

Article history (leave this part):

Submission date: 07.02-2026

Acceptance date: 24.05-2026

Available online: 10.06-2026

Keywords:

Digitalization, Administrative Corruption, High Commission for Digitalization, Governance, Transparency, Algeria

Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Competing interest:

The author(s) have declared that no competing interests exist.

interests exist.

Cite as (leave this part):

Hanan AbufaresElkhimy, (2024), Title, Journal of Science and Knowledge Horizons: 4(1), 283-293.

<https://doi.org/10.34118/jskp.v2i02.2727>The authors (2026). This Open Access article is licensed under a Creative Commons Attribution-Non Commercial 4.0 International License (CC BY-NC 4.0) (<http://creativecommons.org/licenses/by-nc/4.0/>). Non-commercial reuse, distribution, and reproduction are permitted with proper citation

The High Authority for Digitalization and its Role in Combating Administrative Corruption

1Dr. MOURAD KHELIFA .*Conferency Professor Class A Faculty of law and political sciences, University of Batna1.**Laboratory for Human Security Studies, University of Batna 1 (Algeria), Khelifa.mourad@univ-batna.dz*2Dr. KHENNOUCHE TAREK. *Faculty of law and political sciences, University of ChadliBendjedid – eltarf**Laboratory for Legal and Political Studies, University of Oum El Bouaghi (Algeria), t.khennouche@univ-eltarf.dz*3PhD,S. RESGUI BOUTHEYNA. *Faculty of law and political sciences, Laboratory of Contracts and Business Law University of**Sousse,(Tunisia), resguiboutheyna@gmail.comresgui.boutheyna@usousse.tn* <https://orcid.org/0009-0000-3590-231X> <https://orcid.org/0009-0009-3268-7023> <https://orcid.org/0009-0002-0660-1758>

Abstract:

The establishment of the High Commission for Digitization (HCD) under Presidential Decree No. 23-314 constitutes a major step toward modernizing public administration and combating corruption in Algeria. As a public institution under the supervision of the Presidency of the Republic, the HCD is tasked with developing and implementing the National Digitization Strategy in compliance with cybersecurity requirements. This study examines the preventive and corrective role of the HCD in addressing administrative corruption, based on the assumption that digitization enhances governance and transparency. It analyzes the Commission's organizational structure, strategic objectives, and key digital mechanisms, including service automation, electronic data exchange, and reduced human interaction. The study also identifies challenges such as resistance to change and cybersecurity vulnerabilities, concluding that the HCD's effectiveness depends on political will, institutional support, and sustained investment in human and technological resources.

*Dr. KHENNOUCHE TAREK

Volume: 6 / N°: 2 (2026)

Introduction

In recent decades, the world has witnessed a rapid technological evolution that has made digitization a fundamental pillar in strategies for modernizing governance systems and promoting transparency. International experiences have demonstrated that digital transformation represents an effective tool in combating administrative corruption, which is widely recognized as one of the main obstacles to achieving development in its various dimensions.

In this context, Algeria has established a special public authority under the supervision of the Presidency of the Republic—namely, the High Commission for Digitalization (HCD)—by virtue of Presidential Decree No. 23-314, in a move that clearly reflects the political will to leverage digital potential for public administration reform and performance improvement.

The strategic objectives of the High Commission for Digitalization (HCD) include formulating the national digitalization strategy, overseeing its implementation, and ensuring its alignment with cybersecurity requirements. Furthermore, the HCD is entrusted with proposing both legal and technical mechanisms necessary for the success of digital transformation.

Through these responsibilities, the Commission plays a central role in the prevention of administrative corruption, particularly by digitizing public services to reduce bureaucracy and limit direct interaction between civil servants and citizens. In addition, it promotes the use of electronic signatures and documentation, develops platforms for reporting corruption, and strengthens systems for financial, tax, and customs transparency.

However, it is important to highlight that the HCD faces several structural challenges—human, institutional, technical, and financial—including resistance to change within public administrations, weak digital infrastructure in certain regions, shortage of specialized human resources, and the high costs associated with maintenance and development.

Hence, the Commission's ability to achieve its goals remains highly dependent on the availability of strong political will, institutional and societal support, and sustained investment in technological and human capital.

Regarding the research problem, the escalating phenomenon of corruption—coupled with the evolving methods of committing such crimes and the widespread impact across sectors, especially public administration—requires Algeria to update its anti-corruption mechanisms in line with technological advancements. This imperative was embodied in the creation of the High Commission for Digitalization.

Therefore, this study seeks to address the following central question: **What is the actual role that the High Commission for Digitalization can play in combating corruption, and what challenges might hinder its efforts in**

utilizing digital transformation as an effective mechanism for good governance?

To simplify this central issue, the research breaks it down into the following sub-questions:

- What is the High Commission for Digitalization, and what are its main objectives?
- How does the HCD contribute to combating administrative corruption?
- What are the main challenges facing the HCD in ensuring the effective generalization of digitalization?

To answer the main question and the related sub-questions, this study adopts the hypothesis that the HCD aims to reduce human intervention and enhance control mechanisms, with the objective of consolidating digital governance and reinforcing transparency in public administrations, in alignment with the state's anti-corruption strategy—while acknowledging that various obstacles limit its effectiveness.

As for the research methodology, this study primarily relies on the analytical method, which enables a detailed analysis of the legal texts related to the High Commission for Digitalization. This method helps in understanding the legislator's philosophy and objectives and links them to the broader framework of anti-corruption and transparency promotion.

Moreover, it allows for an assessment of the strengths and shortcomings in the legal structure of the HCD and provides insights into its operational mechanisms within the administrative system. The analytical method also facilitates an evaluation of the extent to which the Commission's legal framework aligns with digital transformation requirements and the principles of good governance.

This is further supported by a descriptive approach that explores practical experiences and on-the-ground challenges to arrive at more accurate and objective findings.

Finally, the structure of the study is based on a three-part framework, outlined as follows:

- THE FIRST TOPIC: Framework of the High Commission for Digitalization
- THE SECOND TOPIC: The Practical Role of the High Commission for Digitalization in Combating Administrative Corruption

Methods and Materials:

This study is descriptive and analytical, relying on both quantitative and qualitative approaches to analyze the role of the *High Commission for Digitization (HCD)* in combating administrative corruption in Algeria. It seeks to deconstruct

the legislative and regulatory framework governing digitization and to assess its impact on the principles of transparency and integrity in public administration.

At the outset, the following research questions were raised:

→ What role does the High Commission for Digitization play in preventing and combating administrative corruption?

→ To what extent does digital transformation contribute to enhancing transparency and integrity within public institutions?

→ What are the main technical and administrative obstacles that limit the effectiveness of digitization in combating corruption?

→ How can digital governance mechanisms be activated to ensure the efficiency of preventive and control measures?

1- Analysis and Discussion of Results

This section is based on analyzing the results and comparing them with the legal and regulatory framework related to digital transformation. The findings were classified into sub-sections reflecting the effectiveness of the High Commission for Digitalization in combating administrative corruption and enhancing transparency and governance.

- Institutional Awareness of the Role of the High Commission for Digitalization:

Field data indicate that the Commission is still in the stage of establishing its administrative and media presence. This requires intensifying awareness efforts regarding its roles so that it may become a genuine national reference in leading digital transformation and combating corruption.

- Digital Transformation as a Mechanism for Promoting Transparency:

Digital transformation constitutes an effective tool to reduce administrative corruption by minimizing direct contact between employees and citizens, generalizing electronic services, and adopting shared databases between administrations.

- Technical and Organizational Obstacles:

The analysis revealed that the main challenges facing the digitalization process include:

- Weak digital infrastructure in some local administrations,
- Lack of qualified technical staff to manage digital systems,
- Absence of horizontal coordination among institutions in data exchange,
- Reluctance of some officials to abandon traditional paper-based systems.

These findings demonstrate that the obstacles are not only technical but also behavioral and organizational, stemming from resistance to change and the failure to integrate digital culture into daily administrative practices.

It can thus be inferred that the success of the High Commission for Digitalization in combating corruption necessarily requires parallel reforms in management and

human resources, embracing principles of continuous training and full digitalization of administrative processes.

- **The Role of the High Commission for Digitalization in Preventing Administrative Corruption**

Through the analysis of legal texts and participants' statements, it appears that the High Commission for Digitalization plays a central role in preventing corruption across three levels:

- **Strategic level:** Designing and implementing the national digitalization strategy in coordination with the Presidency and regulatory bodies.
- **Institutional level:** Monitoring digital transformation within administrations and evaluating performance through periodic reports.
- **Preventive level:** Contributing to the establishment of digital systems that enable tracking of administrative and public procurement processes, identifying sensitive areas that could foster corruption.

THE FIRST TOPIC: Framework of the High Commission for Digitalization

The significant attention devoted by the public authorities in Algeria to the process of digitalization, coupled with the personal supervision of the President of the Republic over its various stages, reflects a strong political will to achieve a comprehensive digital transformation in the country.

This commitment materialized through the establishment of the High Commission for Digitalization, entrusted with the mission of leading strategic projects and developing the National Digital Transformation Strategy "Digital Algeria 2030."(Melloud, 2024, p. p 1)

This strategy is built upon several core pillars encompassing infrastructure, human resources, digital governance, digital economy, and digital society, ensuring inclusiveness, social justice, transparency, and efficiency in management. It also accords particular importance to the legal and regulatory dimensions as well as digital security, considering both as fundamental pillars for protecting data and structuring the digitalization process.

Consequently, Algeria is steadily advancing toward building a modern digital state capable of keeping pace with global technological developments and achieving sustainable economic and social development.(Melloud, 2024, p. p 1)

To fully grasp the significance of this newly established institution, it is appropriate to first establish the theoretical foundation of the body by addressing its definition and legal nature, and then linking it directly to anti-corruption efforts through its strategic objectives and governance principles as reflected in the Commission's core missions .

First requirement: Creation and Legal Status of the High Commission for Digitalization

This section addresses the establishment and definition of the High Commission for Digitalization, followed by an examination of its legal nature and regulatory flexibility .

First: Establishment and Definition.

First section: Establishment and Definition

1.1-Establishment :

The High Commission for Digitalization was established by Presidential Decree No. 23-314 as a supreme body responsible for designing and implementing the National Strategy for Digitalization.(Melloud, 2024, p. p 1)

The significance of this Commission lies in its role as a link between the highest authority of the State and other governmental sectors, ensuring coherence in public policies related to digital transformation and the adoption of effective technological tools to combat corruption and promote transparency.

This regulatory framework finds its constitutional foundation in the provisions of the 2020 Constitution, which enshrined the principles of transparency, the right to access information, and the sound functioning of public services. Consequently, the High Commission for Digitalization is not merely a technical body, but rather an institutional embodiment of the State's political will to establish a modern administration grounded in the principles of good governance, aimed at ensuring efficiency, equality in access to public services, and societal oversight of government performance.

1.1- Legal Definition :

In this regard, Article 2 of Presidential Decree No. 23-314 stipulates that the High Commission for Digitalization is “a public institution of a special nature, endowed with legal personality and financial autonomy, placed under the authority of the Presidency of the Republic.”

second section: The Legal Nature and Organizational Flexibility of the High Commission

The fact that the High Commission is established as a “public institution of a special nature” grants it a distinctive status that differs from traditional public institutions. It enjoys administrative and financial flexibility that enables it to effectively carry out its missions, free from bureaucratic constraints.

The legal status conferred upon this body reflects the legislator's intent to make it a central institution of strategic importance, entrusted with leading the national digital transformation and overseeing related public policies. Its legal personality empowers it to enter into contracts and act on its own behalf before judicial and administrative authorities, while its financial autonomy allows it to manage its resources flexibly, away from traditional bureaucratic

limitations.(Article4 of explicitly defines the coordinating role of the High Commission for Digitalization among various sectors.)

2.1- Legal Personality and Financial Autonomy:

By granting the High Commission legal personality, the legislator enables it to conclude contracts and act under its own legal identity. Meanwhile, financial autonomy allows it to manage and allocate its resources to digitalization projects without waiting for complex ministerial procedures.

2.2- Presidential Supervision and Strategic Standing:

The direct attachment of the High Commission to the Presidency of the Republic reflects its strategic significance. This institutional positioning ensures it possesses the authority necessary to coordinate with various governmental sectors and overcome bureaucratic overlaps.

Moreover, its designation as a “High Commission” implies its elevated rank within the administrative hierarchy of the state.

second requirement: The Strategic and Governance Dimension of the Missions of the High Commission for Digitalization

This section will address the missions and prerogatives of the High Commission for Digitalization (**First section**), followed by the foundations of digital governance within the High Commission (**second section**).

First section: The Missions and Prerogatives of the High Commission for Digitalization

The need emerged to assign specific missions and precise prerogatives to a central authority capable of coordinating among various sectors and directing efforts toward a unified national vision. In this context, Presidential Decree No. 23-314 defined the functional framework of the High Commission for Digitalization, outlining its missions and prerogatives and granting it a strategic role that goes beyond mere planning to include supervision, evaluation, and oversight.

This makes it a cornerstone in building a modern digital administration.

The aforementioned decree precisely delineated the missions of the High Commission, particularly in Articles 4 and 5, which set the scope of its intervention at both strategic and operational levels.

1.1- Formulation and Implementation of the National Digitalization Strategy:

One of the core prerogatives of the High Commission is the formulation of the National Digitalization Strategy. It is responsible for designing a comprehensive vision for digital transformation that takes into account the specificities of each ministerial sector.

This process must involve both public and private stakeholders in defining the objectives of the strategy.

The role of the High Commission is not limited to drafting the strategy; it extends to monitoring its implementation through the assessment of sectoral action plans and ensuring their alignment with national orientations. Furthermore, the Commission prepares periodic reports based on quantitative and qualitative performance indicators, thereby proposing adjustments or corrective measures to ensure the achievement of the desired outcomes efficiently and effectively. (Article 4 of explicitly defines the coordinating role of the High Commission for Digitalization among various sectors.)

1.2- Strengthening Cyber security and Digital Sovereignty:

Cyber security constitutes a fundamental pillar of digital transformation, as no digital policy can succeed amid fragile information systems.

From this perspective, the High Commission is entrusted with ensuring the alignment of the national strategy with the requirements for protecting digital infrastructure, in coordination with the relevant security and technical bodies.

Its missions include identifying priority projects and mobilizing the necessary financial and human resources to ensure the continuous protection of the national cyberspace.

In this regard, the Commission contributes directly to the enhancement of digital sovereignty, understood as the State's ability to maintain control over its data and information systems independently of external dependence.

1.3- Development of Legal and Technical Frameworks:

The legislator recognizes that digital transformation is not limited to the technological dimension; it also requires a comprehensive legal and regulatory environment. Therefore, the High Commission has been granted the authority to propose laws and regulations that keep pace with digital advancements.

This includes legislation on personal data protection, electronic signature, digital payment, and e-commerce.

In addition, the Commission conducts forward-looking studies that enable the anticipation of future challenges in the digital domain and promotes scientific research and innovation as key drivers for developing local solutions and addressing technological challenges.

1.4- International Cooperation and Capacity Building:

Given the global nature of digital transformation, the High Commission for Digitalization is committed to remaining open to international experiences through cooperation with global institutions and organizations specialized in the digital field. This cooperation is reflected in partnerships for technology transfer, exchange of expertise, and participation in the development of international standards. The Commission also attaches particular importance to developing national competencies through continuous training programs and by supporting research and innovation centers. These efforts aim to empower Algerian human

resources to keep pace with the rapid changes taking place in the digital world.(Article4 of explicitly defines the coordinating role of the High Commission for Digitalization among various sectors.)

1.5- Leadership of Joint Strategic Projects:

One of the key prerogatives that distinguishes the High Commission for Digitalization is its ability to act as a central coordinator among various ministerial sectors. The legislator has entrusted it with leading major cross-sectoral strategic projects, such as the digitalization of civil status services, taxation systems, and the transition toward e-government.

It is also responsible for reviewing sectoral programs to ensure their coherence and complementarity, as well as for assessing their implementation according to unified standards.

This coordinating role reflects the strategic nature of the Commission and positions it as the national driving force behind Algeria's comprehensive digital transformation.(Article4 of explicitly defines the coordinating role of the High Commission for Digitalization among various sectors.)

second section: The Core Pillars of Digital Governance within the High Commission for Digitalization

The digital governance framework adopted by the High Commission for Digitalization is founded upon a set of fundamental principles that constitute the reference framework for the national digital transformation process. These principles grant the transformation an integrated institutional character that harmonizes strategic, operational, and technical dimensions.

The significance of these pillars lies in their dual function: they not only guide and structure digital initiatives but also establish a comprehensive system capable of adapting to the rapid and continuous changes within the digital environment.

2.1- Centralized Coordination and Sectoral Integration:

Centralized coordination constitutes one of the key pillars adopted by the High Commission for Digitalization in organizing the national digital landscape. The Commission acts as a reference authority responsible for coordinating among various ministerial sectors, public bodies, and institutions involved in the digital domain, with the aim of unifying visions and orientations while avoiding project duplication or conflict.

This coordinating role can be considered a decisive factor in achieving sectoral integration, particularly in large-scale, cross-sectoral digital projects. Such initiatives require a high degree of coherence to ensure effective implementation and to achieve the desired impact on public performance and the quality of services provided to citizens.(Article4 of explicitly defines the

coordinating role of the High Commission for Digitalization among various sectors.)

2.2- Transparency and Performance-Based Accountability:

The High Commission attaches great importance to the principle of transparency as a cornerstone of trust between the State and citizens. Its operations rely on a robust evaluation system built on both quantitative and qualitative indicators used to monitor the progress of sectoral plans and their alignment with the national digital strategy.

Moreover, the Commission is committed to issuing periodic reports that allow for tracking implementation stages and assessing outcomes, thereby enabling evidence-based decision-making and timely course correction when necessary. This approach effectively embodies the concept of accountability within the framework of good governance. (High Commission for Digitalization. Performance report on digital transformation indicators., 2023)

2.3- Digital Sovereignty:

Digital sovereignty constitutes one of the core strategic orientations of the High Commission for Digitalization. It aims to empower the Algerian State with full control over its digital space and data resources, thereby avoiding technological dependence on foreign entities — particularly in relation to vital services and sensitive systems.

This orientation is reflected through projects that seek to establish secure national digital infrastructures and to develop local solutions in the fields of cybersecurity, data storage, and privacy protection. The overarching goal is to preserve the independence of digital decision-making and to maintain control over sovereign informational resources.

2.4- The Participatory and Multi-Stakeholder Approach:

Digital transformation cannot be effectively achieved without the involvement of all relevant actors, both at the state and societal levels. Accordingly, the High Commission adopts a participatory approach that includes public administrations, the private sector, universities, research centers, and civil society organizations.

This inclusive framework contributes to the formulation of more pragmatic and comprehensive policies, while enhancing the dynamism of implementation by mobilizing diverse expertise and leveraging locally available innovations. In this way, digitalization becomes a truly national and collective project.

2.5- Legal Flexibility and Legislative Modernization:

Given the rapidly evolving and dynamic nature of digitalization, the High Commission places great emphasis on ensuring that the legal environment remains adaptable and up-to-date. To this end, the legislator continually reviews

and revises the existing legal and regulatory frameworks to ensure their alignment with emerging technological developments.

This process encompasses the modernization of laws relating to data protection, electronic signatures, digital payments, and e-transactions, thereby fostering a legal climate conducive to innovation and ensuring the protection of digital rights for both individuals and institutions.

2.6- Digital Innovation and Foresight:

The High Commission's work also rests upon innovation as a principal driver for the development of local digital solutions and the effective management of technical challenges. Furthermore, it adheres to a foresight-based approach through the production of analytical and predictive studies that enable anticipation of future digital transformations and proactive preparation for them.

This strategic vision is embodied in the support provided to research and innovation centers and in the encouragement of domestic technological development, thus enhancing the State's readiness to keep pace with regional and global digital transitions within an ever-changing international environment.

THE SECOND TOPIC: The Practical Role of the High Commission for Digitalization in Combating Administrative Corruption

Among the most serious phenomena threatening the effectiveness of government institutions and undermining citizens' trust in the state is administrative corruption.

This scourge leads to the waste of public resources, obstructs economic and social development, and erodes the principles of transparency and good governance. In response to these challenges, Algeria has adopted digital transformation as one of the most modern and effective mechanisms to combat corruption—primarily by reducing human intervention in administrative transactions and promoting digitalization tools as instruments of transparency and oversight. (Dilem Jamila, 2024, pp. pp. 27–40)

In this regard, Ms. Mariem Benmouloud, the High Commissioner for Digitalization, affirmed that the National Strategy for Digital Transformation is now complete. This strategy aims to redefine traditional management models and adopt an institutional approach grounded in transparency, the eradication of bureaucracy, and the expansion of equal access to information, thereby contributing to the improvement of public service quality. (Melloud, 2024, p. p 1)

This section will address, in Subsection One, the digital mechanisms implemented to combat corruption, and in Subsection Two, the impact of digital transformation on indicators of integrity and administrative accountability.

First requirement: Digital Mechanisms Implemented to Combat Corruption

The High Commission for Digitalization plays a pivotal role in the process of administrative reform in Algeria, as digitalization has become a strategic and

indispensable option to confront the challenges posed by traditional bureaucracy and practices of administrative corruption.

The transition toward digital governance reduces direct human intervention in administrative procedures and transactions, thereby limiting opportunities for favoritism and bribery, while reinforcing the principles of transparency and accountability in public administration.

Moreover, digitalization serves as an effective tool to accelerate and simplify public services, ensuring greater equity in access, which in turn enhances citizens' trust in institutions and strengthens the foundations of good governance.

In this regard, the High Commission for Digitalization acts as the central authority responsible for formulating and overseeing the implementation of the National Digital Strategy across various governmental sectors, ensuring coherence and complementarity of efforts.

This role is reflected in the adoption of a set of advanced technological mechanisms and tools that constitute the core foundation for administrative reform and the fight against corruption. The most significant of these mechanisms can be highlighted as follows:

First section: Digital Mechanisms Implemented to Combat Corruption

1.1- Digitalization of Administrative Transactions:

The digitalization of public services constitutes one of the fundamental pillars of administrative reform, aimed at reducing bureaucracy and enhancing transparency within public institutions. The shift from traditional paper-based processes to interactive digital platforms represents a qualitative leap that improves the citizen-administration relationship, simplifies procedures, and ensures greater efficiency in public management. (Khadidja, 2023, pp. pp. 139–152.)

One of the most prominent advantages of digitalization lies in its capacity to curb administrative corruption. By minimizing direct interaction between civil servants and citizens through the use of digital government platforms, the likelihood of bribery, influence peddling, or favoritism is substantially reduced. Consequently, digital technology not only accelerates the provision of services but also becomes a preventive mechanism for good governance.

In this context, the Public Procurement Electronic Portal ((PEMP), 2023) (PEMP) stands as a leading example in Algeria of how digitalization contributes to these objectives. The platform:

2. Ensures that all announcements related to public procurement are published openly and transparently, thereby reinforcing equal opportunity among economic operators.
3. Enables both citizens and oversight bodies to monitor the entire process of tendering and contract execution, fostering a culture of accountability and reducing the potential for financial and administrative corruption.

4. Automates most administrative operations related to public procurement, such as electronic submission of bids and the opening of envelopes, thus minimizing the possibility of manipulation or illicit mediation.(Objectives)

Although the High Commission for Digitalization does not directly manage this platform, its role remains strategic and coordinating in shaping national digitalization policies. This includes integrating the field of public procurement within the broader vision of the digital transformation process.

The Commission works to coordinate intersectoral efforts and set technical and regulatory priorities, thereby enhancing the efficiency of such initiatives and linking them to broader objectives, such as improving the investment climate and strengthening public trust in administration.

1.2- Electronic Signature and Authentication

Among the most significant legal and technological tools is the electronic signature and authentication system, which ensures the validity of administrative documents and transactions within the digital environment.

This mechanism serves two essential purposes: first, verifying the identity of the parties involved; and second, preventing any attempt at forgery or manipulation of digital documents.

The electronic signature is not merely a substitute for the traditional handwritten signature—it is an advanced technical mechanism that relies on encryption methods and secure software to guarantee the integrity and reliability of electronic transactions.(Boukour Rachida, 2016, pp. pp. 64–80.)

The Algerian legislator has provided a robust legal framework for this system through Law No. 15-04 on Electronic Signature and Certification, which formally recognizes the legal validity of electronic transactions and grants them the same evidentiary weight as paper-based ones.

Article 2 of this law explicitly states that the electronic signature “has the same legal validity as the handwritten signature, provided that it meets the technical conditions established by regulation.”

This provision reflects the legislator’s intent to align national legislation with global developments in e-government and to ensure the legal credibility of digital documentation.(Fassiha Abdelkader, 2016, pp. pp. 95–107.)

The electronic signature thus represents both a legal and technological revolution, as it establishes the principle of digital trust, a prerequisite for the growth of electronic transactions. However, several scholars emphasize that the successful implementation of the electronic signature in practice depends largely on the availability of an adequate technological infrastructure and accredited certification authorities (Certification Authorities) capable of issuing and validating digital certificates that confer binding legal force.

Beyond its legal significance, the electronic signature promotes equality among users and removes temporal and spatial barriers by allowing citizens and economic operators to complete administrative or contractual procedures remotely, without physical presence or direct contact with public authorities.(Hassan Ben Aissa, 2021, p. p. 112.)

In conclusion, electronic signature and authentication are not merely technical innovations but foundational instruments for establishing legal and institutional trust in digital transactions.

They constitute an indispensable pillar for the success of the digital transformation process led by the High Commission for Digitalization in Algeria.

1.3- Electronic Complaint and Reporting Platforms

Among the most significant modern tools adopted by Algeria to combat administrative corruption and enhance transparency are electronic complaint and reporting platforms. These platforms serve as direct communication channels between citizens and oversight bodies, allowing individuals to safely and confidentially report any irregularities or misconduct.

They represent a qualitative leap in the relationship between the administration and the citizen, as they eliminate the bureaucratic barriers that once hindered the effectiveness of traditional reporting mechanisms, while simultaneously reinforcing the principle of citizen participation in monitoring public service performance.(Bouchari Djamel, 2020, p. p. 87.)

In Algeria, these platforms cover several vital sectors, the most prominent of which include:

5. The “Nechki” platform, established by the Ministry of Interior, Local Authorities, and Territorial Development, which enables citizens to file complaints regarding administrative mismanagement or poor service delivery.(Platform)
6. The “Ballaghna” platform, launched by the High Authority for Transparency, Prevention, and the Fight Against Corruption, serves as a dedicated tool for reporting financial and administrative corruption cases, thereby strengthening the efforts of supervisory and anti-corruption bodies.(High Authority for Transparency)
7. The “Ashki” mobile application, the first of its kind in the field of consumer protection, allows citizens to report commercial misconduct such as price manipulation, deceptive advertising, or fraud in trade practices.(Organization for the Protection and Guidance of the Consumer and His Environment)
8. The complaint platforms of the Postal and Electronic Communications Regulatory Authority, which enable users to submit grievances related to postal or telecommunications services, enhancing service quality and reducing potential abuses in this critical sector.(Communications)

Thus, the establishment of such digital complaint platforms constitutes a form of electronic social oversight, directly involving citizens in detecting corruption and providing an effective means to reduce the time and financial costs associated with traditional administrative procedures.

However, the success of these mechanisms largely depends on ensuring the confidentiality and protection of whistleblowers from any form of retaliation, as insufficient legal safeguards could discourage their use. (Dilem, 2024, pp. pp. 466–467.)

Accordingly, these platforms should not be viewed merely as technical reporting tools, but rather as foundational pillars of digital governance in Algeria. They contribute to strengthening transparency, empowering citizens to exercise their supervisory role, and providing an efficient mechanism to address manifestations of administrative corruption.

1.4- Financial and Accounting Transparency Systems

The High Commission for Digitalization has played a key role in directing the national digital transformation strategy toward the enhancement of digital financial systems, considering them an essential tool for consolidating the principles of transparency and oversight over public funds.

These systems enable real-time monitoring of public financial operations and provide accurate databases that help uncover any irregularities or violations during the stages of budget preparation and execution.

This orientation represents a direct response to Algeria's international commitments in the field of financial governance and anti-corruption—particularly the recommendations of the United Nations Convention against Corruption (UNCAC) regarding the development of electronic accounting and monitoring tools. Article 9, United Nations Convention against Corruption, New York, 2003.

This commitment has been materialized through the adoption of several specialized digital systems, notably:

- 9. SIGBUD (Système Intégré de Gestion du Budget de l'État):** an integrated system for managing the State's general budget. It allows for precise tracking of all financial operations related to budget preparation and execution, enabling better control over public expenditures and reducing the risks of manipulation or unjustified inflation. (Finance M. o., 2021, p. p. 15.)
- 10. GID (Gestion Intégrée de la Dépense):** a system designed to track the stages of government expenditure, from programming to implementation. It enhances both internal and external oversight of public finances and minimizes the likelihood of conflicts of interest or abuse of authority. (Finance G. I., 2022, p. p. 27.)

11. **JIBAYATIC**: an electronic taxation platform that allows citizens and economic operators to pay their taxes online. This reduces human intervention, limits opportunities for tax evasion and bribery, and facilitates more transparent and efficient tax collection monitoring.(Finance G. I., 2022, p. p. 27.)
12. **SINIACE (SystèmeIntégré des Informations des Activités de Contrôle des Douanes)**:a system used in the customs sector to electronically monitor customs transactions. It contributes to simplifying procedures and reducing direct interactions between customs officers and operators, thereby serving as an effective mechanism for combating administrative corruption in this sensitive area.(Customs, 2022, p. p. 9.)

Accordingly, the integration of these digital systems into the management of public finances represents a qualitative leap in the trajectory of financial oversight, as they enhance electronic tracking mechanisms and minimize opportunities for human interference. However, some experts point out that their effectiveness remains contingent upon their integration with the existing legal and regulatory framework, since the lack of coordination between financial and control institutions may limit the positive impact of these tools.(Boubaker, 2025, pp. pp.13–24 .)

In conclusion, these digital systems should not merely be viewed as technical mechanisms for simplifying financial procedures, but rather as regulatory and reformative instruments that place the High Commission for Digitalization at the heart of Algeria’s fight against financial and administrative corruption.

1.5- Digital Identity Management

The Digital Identity System plays a crucial role in significantly reducing opportunities for administrative fraud by mandating the registration of citizens and public officials within a unified central database.

This database securely stores essential and biometric information—such as fingerprints, facial images, electronic signatures, and civil data—thereby ensuring accurate and immediate identity verification when conducting any administrative or financial transaction.

This system establishes both a technical and legal mechanism for tracing administrative accountability, as every step or transaction is digitally recorded, making any attempt at forgery or manipulation easily detectable and retrospectively verifiable.(Boukhenfer, 2023, pp. pp. 96-109.)

Moreover, the system allows for the near real-time identification of irregularities, whether individual or institutional, thereby enhancing the effectiveness of administrative oversight and reinforcing the principles of transparency and integrity in official interactions.

This constitutes a fundamental factor in restoring public trust in governmental institutions, as all operations linked to a citizen’s digital identity

become subject to continuous technical and legal audit, thus enshrining the principle of accountability and contributing to the improvement of public service quality.(Masouda, 2020, pp. pp. 133–154.)

second section:The Impact of Digital Transformation on Indicators of Integrity and Administrative Accountability

2.1- Enhancing Administrative Transparency through the Digitization of Sectoral Procedures

The integration of digitalization into public service sectors has led to a remarkable improvement in the clarity of administrative procedures, thereby reducing opportunities for corruption arising from administrative ambiguity. This impact is particularly evident across several key sectors of the state:

- Judicial Sector:

Digitalization has strengthened the principle of transparency through the launch of the Ministry of Justice’s electronic portal, which allows litigants to track their cases remotely, access court rulings, and submit petitions online. This system limits personal interference and eliminates informal mediation practices.(Justice, Official Electronic Portal: www.mjustice.dz, E-Services Section, , 2024)

- National Education Sector:

Significant progress has been recorded through the digital platform for human resource management (amatti.education.gov.dz), which replaced the outdated paper-based system that often-facilitated favoritism in recruitment and promotion. The platform now serves as a digital reference point that enables the tracking of each employee’s career path and promotion history, thereby reducing the administrative gaps that were once exploited to justify unlawful practices.(Education, User Guide for the Digital Platform Dedicated to Human Resources Management, Algeria, ., 2023)

- Higher Education Sector:

The adoption of the PROGRES system represents a comprehensive digital platform for managing students’ academic life. It enables student registration, grade tracking, and the submission of appeals, thus creating a balanced relationship between the administration and students and promoting academic transparency.(Ministry of Higher Education and Scientific Research, 2022)

2.2- Strengthening Administrative Accountability through Digital Documentation and Real-Time Tracking

Digitalization has established clear principles of administrative accountability by ensuring that every digital transaction within the system is traceable and directly linked to the identity of the administrative actor. This has significantly reduced opportunities for manipulation and increased levels of accountability.

- Health Sector:

Digital platforms have been developed to manage patient appointments within public hospitals, thereby reducing queues and eliminating prior manipulation in surgery scheduling or treatment prioritization. Moreover, each medical and administrative action is digitally recorded, enabling direct accountability of healthcare professionals or administrators in the event of misconduct. (Ministry of Health, 2023)

- Higher Education Sector:

This concept is reflected through the digitization of staff and faculty evaluations, which relies on periodic electronic assessment forms linked to academic and administrative performance indicators. This reinforces a data-driven culture of objective evaluation.

2.3- Promoting Integrity by Reducing Human Interaction and Automating Service Delivery

The less direct contact exists between citizens and the administration, the lower the likelihood of administrative corruption. Digitalization thus serves as an effective mechanism to dismantle bureaucratic routines that foster favoritism and bribery.

- Education Sector:

The digital system for student registration and transfer has prevented manipulations that were previously common in student placements, ensuring that assignments are now made automatically according to objective scientific, technical, and organizational criteria.

- Judicial Sector:

Lawyers and litigants can now schedule hearings and receive notifications remotely, without the need to visit the courthouse in person. This has curtailed the influence of intermediaries who previously delayed or expedited certain cases through illegal means.

2.4- Linking Responsibility to Accountability through Integrated Digital Systems

With the digitalization of numerous public sectors, it has become possible to compare the performance of different administrative bodies using clear statistical and temporal indicators.

For instance, the SIGBUD system in the Ministry of Finance enables the daily monitoring of public expenditure and links each disbursement to the identity of the authorizing officer, thereby establishing a solid foundation for accountability before oversight institutions, High Authority for Transparency and the Prevention of Corruption, Annual Report on Digital Reporting Mechanisms, Algeria, 2023.

In universities, digital correction systems and online teaching platforms now allow for continuous tracking of academic performance at both departmental and

individual levels. This makes it possible to distinguish high performers from underachievers and to tie outcomes directly to professional evaluations.

second requirement: Challenges, Obstacles, and Prospects for Strengthening the Role of the High Commission for Digitalization

Despite the considerable efforts and advanced digital mechanisms adopted by the High Commission for Digitalization—such as the national digital identity system, financial monitoring tools, and electronic complaint platforms—these reforms still face a series of challenges that may hinder the achievement of the strategic objectives sought in combating corruption and promoting good governance.

The success of digitalization in public administration is not limited to the technical dimension alone; rather, it depends on a set of structural and institutional factors, including the level of human resource training, the readiness of digital infrastructure, and citizens' awareness of the importance of using these platforms. (Amar Iman, 2025, pp. pp. 348–361.)

First section: Technical and Human Challenges Hindering the Full Activation of the Commission's Role

One of the key issues lies in the coordination between institutional actors. The lack of harmony among ministerial sectors may result in duplication of efforts or overlapping competences, which in turn weakens the effectiveness of the adopted measures. Furthermore, resistance to change within certain administrations, coupled with concerns regarding data protection and network security, represents major obstacles to the smooth transition toward e-governance.

Additionally, ensuring sustainable financing and continuous monitoring of digitalization projects remains a decisive factor, particularly given the limited budgets allocated to this sector. Consequently, the challenges faced by the High Commission for Digitalization are not merely technical barriers but encompass broader issues related to governance, organizational culture, and cybersecurity. Addressing these challenges requires an integrated approach combining legal and institutional reform with technological development. (Abdelkader, 2024, pp. pp. 84–99.)

1.1- Institutional Inertia:

Resistance to change represents one of the main obstacles encountered by the High Commission for Digitalization in implementing its strategies. Some employees express apprehension toward moving away from traditional administrative practices that have been entrenched for decades. This reluctance largely stems from a lack of basic digital skills and the inadequacy of training programs designed to enable civil servants to adapt to the new working environment.

The transition from paper-based to digital administration is not simply a matter of introducing modern tools—it is a profound institutional reform requiring a comprehensive restructuring of work processes and a redistribution of roles and responsibilities. This can generate anxiety among certain administrative groups who fear losing their professional standing or failing to adapt to rapidly evolving technological changes.

Institutional inertia also manifests through internal obstruction of digital projects, where traditional bureaucracy becomes a resistance force that slows down transformation. Overcoming this requires a dual approach: (i) implementing continuous professional training programs focused on digital competencies, and (ii) promoting an organizational culture based on openness, innovation, and adaptability.

This ensures that change originates internally rather than being imposed from above, thus guaranteeing the sustainability and integration of digitalization strategies across administrative structures. (SaraaSouad, 2025, pp. pp. 179–188.)

1.2- Organizational Issues:

Effective coordination among government sectors is a prerequisite for successful digitalization, as it is a cross-sectoral process requiring legal, administrative, and technical coherence. However, reality reveals the persistence of fragmented legal and regulatory frameworks governing each sector separately, creating a complex environment that hinders seamless data exchange. (Naamouni, 2020, pp. pp. 557–561.)

For example, personal data protection standards may differ from one sector to another, or authentication procedures may vary between institutions, leading to administrative inconsistency and the emergence of loopholes that could be exploited to obstruct digital transformation.

Such organizational issues undermine the principle of system interoperability and prevent the establishment of centralized data repositories shared across sectors, thereby reducing digital projects to isolated sectoral initiatives. Addressing this requires the development of a unified legal and regulatory framework that ensures system compatibility and secure data exchange under common cybersecurity and privacy standards.

Moreover, establishing a central coordinating authority tasked with aligning sectoral legislation with national digitalization policies would prevent such fragmentation from impeding the strategic objectives of the High Commission for Digitalization. (Naamouni, 2020, pp. pp. 572–573)

1.3- Technical Challenges:

Rapid technological progress poses significant challenges for public institutions that often suffer from a shortage of specialized personnel. Reliance on outdated or incompatible information systems creates a digital gap between local

capabilities and the technical standards imposed by the digital era. This gap is not only material—related to hardware and software—but also human, tied to the training of professionals capable of managing, maintaining, and upgrading such systems.(Boukasem, 2025, pp. pp. 20–41.)

Furthermore, the absence of robust digital infrastructure—such as data centers and high-speed communication networks—exacerbates these technical challenges, making the implementation of national digital projects prone to delay or partial failure.

The fast evolution of artificial intelligence, blockchain, and cloud computing technologies also demands that public administrations keep pace with innovation to prevent obsolescence of digital initiatives.

Hence, overcoming these challenges requires adopting a national strategy focused on developing technical expertise, upgrading infrastructure, and continuously modernizing digital systems in line with global advancements.

1.4- Public Policy Challenges:

In Algeria—as in many developing countries—digitalization is often perceived as a “magic tool” capable of instantly resolving administrative inefficiencies and institutional corruption. However, such a view may prove risky if not grounded in a comprehensive understanding of the technical, legal, and organizational dimensions of digital transformation.

Policy-makers frequently emphasize declared objectives such as transparency and efficiency while overlooking essential implementation requirements, including digital infrastructure, the legal framework governing electronic transactions, and continuous staff training.

Moreover, the absence of an integrated vision of digitalization as a complex institutional process—rather than a mere technological project—leads to ambitious yet ineffective programs.

Large-scale digital projects may be launched without feasibility studies or risk assessments, resulting in resource wastage and limited impact. Therefore, it is imperative to integrate digitalization into public policy as a long-term strategic choice, based on sustained institutional coordination and a clear, technically and legally grounded vision.

1.5- Resource Constraints:

Financial and human resource limitations remain among the most significant challenges facing digital transformation projects in Algeria. Digitalization is not a simple technical process but a complex, multi-level investment endeavor.(Aïssaoui Abdelnour, 2023, pp. pp. 9–25.)

Financially, public institutions require substantial budgets to develop digital platforms, secure them against cyberattacks, and ensure their maintenance.

However, budgetary constraints often cause project delays or incomplete implementation.

From a human perspective, the success of digitalization largely depends on the availability of specialized expertise in ICT, which public institutions often lack due to brain drain toward the private sector or abroad, as well as the absence of continuous training programs.

To address these challenges, a gradual, priority-based approach is required—focusing first on sectors with direct societal impact (e.g., health, education, justice, and public procurement)—while ensuring sustainable financing and the development of specialized digital skills capable of steering the national transformation process.

second section: Prospects for Strengthening the Role of the High Commission as a Preventive Shield Against Corruption

Given the technical, human, and organizational challenges outlined above, it becomes crucial to reorient the role of the High Commission for Digitalization—from merely coordinating digital initiatives to becoming a central actor in the national anti-corruption framework. This transformation requires a multidimensional approach based on developing digital legislation, integrating artificial intelligence, and strengthening partnerships with oversight bodies to detect and address early signs of corruption.

2.1- Legislative Foundations for Preventive Governance:

The legislative framework constitutes a cornerstone for enhancing the Commission's effectiveness in combating corruption. Existing laws must be updated to incorporate digitalization into public anti-corruption strategies by enacting new regulations that oblige public institutions to adopt transparent, auditable digital systems. (Concerning Electronic Signature and Certification, Official Gazette of the People's Democratic Republic of Algeria, 2015)

Furthermore, expanding the legal use of electronic signatures and authentication would ensure the credibility of administrative transactions. Regulatory texts should also institutionalize open data principles, encouraging citizens and civil society actors to monitor public sector performance through digital platforms. (Justice, Digitalization of the Judicial Process, 2022)

For instance, in the judicial sector, digitizing case files and linking them to judicial databases can help prevent conflicts of interest and procedural manipulation, thereby reinforcing public confidence in the justice system.

2.2- Partnership with National Anti-Corruption Bodies:

Enhancing the effectiveness of the High Commission in combating corruption necessitates establishing institutional partnerships with the High Authority for Transparency and the Prevention of Corruption, the Court of Accounts, and various sectoral oversight bodies.

These partnerships should focus on real-time information sharing, coordination of digital investigations, and the development of joint digital operation centers to monitor high-risk transactions and public procurement activities.

For example, in the health sector, a shared platform could be established linking the Ministry of Health and the High Commission to monitor requests for medical equipment, verify invoices against reference prices, and prevent inflated billing or procurement fraud.(Health, 2023)

2.3- Leveraging Artificial Intelligence for Early Detection of Corruption:

Artificial intelligence (AI) represents a powerful tool for predictive analysis and early detection of corruption patterns within institutions. AI algorithms can detect anomalies in financial and administrative management—such as repeated dealings with the same suppliers, inconsistent dates, or sudden data modifications.

Such tools enable the High Commission to issue early warnings and alert oversight authorities to potential risk areas.

A practical example lies in the higher education sector, where AI could monitor recruitment processes or research budget allocations to identify possible irregularities such as favoritism or inequitable distribution.(Ouqabi, 2023, pp. pp. 198–209.)

2.4- Strengthening Social Oversight through Interactive Platforms:

Digital civic oversight is a key element of corruption prevention, as it enables citizens to report administrative misconduct securely and effectively. The High Commission, in cooperation with line ministries, could develop interactive platforms allowing citizens to evaluate public services, access integrity indicators for each institution, and submit feedback or complaints regarding administrative performance.

In the education sector, for instance, a platform could enable parents to report irregularities in textbook distribution or school meal management—enhancing transparency and fostering public participation in daily oversight.(Education, Report on Governance in Educational Institutions,, 2023)

2.5- Automating Internal Control and Smart Auditing:

The High Commission can play a leading role in automating internal control mechanisms across public administrations by developing digital tools that continuously analyze administrative and financial data to detect signs of irregularities or manipulation. These systems can generate periodic evaluation reports based on Digital Integrity Key Performance Indicators (KPIs) that update automatically.

In the taxation sector, for example, AI technologies could analyze tax declarations to identify patterns indicative of evasion or manipulation and automatically refer them to financial inspection teams.(Taxes, 2024)

Conclusion:

It can be asserted that digital transformation is no longer a secondary option but has become a strategic necessity to meet the requirements of modern governance and to strengthen the integrity of public administration. In this context, the establishment of the High Commission for Digitalization in Algeria represents a significant step toward reducing bureaucratic practices and combating administrative corruption.

This is achieved through the formulation of a comprehensive national vision for digital transformation and the activation of technological and legislative mechanisms capable of consolidating the principles of transparency and efficiency.

The study revealed that this Commission has become an institutional cornerstone for advancing administrative reform and achieving sustainable development, despite the structural, organizational, and technical challenges that persist.

Based on the findings of this research, several key results and recommendations can be summarized as follows:

Findings:

- 1. Digitalization as a central mechanism for good governance:** The results demonstrated that digitalization reduces direct human intervention and provides open data systems, thereby enhancing transparency and limiting opportunities for corruption.
- 2. Activation of multiple digital tools:** The implementation of administrative digitalization, electronic signature and authentication, digital corruption-reporting platforms, and financial monitoring systems has significantly reduced the scope for administrative and financial manipulation.
- 3. Persistence of institutional and infrastructural challenges:** Institutional rigidity, insufficient digital competencies, and disparities in digital infrastructure between urban and rural areas remain major barriers to achieving comprehensive digital transformation.
- 4. The necessity of sustained political commitment:** The success of the national digitalization strategy depends on continuous political support, effective institutional coordination, and broad participation from all stakeholders—governmental, civil society, and the private sector.
- 5. The citizen as a digital partner:** Digital platforms have demonstrated that citizen participation in community oversight has become a key component in strengthening accountability and limiting administrative corruption.

Recommendations:

1. Enhancing human capacity Establish continuous training programs for public employees in digital technologies and integrate digital culture into administrative training policies.
2. Developing digital infrastructure Invest in high-speed internet networks, particularly in remote and border regions, to ensure digital equity in access to public services.
3. Activating and updating the legislative framework Review and modernize legal texts related to digital transactions and electronic signatures to align with technological developments and cybersecurity standards.
4. Engaging civil society Empower civil society organizations with digital monitoring tools and expand their role in promoting a culture of digitalization and anti-corruption awareness.
5. Encouraging public-private partnerships Leverage the technical expertise of the private sector in developing, maintaining, and upgrading digital platforms to ensure sustainability.
6. Adopting a gradual approach Focus initially on digitalizing sectors most vulnerable to corruption—such as public procurement, customs, and taxation—before expanding toward comprehensive digitalization across all sectors.
7. Raising public awareness Launch national campaigns to highlight the importance of digitalization in combating corruption and to promote awareness of reporting channels for unlawful practices.

Références

(PEMP), P. P. (2023). <https://marches-publics.gov.dz/>.

23-314, P. D. (2023). Article 4 of explicitly defines the coordinating role of the High Commission for Digitalization among various sectors.

Abdelkader, M. (2024, 1). Challenges of Digitalizing the Health Sector in Algeria. *Journal of Environmental Studies and Sustainable Development*, 3(1), 84–99.

Aïssaoui Abdelnour. (2023, 12). Obstacles to the Digitalization of Algerian Public Services. *Journal of Law*, 12(2), 9–25.

Amar Iman, A. C. (2025, 3). Difficulties and Challenges in Facing Digital Transformation in Algeria: A Case Study. *Algerian Journal of Public Finance*, 15(1), 348–361.

Boubaker, B. E.-M. (2025). The Contribution of Digital Governance in Supporting Digital Transformation to Improve the Quality of Financial Performance. *Journal of Accounting and Financial Studies*, 11(1), 13–24.

Bouchari Djamel. (2020). Digitalization and Governance in Algeria: A Legal and Administrative Approach. *Journal of Legal Studies*, (12), 87.

Boukasem, A. (2025, 10). Electronic Transformation as a Strategic Option and a Necessity for Reforming the Algerian Administration. *Algerian Journal of Public Policies*, 8, 20–41.

- Boukhenfer, Z. (2023, 3 18). Digital Identity Management and the Challenges of Reputation, Privacy, and Cyber Intrusion: GAFAM and the State in the Face of Digital Sovereignty Challenges Digitization. *Journal for Media and Communication Studies*, 3(1), 96-109.
- Boukour Rachida. (2016, 12). Electronic Signature in Algerian Legislation: A Comparative Study. . *El Oustadh Al-Bahith Journal for Legal and Political Studies*, 1(4), 64–80.
- Communications, R. A. (s.d.). Complaints Platform. algeria. Récupéré sur <https://www.arpce.dz/ar/claim>.
- Customs, G. D. (2022). *Introductory Brochure on the SINIACE System*. Algeria.
- Dilem Jamila, B. A. (2024, 12). The Role of Digitalization in Combating Administrative Corruption within Public Services. *Journal of Social and Human Sciences*, Vol. 25, No. 02, 25(02), 27-40.
- Dilem, J. B. (2024, 12). The Role of Digitalization in Combating Administrative Corruption within Public Services. *Journal of Social and Human Sciences*, 25(2), 466–467.
- Education, M. o. (2023). *Report on Governance in Educational Institutions*,. Algeria. Retrieved from <https://www.education.gov.dz/>
- Education, M. o. (2023). User Guide for the Digital Platform Dedicated to Human Resources Management, Algeria, . Algeria.
- Fassiha Abdelkader. (2016, 9). (2016) The Signature and Its Role in Evidence. Vol. 1, No. 3, September. *Journal of Legal and Social Sciences*,, 1(3), 95–107.
- Finance, G. I. (2022). *Report on the Implementation of the GID System in the Oversight of Public Expenditure*. Algeria.
- Finance, M. o. (2021). Guide to the SIGBUD System for the Management of the State Budget,. Algeria.
- Hassan Ben Aissa. (2021). Law and Technology: A Reading in Electronic Signature. *Algerian Journal of Law and Technology*(5), 112.
- Health, M. o. (2023). *Annual Report on Public Procurement in the Health Sector*. Algeria. Retrieved from <https://www.facebook.com/SanteDZA>
- High Authority for Transparency. (n.d.). Balighna Platform, High Authority for Transparency, Prevention, and Combating of Corruption. algeria. Retrieved from <https://balighna.hatplc.dz/>
- (2023). *High Commission for Digitalization. Performance report on digital transformation indicators*.
- Justice, M. o. (2022). Digitalization of the Judicial Process. Algeria. Récupéré sur <https://tadjrib.mjustice.dz/login.php>
- Justice, M. o. (2024). Official Electronic Portal: www.mjustice.dz, E-Services Section, . Algeria.
- Khadidja, K. (2023, 6). Administrative Digitalization in Algeria: Between the Necessity of Transition and the Obstacles to Implementation. *Al-Mufakkir Journal*, 18(1), 139–152.
- Masouda, T. (2020, 8). Digital Identity: The Dilemma of Use and Privacy. *Journal of Social Change*, 5(2), 133–154.

- Melloud, M. B. (2024)., (2024) *The National Strategy for Digital Transformation in Algeria, Speech by the Minister of the High Commission for Digitalization, For a Digital Algeria 2030, Presidency of the Republic – High Commission for Digitalization, August, . Retrieved 01 03, 2026, from <https://hcn.dz/SNTN-Ar.pdf>.*
- Ministry of Health. (2023). *Ministry of Health, Report on the Digitalization of Public Hospital Services. Algeria.*
- Ministry of Higher Education and Scientific Research. (2022). National System “PROGRES”, Ministry Publications, . algeria.
- Naamouni, M. (2020). The Impact of Organizational Culture on the Success of Digital Transformation within the Institution. *Journal of the Institute of Economic Sciences, 23(2)*, 557–561.
- National Digitalization Strategy Presidency of the Republic of Algeria. (2023). Algeria.
- No15-04, L. (2015, 2 1). Concerning Electronic Signature and Certification, Official Gazette of the People’s Democratic Republic of Algeria. algeria.
- Objectives, P. F. (n.d.). <https://marches-publics.gov.dz/about>.
- Organization for the Protection and Guidance of the Consumer and His Environment. (n.d.). Nashki Application. Algerian. Retrieved from <https://apoce.org/%D8%AA%D8%B7%D8%A8%D9%8A%D9%82-%D8%A3%D8%B4%D9%83%D9%8A-achki/>.
- Ouqabi, A. (2023, 7). Algeria’s Strategy for Digitalizing Higher Education and Scientific Research. Herodotus. *Journal of Humanities and Social Sciences*, 198–209.
- Platform, M. o. (n.d.). “Nechki” Platform, Ministry of Interior, Local Authorities, and Territorial Planning, available. algeria. Retrieved from www.nechki.interieur.gov.dz
- SaraaSouad, B. H. (2025, 3). The Reality of Digitalization in Algerian Public Administration. Algerian. *Journal of Public Finance, 15(1)*, 179–188.
- Taxes, G. D. (2024). Guide to Combating Tax Evasion through Digital Systems, Algeria,. Algeria. Retrieved from <https://www.mf.gov.dz/index.php/ar/documentation-ar/grands-dossiers-ar/2173-2025-02-06-14-34-12>.