a stage to help new businesses and independent work. Moreover, a computerized stage is being created to trade and interface different general administration data frameworks. This stage will keep on developing to oblige an ever-increasing number of divisions. The expanded utilization of data and correspondence innovation out in the open administrations has prompted critical upgrades in straightforwardness, productivity, advancement, and quality in the public area. These enhancements decidedly affect the general presentation of policy implementation and its relationship with partners. One of the primary advantages of digitization is the foundation of

a goal and straightforward connection among residents and organization, which has added to decreasing inclination and preference. Digitization has likewise prompted a decrease in the responsibility on regulatory staff, alongside expanded straightforwardness and simple entry to techniques and broadened approaches to testing managerial choices simultaneously. (Karti & Madaoui, 2017) All the more significantly, digitization has started the course of "organization end and disposing of it" by separating managerial practices and changing the hierarchical designs of regulatory bodies. This change incorporates the division of obligations and the presentation of new systems for practicing managerial power. Furthermore, digitization has worked with the utilization of public administrations through correspondence and coordinated effort devices. For instance, clients can now plan arrangements online to get to clinical benefits through the advanced wellbeing stage (<https://etabib.dz>), which is the principal computerized wellbeing stage in Algeria, or get reports from security, legal, and different offices. (Platform H. D., 2016) Moreover, the utilization of computerized devices has worked on the straightforwardness of public administrations and decrease a few degenerate practices that were common in the past because of absence of straightforwardness, restricted public support in open issues the executives, and the shortfall of a culture of resistance in working with public help among residents. (Rania, 2016) Digitization has empowered the smoothing out of human asset the executives in the public area by lessening the presence of "ghost" representatives considering the speed of registration activities, and by esteeming computerized callings that do not need high business rates. As per the Association for Monetary Collaboration and Improvement, around 14% of occupations in Algeria are in danger of robotization in the following twenty years, like a few positions connected with common status association, business records, and occupations connected with legal issues, and so on. Moreover, computerized authoritative arrangements can improve the work execution of representatives and lessen the safety buffer coming about because of manual information handling. (Badari, 2022)

2.3. The impact of digital bureaucracy on Algerian administration: manifestations and opportunities

Electronic management systems lag behind many traditional systems, which now require innovative methods to redirect technologies towards serving the economic and social goals of digital transformation. This must be done within a comprehensive vision for public sector reform that goes beyond technical considerations and includes legal, institutional, and procedural guarantees to control the new boundaries of public administration.

-The side effects of digital transformation on public administration in Algeria:

The process of digital transformation faces various obstacles that hinder its progress or prevent it from achieving the desired results. Some negative effects have started to emerge, especially in light of the funds allocated to finance digital transformation initiatives, which are implemented within several programs led by the government in partnership with the private sector and international donor agencies. Among the harmful effects that we will seek to shed light on are the following.

-Leadership failure

These systematic failures include limited coordination between programs. For example, the results of the Algerian Electronic Plan 2015 were not taken into account when developing the Algerian Digital Strategy. Additionally, there was a lack of control over project implementation, resulting in only 42 services being completed instead of the originally planned 89 services. Similarly, service quality was primarily evaluated based on the number of services provided, regardless of their readiness and ability to meet user needs, as determined by official references such as the Reference Guide for Digital Administrative Services in 2018. Leadership structures also faced difficulties, as evidenced by the Ministry of Digitalization and Statistics, which did not make significant progress in monitoring the implementation of the Algerian strategy in the digital administrative field. The ministry held only three meetings 2019-2023, despite being required to meet at least twice annually. Governance problems arise from the absence of a joint governmental mechanism to oversee the different aspects of digital transformation, contrary to international standards that require permanent leadership structures. In Germany, for example, the Ministry of Digitalization and Information Systems (DINSIC) played and continues to play a crucial role in coordinating digital transformation efforts. To address these issues, specialized entities must be empowered with sufficient resources and clear mandates. (Yazid, 2020)

-The continuation of the digital divide:

The contradiction in the pace of digital transformation continues to widen the gap between citizens and the government in terms of their access to public services. This division takes various forms, such as spatial disparities, where some areas, known as "shadow areas," lack sufficient internet infrastructure. Additionally, central administration monopolizes most equipment and information solutions, resulting in limited resources and weak digitization of local authorities. On a social and cultural level, digital services risk-creating inequality among citizens in terms of their ability to access public services. Despite significant developments in the information technology market and the efforts made by both the government and the private sector, many social groups in Algeria still lack the necessary means and technologies to access digital services due to limited income on one hand, and a lack of digital literacy on the other. (al-Nafir & Al-Qurashi, 2011) From an economic perspective, the level of (e-Readiness) index varies depending on the type of services and beneficiaries. Generally, services targeting the general users are less advanced compared to platforms used for bill payment, fees, and taxes, resulting in a disparity in the quality of services provided to regular users and professionals. Approximately 60% of online services provided to the public are limited to information provision, while digital platforms used by companies constitute nearly 42% of all services, compared to only 32% of fully digital services available to other users. (Faouzi & Khalifa, 2021) Excessive growth of digital bureaucracy: Public administrations today increasingly rely on digital tools to make public services more responsive to the citizens' expectations, with a focus on specialization and efficiency, as well as the presence of clear and stable administrative rules. However, in practice, digital bureaucracy has emerged as an important issue in itself, hindering the potential of modern tools to improve public services. Examples of these trends include:

-Outdated administrative sectors:

An enormous number of workers have become unfit to stay aware of innovation. The level of laborers in the field of data and correspondence innovation in Algeria doesn't surpass 1.19%, contrasted with a worldwide normal of 3% in 2022. This frequently prompts protection from change and an inclination for paper-based administration culture among more seasoned workers. The absence of an unmistakable meaning of online administrations implies that a few web-based benefits just give data or get essential records that do not meet client necessities. Numerous virtual entrances of public organizations in Algeria need vital updates and experience the ill effects of the backwardness of intelligent and coordinated computerized arrangements, which ruins their capacity to draw in clients.

-Exhausting procedures

Electronic administrations for mentioning regulatory records are as yet restricted to submitting demands just, while getting the reports actually requires actual presence. Assuming clients wish to get records through actual participation, organization and managerial assertion proceed. (ouahba & Karra, 2022)

-Lack of trust

The shortfall of a bound together and improved on framework for recognizing clients and representatives, alongside the sluggish speed of getting computerized benefits and safeguarding information, subverts trust in electronic exchanges. Accordingly, numerous residents, as well as establishments and public organizations in the nation, wonder whether or not to manage electronic stages, particularly those connected with monetary administrations.

-Administrative inertia

The fundamental innovation behind internet-based administrations is full of difficulties that influence its viability. Interruptions coming about because of successive specialized disappointments and unfortunate support influence the interests of clients, concocting these disappointments a rationalization to dodge liability and defer administration arrangement to people and residents. (Zaoui, Boudaoud, & Hasseb, 2021)

-Exhausting procedures and administrative inertia are significant hurdles hindering the full adoption of electronic administrative services. Electronic administrations for requesting regulatory records are currently limited to submitting requests only, while obtaining the documents still necessitates physical presence. Should clients opt for obtaining records through physical attendance, bureaucratic processes and administrative formalities persist (ouahba & Karra, 2022). Moreover, the underlying technology powering online services faces numerous challenges affecting its effectiveness. Disruptions stemming from frequent technical failures and inadequate maintenance impede user interests, with these failures often serving as excuses to evade accountability and delay service provision to individuals and citizens (Zaoui, Boudaoud, & Hasseb, 2021).

-Excessive complexity

Constant specialized intricacies and deficient support can block advanced exchanges and administrations. These issues incorporate discontinuous availability issues, trouble in perceiving electronic marks, and moves in transferring the essential records to get administrations. Restricted computerized education abilities keep numerous clients from finishing electronic structures and going through with authoritative exchanges completely and dependably, as most authority sites are not easy to understand enough. Indeed, even in nations that have gained huge headway in computerized change, clients frequently need help to get to remote administrations. For instance, concentrates on show that 71% of clients in Western Europe need support and 78% in the UK. Inventive arrangements are being created to help clients of policy management sites and keep digitization from turning into a boundary to getting to administrations. These arrangements are especially urgent for country and far off regions, where occupants frequently face difficulties in enlisting on sites committed to acquiring archives, backing, or administrations from authoritative authorities. (Fund, 2018) Accordingly, it is important to distribute assets and satisfactory measures to upgrade correspondence and collaboration among clients and different public assistance gateways. While this is the essential obligation of the public authority, non-legislative associations likewise play a part to play in bringing issues to light, backing, and preparing to advance a culture of computerized proficiency and public advantage.

2.4. The potential of digitization to enhance public service in Algerian administration:

Digitization has colossal abilities for smoothing out managerial work. Nonetheless, it is important to recognize the going with dangers and moves to proactively change them into amazing open doors through which we can completely profit from the benefits of computerized innovation by: (Selma & Adel, 2021)

-Digital Justice

As we move towards a computerized society, tending to the developing and steady advanced split between communities is vital. In spite of the Algerian government's endeavors, the variations in admittance to great hardware and quick web keep on enlarging, abandoning weak gatherings like people with handicaps, the old, ladies, youth, and those living in neediness. To overcome this issue, new measures should be taken, including growing admittance to fast web and guaranteeing nature of administration in this field. It is vital for make man-made consciousness more open; foster easy to understand portable applications, and imaginative computerized frameworks that unmistakably affect clients' lives. Moreover, public stages ought to be improved by offering specific electronic help and exhortation to guests looking for computerized public administrations.

-Advanced e-government

To enhance users' access to administrative services online, it is necessary to simplify the process for users by reducing the number of required steps, minimizing the necessary documents, and streamlining the involvement of different service departments. Developing

interoperable data platforms that enable the exchange of data and documents between various public administrations is also of utmost importance, along with improving transparency, maturity, and effectiveness indicators, and providing secure access to digital services.

-Administrative effectiveness:

Preparing for digital management requires a comprehensive organizational review that effectively addresses the challenges of digitization. This entails making profound changes to administrative structures, rather than settling for superficial updates to outdated devices. To achieve this, the government must establish specialized administrative departments for analysis, processing, programming, and maintenance operations. These departments should be responsible for technical issues related to the deployment of digital information and applications. Information skills should be a fundamental criterion in human resource recruitment. Additionally, digital professions that require specialized qualifications, such as information security, smart design, computing, information engineering, and big data analysis, should be promoted to ensure the availability of necessary competencies to adapt modern technology to administrative requirements. Comprehensive approval of administrative reforms is necessary to create the political, legislative, institutional, and financial conditions required for the digital transformation of management systems. This includes giving a physical character to administrative procedures and public services to simplify processes and enhance efficiency.

- *Politically*

To achieve successful digital transformation, it is necessary to develop an innovative strategy that benefits from lessons learned from previous experiences. This strategy should prioritize unifying the vision and accelerating implementation while ensuring seamless integration between digital solutions. Partnerships with the private sector are also essential to enhance digital economy indicators, facilitate collaboration between interests and public entities, and simplify data exchange between different administrations. To ensure digital sovereignty, it is necessary to develop a dashboard to monitor policies related to the dematerialization of public services, similar to the Digital Governance Indicator (DGI) in the Organization for Economic Cooperation and Development (OECD). This will help measure the effectiveness of digital technology in activating administrative modernization strategies. (Kanza & Soraya, 2022)

- *From a legislative perspective:*

To ensure successful digital transformation of the public sector in Algeria, it is necessary to enhance the legislative framework. This can be achieved through Law No. 20.364 concerning digital administration, which has not yet come into effect. This law aims to remove barriers that hinder electronic transactions and enhance the level of service digitization. Another important step is to initiate the establishment of a decree related to electronic signatures to secure administrative documents and increase trust and credibility in digital applications. Additionally, new decrees should be issued to regulate data exchange

processes between administrations, relieving users from producing documents already available in public administrations such as the General Directorate of National Security, health funds, social security, the Ministry of Justice, the Ministry of National Education, and others. (Statistics, MNS.gov, 2023)

- *At the institutional level*

To keep up with the fast pace of digitization, it is necessary to establish a higher authority responsible for coordinating the involvement of various stakeholders. This can be achieved by creating a specialized team, such as a joint ministerial committee, to lead organized workshops and unify efforts between all relevant departments and organizations. (Saida & Nassima, 2018) This committee should include representatives from various entities, such as the Ministries of Communication, Interior, Digitalization, Statistics, and the Information Authority, among others. There should also be a review of the overall governance of public services online, including the competencies and relationships between relevant ministerial sectors, particularly between the Ministry of Digitalization and Statistics and the Ministry of Interior. Despite its importance, these reforms alone will not be able to overcome the constraints that hinder the digital transformation of public administration in Algeria. To achieve this, it is necessary to implement a comprehensive set of measures to modernize and streamline the public sector. It is also essential to recognize the risks and side effects of digitizing public services on the fundamental principles of the public interest, such as continuity and equality. This would prevent online applications from becoming a means of privatizing administration and undermining public service. This is particularly important due to the technical and procedural complexities that limit user access and create spatial and social gaps, leading to the exclusion of a large sector of society from the benefits of digitization.

3. Discussion

This research focuses on the effectiveness of electronic digitization and the extent of its application in Algerian administration. Analysis E-digitization, or the process of integrating digital technologies into administrative processes, holds immense potential for improving public service within the Algerian administration. By leveraging digital tools and platforms, government agencies can streamline operations, enhance efficiency, and ultimately provide better services to citizens. However, the effectiveness of e-digitization in this context depends on several factors, including infrastructure, policy frameworks, and cultural attitudes towards technology adoption. In Algeria, as in many countries, transitioning to e-digitization can offer numerous benefits, one of the primary benefits of e-digitization is the ability to automate and streamline administrative processes. Digital platforms can facilitate the online submission of documents, requests, and applications, reducing the need for manual paperwork and streamlining service delivery. This can lead to faster processing times, reduced bureaucratic red tape, and improved overall efficiency within government agencies. Moreover, e-digitization can enhance accessibility and convenience for citizens. By offering online services, such as applying for permits, paying taxes, or accessing government information, individuals can interact with the government more easily and

conveniently, without the need to visit physical offices. This is particularly beneficial for citizens in remote areas who may face challenges accessing traditional government services. Additionally, e-digitization has the potential to improve transparency and accountability within the Algerian administration. Digital platforms can enable greater visibility into government processes and decision-making, allowing citizens to track the status of their requests or applications online. This transparency can help build trust between the government and the public and reduce opportunities for corruption and inefficiency.

Conclusion

Digital technology has become essential to include it in the core of the new workshops for public administration in Algeria. This includes implementing initiatives such as stimulating regional investment, reforming public institutions and enterprises, updating public infrastructure and local administration, and establishing the Unified Social Registry (RSU) as an information system that identifies individuals eligible for social support programs. The goal is to view digital transformation as a reflection of other forms of political, economic, social, and administrative transformation. Undoubtedly, information technology has made administrative procedures and access to public services easier and more cost-effective. However, digitization has become fertile ground for bureaucratic practices due to slow decision-making processes, expanding institutional frameworks, and complex communication systems. Therefore, it is necessary to create conditions for improving the quality of digital public services, including by accelerating the organizational transformation of public management systems involves reviewing structural and functional frameworks, managing human resources for digital transformation, and removing technical barriers to electronic services. This shift includes developing comprehensive digital solutions and recognizing civil society's role in embracing digital transformation. Ensuring digital justice requires fast internet, efficient devices, and fostering digital competencies. Efforts also focus on developing a cross-platform data operating system, establishing information exchange rules, and enhancing communication between portals. Continuous monitoring through regular reports evaluates service effectiveness based on accessibility, accuracy, innovation, justice, and suitability beyond quantitative measures.

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