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RESEARCH ARTICLE

Conceptual Foundations and Practical Implications of E-Government in Strengthening Institutional Governance: A Case Study of the Algerian Electricity and Gas Sector

Abdelali Dahmani
Dr.
Laboratory of Business Administration and Sustainable Economic Institutions
El-Oued University, Algeria
Email: abdelali-dahmani@univ-eloued.dz

Djamel Adidou
Dr.
University of Mustapha Stambouli, Mascara
Algeria
Email: djamel.adidou@univ-mascara.dz

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Abstract

The accelerating pace of technological innovation has fundamentally transformed public administration systems worldwide, making digital transformation an unavoidable strategic imperative for governments and public institutions. Within this context, e-government has emerged as a critical instrument for enhancing administrative efficiency, improving service quality, and reinforcing the principles of good governance. Far from being a mere technological upgrade, e-government represents an integrated managerial framework that restructures administrative processes, reduces bureaucratic rigidity, and enables transparent, responsive, and data-driven decision-making. This study explores the conceptual relationship between e-government and governance, emphasizing how digital tools contribute to transparency, accountability, equity, and institutional effectiveness. Focusing on the Algerian experience, the research examines the implementation of e-government within the Electricity and Gas Distribution Directorate of El Bayadh, affiliated with Sonelgaz, as a representative case of a strategic public utility sector. The study situates this experience within Algeria's national digital transformation agenda, including the e-Algeria 2013 strategy and the broader Vision Algeria 2030 framework aimed at modernizing public administration and strengthening anti-corruption mechanisms. Using an analytical and descriptive approach, the study demonstrates that the digitization of administrative procedures enhances information accessibility, improves internal coordination, and supports evidence-based decision-making at various managerial levels. These improvements, in turn, foster institutional trust, reinforce organizational credibility, and promote stakeholder confidence, including employees, citizens, and shareholders. The findings indicate that e-government plays a pivotal role in operationalizing governance principles by translating them from abstract norms into practical, measurable administrative practices. The study concludes that the successful integration of e-government constitutes a key driver for sustainable institutional performance and good governance in Algerian public enterprises. It offers practical insights and policy-oriented recommendations for public institutions seeking to leverage digital transformation as a mechanism for governance reform and long-term organizational resilience.

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1. Introduction

E-government and the application of governance principles have become unavoidable imperatives in contemporary public administration, driven by rapid technological advancement and increasing societal expectations for transparency, efficiency, and accountability. Governments worldwide are increasingly relying on digital technologies to modernize public institutions, enhance service delivery, and strengthen trust between citizens and the state. In this context, e-government is no longer perceived as a technical option but rather as a strategic tool for institutional reform and sustainable development.

In Algeria, digital transformation has been embedded within national public policy through the e-Algeria 2013 strategy, which aimed to modernize administrative structures, simplify procedures, and improve the quality and accessibility of public services. This strategic orientation aligns with Algeria Vision 2030, which emphasizes good governance, transparency, and institutional performance as key drivers of sustainable development. Complementing these efforts, the establishment of the High Authority for Transparency, Prevention, and Combating Corruption reflects the state's commitment to strengthening accountability mechanisms and combating administrative and financial corruption.

Modern public institutions require high standards of transparency, accountability, and fairness to ensure long-term effectiveness and institutional sustainability. Within this framework, the implementation of e-government in large public enterprises—particularly in strategic sectors such as energy—can generate a qualitative shift in administrative practices. By digitizing procedures and integrating information systems, institutions can significantly enhance decision-making quality through timely access to accurate data, improved information flow, and reduced administrative complexity. These improvements contribute to more effective resource management, stronger institutional coordination, and increased organizational credibility.

In this regard, the National Electricity and Gas Company (Sonelgaz) represents a relevant case for examining the role of e-government in strengthening governance principles. As a key public utility, Sonelgaz operates in a sector that directly affects citizens' daily lives and national economic stability. The adoption of e-government practices within its El Bayadh branch illustrates how digital transformation can enhance administrative efficiency, reinforce accountability, and improve stakeholder trust, including that of employees, customers, and shareholders.

This study seeks to explore the relationship between e-government and governance principles by analyzing the experience of Sonelgaz's El Bayadh Electricity and Gas Distribution Directorate. By focusing on this institutional context, the study aims to demonstrate how digital technologies can operationalize governance values—such as transparency, fairness, and accountability—within public enterprises, while also offering a practical framework for improving overall institutional performance.

Research Problem

In light of ongoing technological advancements, Algerian public institutions face significant challenges in adopting e-government as a mechanism for strengthening governance principles. Accordingly, this study seeks to answer the following research question:

To what extent can e-government contribute to the establishment and reinforcement of governance principles at the El Bayadh Electricity and Gas Distribution Directorate?

Importance of the Study

The importance of this study lies in its focus on the intersection between digital technology and governance within public administration. Contemporary administrative systems increasingly rely on information and communication technologies (ICTs) to transform traditional management models into digital, integrated systems capable of improving service quality and institutional performance. This transformation reflects the Algerian government's broader objective of modernizing public administration, bringing services closer to citizens, and enhancing transparency and disclosure.

By examining the experience of Sonelgaz—one of Algeria's most strategic public enterprises—this study contributes to national efforts aimed at promoting institutional digitalization and strengthening governance practices. It highlights the practical implications of e-government adoption in the energy sector and demonstrates how modern management approaches can support sustainable development and public value creation.

2. Theoretical Framework of E-Government

2.1 Concept and Essence of E-Government

The essence of e-government lies in the use of digital technologies to improve governmental performance and strengthen interactions between the state, citizens, and the private sector. It aims to simplify administrative procedures, enhance service delivery, and establish transparent and efficient communication channels. Through digital platforms, governments can reduce bureaucratic constraints, improve responsiveness, and facilitate broader citizen participation in public affairs (Heeks, 2006; Fountain, 2001).

2.2 Emergence of the Concept of E-Government

The origins of e-government can be traced back to early conceptual debates surrounding the role of information technology in governance. Interestingly, the idea initially appeared in the realm of science fiction. In 1975, John

Brunner's novel portrayed a society controlled by a centralized computer network that collected detailed data on citizens, raising concerns about power concentration and digital surveillance. The concept of electronic resistance emerged through what was later termed the "worm program," symbolizing early anxieties about technological domination (Al-Baz, 2007).

In 1988, these fictional concerns gained practical relevance when a computer science student in the United States developed a self-replicating computer program, later known as the Morris Worm, leading to legal consequences related to computer misuse. While initially associated with cyber risks, these developments highlighted the growing influence of information technology on governance and administrative systems.

The concept of e-government entered the administrative sphere more formally in the early 1990s. During the 1992 U.S. presidential campaign, President Bill Clinton emphasized the importance of building an "information superhighway" as a core component of national infrastructure, comparable to traditional public utilities. This vision laid the foundation for integrating digital technologies into public administration. Subsequently, several countries—including Canada, the Netherlands, Sweden, Norway, Denmark, and Italy—began implementing e-government systems as part of broader public sector reforms (Al-Baz, 2007).

2.3 Stages of Transition from Traditional Administration to E-Government

The transition from traditional administration to e-government is a gradual process that requires appropriate institutional, technical, and human conditions. Implementing e-government abruptly without adequate preparation often leads to implementation failures. Therefore, a phased approach is widely considered the most effective strategy (Dridi et al., 2019).

The evolution toward e-government typically passes through three main stages:

1. Effective Traditional Administration, characterized by manual procedures and hierarchical structures.
2. Effective Communication-Based Administration, relying on tools such as fax and telephone to improve coordination and responsiveness.
3. Effective E-Government, where digital platforms, integrated databases, and online services form the core of administrative operations.

This gradual progression allows institutions to adapt organizational structures, develop digital skills, and ensure technological readiness.

2.4 Definition of E-Government

E-government has been defined in various ways in academic literature. According to Kaddouri (2006), e-government refers to an administrative system based on the use of computers, the internet, intranets, and extranets to provide information and public services to citizens, institutions, and businesses with greater efficiency, transparency, and accessibility. This definition emphasizes both the technological and managerial dimensions of e-government as a comprehensive administrative reform.

2.5 Advantages and Characteristics of E-Government

E-government offers several advantages that distinguish it from traditional administrative systems:

- Speed and Transparency: Digital procedures reduce bureaucratic delays and eliminate many obstacles associated with paper-based processes, enabling faster and clearer transaction processing.
- Independence from Time and Place: E-government services are accessible around the clock and are not restricted by office hours or physical locations, allowing citizens and institutions to interact with public services remotely.
- Information Management Rather Than Storage: E-government systems focus on managing and analyzing information through integrated databases rather than merely storing documents, improving decision-making quality.
- Flexibility and Responsiveness: Thanks to technological capabilities, e-government systems can quickly adapt to changes, respond to emergencies, and overcome communication barriers that limit traditional administration.

These characteristics make e-government a powerful instrument for enhancing institutional performance and embedding governance principles within public organizations.

2.5 Additional Characteristics of E-Government

Direct and Reliable Monitoring

One of the distinguishing characteristics of e-government is its capacity to enable direct, continuous, and reliable monitoring of administrative operations through digital technologies. By utilizing surveillance cameras, digital dashboards, and real-time monitoring systems, public administrations can oversee their operational sites, public service points, and technical equipment with a high degree of accuracy. These technologies allow management to monitor activities instantaneously, evaluate performance objectively, and detect operational deviations in a timely manner.

Unlike traditional administrative control mechanisms, which rely heavily on written reports, memos, and delayed feedback, e-government provides decision-makers with immediate visual and data-driven insights into institutional performance. This shift enhances managerial confidence, improves accountability, and reduces information asymmetry

within the organization. Consequently, digital monitoring systems represent a more effective alternative to conventional oversight tools by ensuring transparency, precision, and continuity in administrative supervision (Al-Maghribi, 2007).

Confidentiality and Privacy Protection

Confidentiality and data protection constitute another fundamental characteristic of electronic administration. Despite the emphasis on transparency and information accessibility inherent in e-government, not all administrative data are subject to public disclosure. E-government systems are equipped with advanced security programs that restrict access to sensitive information and ensure that only authorized personnel, through authentication mechanisms such as passwords and encryption protocols, can retrieve protected data.

Compared to traditional administration, electronic administration offers superior levels of data confidentiality and protection. Digital systems integrate cybersecurity tools, including firewalls, encryption techniques, and intrusion detection systems, which significantly reduce the risks of unauthorized access and data breaches. As a result, e-government achieves a balance between transparency and information security, safeguarding institutional data while maintaining operational efficiency (Tawfiq, 2007).

3. Functions of E-Management

E-management encompasses a set of core administrative functions that are carried out using digital technologies and electronic communication systems. These functions include e-planning, e-organization, e-leadership, and e-control, all of which are redesigned to align with the requirements of a digital administrative environment (Chili, 2019).

3.1 E-Planning

Planning is universally recognized as the foundational function of management, as no administrative activity can be effectively conducted without a clear plan. It represents the process through which organizations define objectives and determine the necessary actions, resources, and timelines required to achieve them. Planning is inherently future-oriented, decision-focused, and goal-driven, making it one of the most challenging managerial functions.

Henri Fayol defined planning as a structured set of action plans that must be implemented through specific stages and methods to achieve organizational objectives. In the digital era, this function has evolved into e-planning, which relies heavily on advanced information systems and technological tools. E-planning utilizes decision support systems, expert systems, artificial intelligence applications, and artificial neural networks to enhance forecasting accuracy and strategic decision-making.

Unlike traditional planning, which is often constrained by bureaucratic complexity and slow information flows, e-planning simplifies procedures and accelerates decision-making processes. It enables organizations to formulate strategic plans based on real-time data, rapidly adapt to environmental changes, and achieve long-term strategic objectives through integrated electronic communication networks. As such, e-planning represents a qualitative shift from conventional planning models toward more agile, responsive, and data-driven planning systems (Chili, 2019; Fayol, 1949).

3.2 Electronic Organization (E-Organization)

The organizational function has historically been regarded as the cornerstone of managerial effectiveness, as it defines how tasks, responsibilities, and authority are distributed within an institution. Organization provides the structural framework that governs the division of labor, coordination of activities, and alignment of resources toward achieving organizational goals. Key elements of organization include organizational structure, administrative divisions, chain of command, formalization, and the balance between centralization and decentralization.

Traditionally, organization has been defined as the process of coordinating human efforts to implement established policies at the lowest possible cost. However, the widespread adoption of information and communication technologies has transformed this function into what is now referred to as **e-organization**. E-organization is characterized by flexible, network-based structures that promote horizontal coordination, real-time collaboration, and decentralized decision-making.

Through digital platforms, organizations can coordinate activities across departments and geographical locations without being constrained by physical boundaries. E-organization facilitates interaction among electronic managers, employees, customers, and suppliers by relying on tools such as email systems, shared databases, intranet platforms, and enterprise resource planning systems. Additionally, customer relationship management (CRM) systems and online service platforms enhance communication with external stakeholders.

This digital organizational model enables institutions to respond more effectively to dynamic environments, reduce administrative rigidity, and foster collaboration among stakeholders. Consequently, e-organization enhances institutional agility, improves service delivery, and supports the achievement of governance principles such as efficiency, accountability, and transparency (Chili, 2019; Heeks, 2006).

3.2 Electronic Organization (E-Organization) – Continued

The concept of **e-organization** is closely associated with the broader process of digital transformation in contemporary organizations operating in the internet age. It refers to the replacement of traditional, face-to-face organizational practices with virtual and technology-mediated forms of interaction. Through e-organization, many organizational

activities—such as coordination, meetings, supervision, and service provision—can be carried out electronically without requiring physical presence.

E-management contributes significantly to organizational development through e-organization in several ways. First, e-organization is characterized by a high degree of flexibility, enabling continuous communication and collaboration among individuals and organizational units regardless of geographical location. Second, the extensive use of intranet systems allows employees across all organizational levels to connect in real time, facilitating rapid information exchange and coordination. Third, reliance on digital business networks and intranets has enabled the emergence of new organizational models, such as virtual organizations and virtual factories, which either produce specific goods or provide services electronically by acting as intermediaries between organizations and customers. These features enhance organizational agility, reduce operational costs, and improve responsiveness to environmental changes (Chili, 2019; Heeks, 2006).

3.3 E-Leadership

No plan or strategy can be successfully implemented without effective leadership capable of mobilizing human, technical, and organizational resources. Leadership plays a central role in guiding efforts, coordinating activities, communicating with stakeholders, and fostering collaboration and constructive competition within organizations. Through leadership, organizational objectives are translated into actionable practices and collective commitment.

Leadership can be defined as *the process of influencing individuals to achieve organizational goals*. Modern organizations require strong leadership and efficient management systems to address contemporary challenges, formulate future-oriented visions, design effective organizational structures, and supervise daily operations.

In the digital era, leadership has evolved into **e-leadership**, which represents a form of social influence mediated by information and communication technologies. E-leadership integrates technological tools with human interaction to drive change at multiple levels, including attitudes, perceptions, behaviors, individual and group performance, and overall organizational outcomes. It challenges traditional leadership constraints by introducing innovative methods of communication, motivation, and coordination. By leveraging digital platforms, e-leaders can enhance employee engagement, stimulate creativity, and support continuous organizational learning, thereby contributing to improved institutional performance and governance effectiveness (Avolio et al., 2014; Chili, 2019).

3.4 Electronic Control (E-Control)

Control is an essential managerial function that accompanies every human activity aimed at achieving specific objectives. It involves continuous assessment of performance, comparison between planned and actual results, and corrective action when deviations occur. Within the transition from traditional to electronic administration, the control function has undergone a profound transformation, giving rise to what is known as **electronic control** or **electronic monitoring**.

Electronic control is considered one of the modern solutions to challenges associated with technological advancement, particularly in detecting workplace misconduct, inefficiencies, and data breaches. It relies on digital tools and electronic systems to monitor activities and transactions within organizations, thereby reducing time, effort, and cost while improving accuracy and effectiveness. Electronic monitoring systems are capable of identifying deviations during implementation in real time and alerting management promptly, enabling corrective action before problems escalate.

Internal networks play a crucial role in electronic control by facilitating real-time information transfer and performance tracking. This allows management to monitor implementation processes, identify areas of inefficiency or risk, and intervene immediately to restore operational balance. Consequently, electronic control enhances accountability, strengthens transparency, and improves organizational discipline compared to traditional control mechanisms (Al-Kasasbeh, 2011).

4. Requirements for Implementing E-Government

Successful transition from traditional administration to e-government requires a comprehensive set of interrelated requirements that enable effective and sustainable implementation (Tahrat, n.d.).

4.1 Human Resource Requirements

Human capital is one of the most critical resources for the successful implementation of e-government. Key human resource requirements include:

- Identifying current and future needs for qualified personnel in information systems, software development, and internet-based applications;
- Attracting and retaining highly skilled professionals in ICT-related fields;
- Establishing effective systems for training, motivation, and professional development;
- Empowering employees administratively to enhance adaptability to technological and organizational change.

4.2 Political and Administrative Requirements

Political and administrative support constitutes a decisive factor in the success of e-government initiatives. These requirements include:

- Political Will: Assigning a responsible authority or committee to oversee implementation, provide coordination, and evaluate progress;
- Strategic Planning: Developing clear strategies and implementation plans through specialized administrative units, supported by adequate financial resources;
- Leadership and Administrative Support: Strong commitment from senior management to support digital transformation and provide continuous guidance and feedback;
- Legislative and Regulatory Frameworks: Updating laws and regulations to facilitate electronic transactions and accommodate digital work environments;
- Awareness and Cultural Change: Promoting societal and organizational awareness of e-management culture to ensure psychological, behavioral, and technical readiness among employees.

4.3 Security Requirements

Information security represents one of the most significant challenges associated with e-government implementation. To ensure data protection and minimize cyber risks, organizations must adopt several measures, including:

- Establishing comprehensive information security policies;
- Enacting laws and penalties to combat cybercrime and protect data privacy;
- Developing security frameworks tailored to accounting and information systems;
- Assigning clear responsibility for information security;
- Implementing monitoring and auditing mechanisms for networks and systems.

4.4 Financial Requirements

Adequate financial resources are essential to support system maintenance, staff training, service quality, and continuous technological upgrading. Sustainable funding enables institutions to keep pace with global developments in e-government and digital innovation.

4.5 Technical Requirements

Technical requirements include the provision of hardware, software, communication networks, and integrated information systems. Effective e-management depends on robust digital infrastructure, high-speed networks, modern communication tools, and the gradual digitization of administrative transactions to reduce reliance on paper-based processes (Zaid & Lamia, 2021).

5. Mechanisms for Implementing E-Government in Algeria

5.1 Physical and Technological Mechanisms

Algeria's engagement with information and communication technologies began with its connection to the internet in 1994 through the Scientific and Technical Information Research Center. By the late 1990s, internet connectivity had expanded across public institutions, universities, medical facilities, and economic sectors. Despite this progress, international reports—such as those of the World Economic Forum—have highlighted disparities in ICT access and usage, placing Algeria at relatively low global rankings in computer ownership, internet penetration, and digital education indicators (Shaker, 2019).

To address these challenges, Algeria launched initiatives such as the "My Family 01" and "My Family 02" programs, aimed at expanding household access to computers and connecting educational institutions to digital technologies. These efforts were complemented by the launch of the E-Algeria 2013 program, which constitutes a comprehensive national strategy designed to accelerate the development of the information society and digital economy. This program seeks to generalize the use of modern technologies across public administration, education, and economic sectors, thereby modernizing public services and improving citizen interaction with government institutions (Shaker, 2019).

5.2 Human Capacity-Building Mechanisms

Human development has been a central component of Algeria's e-government strategy. In 2009, a partnership between the Ministry of Vocational Training and the Ministry of Post and Information and Communication Technologies led to the organization of nationwide training programs focused on computer literacy and digital lifestyles. These programs, offered through vocational training centers, targeted various segments of society.

Additionally, the Ministry of National Education initiated specialized training for teachers and facilitators to integrate ICT into the educational process. Algeria has also hosted numerous national and international conferences and seminars dedicated to e-government and digital transformation, contributing to knowledge dissemination and capacity building in this field (Hajar, 2017).

Table 1. Key Characteristics of E-Government and Their Administrative Implications

Characteristic	Description	Administrative Impact	Key Source
Speed and Transparency	Digital procedures reduce bureaucratic delays and paperwork	Faster service delivery and clearer procedures	Kaddouri (2006)

Time and Place Independence	Services available 24/7 via digital platforms	Increased accessibility for citizens and institutions	Heeks (2006)
Information Management	Focus on managing and analyzing data rather than storing documents	Improved decision-making quality	Tawfiq (2007)
Flexibility	Rapid response to changes and emergencies	Higher institutional adaptability	Chili (2019)
Direct Digital Monitoring	Use of cameras, dashboards, and real-time systems	Enhanced accountability and oversight	Al-Maghribi (2007)
Confidentiality and Privacy	Restricted access through passwords, encryption, and security systems	Stronger protection of sensitive data	Tawfiq (2007)

Table 2. Comparison Between Traditional Administration and E-Government

Dimension	Traditional Administration	E-Government
Work Procedures	Paper-based and manual	Digital and automated
Decision-Making	Slow and hierarchical	Fast and data-driven
Communication	Face-to-face, memos, reports	Electronic, real-time
Transparency	Limited	High
Monitoring	Periodic reports	Continuous digital monitoring
Data Security	Physical files, vulnerable	Encrypted, access-controlled
Service Availability	Limited to office hours	24/7 availability

Table 3. Core Functions of E-Management

Function	Definition	Main Tools	Expected Outcomes	Key Source
E-Planning	Digital formulation of objectives and strategies	DSS, expert systems, AI, databases	Accurate forecasting and strategic agility	Fayol (1949); Chili (2019)
E-Organization	Network-based coordination of tasks and authority	Intranets, ERP, CRM	Flexible structures and real-time coordination	Heeks (2006)
E-Leadership	Technology-mediated influence and motivation	Digital platforms, collaboration tools	Enhanced engagement and innovation	Avolio et al. (2014)
E-Control	Continuous electronic monitoring of performance	Dashboards, internal networks	Immediate corrective action	Al-Kasasbeh (2011)

Table 4. Requirements for Implementing E-Government

Category	Main Requirements	Purpose	Key Source
Human Resources	Skilled ICT staff, training, empowerment	Ensure adaptability and competence	Tahrat (n.d.)
Political & Administrative	Political will, leadership support, strategy	Ensure commitment and coordination	Tahrat (n.d.)
Legal & Regulatory	Updated laws and procedures	Enable digital transactions	Tahrat (n.d.)
Security	Cybersecurity policies, monitoring systems	Protect data and systems	Tawfiq (2007)
Financial	Sustainable funding	Maintain and upgrade systems	Zaid & Lamia (2021)
Technical	Hardware, software, networks, databases	Build digital infrastructure	Zaid & Lamia (2021)

Table 5. Mechanisms for Implementing E-Government in Algeria

Mechanism Type	Description	National Examples	Source
Physical / Technological	Expansion of internet access and ICT infrastructure	Internet connection (1994), E-Algeria 2013	Shaker (2019)
Household Access	Increasing public access to computers	"My Family 01" and "My Family 02" programs	Shaker (2019)
Institutional Strategy	National digital transformation policy	E-Algeria 2013 Strategy	Shaker (2019)
Human Capacity Building	Training and awareness programs	ICT training centers, education sector	Hajar (2017)

Academic & Scientific Support	Conferences and seminars	National & international events	Hajar (2017)

Table 6. Contribution of E-Government to Governance Principles

Governance Principle	Contribution of E-Government	Practical Effect
Transparency	Open access to information and procedures	Increased public trust
Accountability	Digital monitoring and traceability	Reduced misconduct
Efficiency	Automated processes	Faster service delivery
Fairness	Standardized electronic procedures	Equal treatment
Participation	Online interaction platforms	Citizen engagement

5. The Algerian Government's Efforts to Activate Governance Mechanisms

5.1 Issuance of a Corporate Governance Charter

In recent years, Algeria has undertaken several initiatives aimed at promoting good governance practices within both public and private sector institutions. One of the most significant steps in this direction was the issuance of a **Corporate Governance Charter**, developed through collaborative efforts involving Algerian business associations and institutional stakeholders. This initiative sought to enhance institutional transparency, improve managerial performance, and create a more attractive environment for foreign direct investment.

Within this framework, a Governance Working Group was established, bringing together representatives from the public and private sectors in cooperation with the Global Corporate Governance Forum (GCGF) and the International Finance Corporation (IFC). These partnerships reflect Algeria's openness to international best practices and global governance standards.

In March 2009, a national conference was organized with the participation of the Algerian association CARE and the National Governance Committee, during which the official launch of a Corporate Governance Guide was announced. This guide, developed with technical and conceptual support from the GCGF and the IFC, was designed as a comprehensive reference framework tailored to the Algerian institutional context. It consists of two main parts supported by detailed appendices that address governance principles, board responsibilities, transparency mechanisms, and stakeholder relations.

The primary objective of this initiative was to disseminate a governance culture within the Algerian business environment, enhance institutional credibility, and attract foreign investment. By promoting accountability, transparency, and ethical management practices, the Corporate Governance Charter represents a foundational step toward improving institutional performance and reinforcing investor confidence in the Algerian economy (Omar, 2013).

5.2 Establishment of the National Authority for the Prevention and Combating of Corruption

As part of its broader governance reform agenda, Algeria established the National Authority for the Prevention and Combating of Corruption (NAPCC) through Presidential Decree No. 06-02-202 of November 19, 2006, which was subsequently amended and supplemented by Presidential Decree No. 12-09-02 of February 22, 2012. The Authority is defined as an independent administrative body tasked with strengthening national efforts to prevent corruption and promote integrity in public life.

The Authority is composed of two main components: a Vigilance and Evaluation Council and a set of specialized administrative structures.

The Vigilance and Evaluation Council consists of a chairperson and five members appointed by presidential decree for a renewable five-year term. The termination of their mandates follows the same legal procedures governing their appointment, ensuring institutional stability and independence.

The Authority's administrative structures include a General Secretariat and three specialized departments:

- A department responsible for documentation, analysis, and awareness-raising activities;
- A department tasked with processing asset-related declarations and transactions;
- A department dedicated to coordination and international cooperation.

The National Authority does not operate in isolation; rather, it functions through coordination and cooperation with relevant public administrations, institutions, and regulatory bodies. Among its core responsibilities is the issuance of recommendations, advisory opinions, reports, and analytical studies aimed at improving legislative and regulatory frameworks related to corruption prevention. These tasks are carried out in accordance with Article 19 of the governing legal framework, reinforcing the Authority's role as a central pillar of Algeria's governance and integrity system (National Authority for the Prevention and Combating of Corruption, n.d.).

Conclusion

This study examined the theoretical foundations of e-government by analyzing its key characteristics, functions, requirements, and implementation mechanisms, with particular attention to the Algerian context. It also explored the theoretical dimension of governance by presenting its fundamental principles and the main theories that explain its role in enhancing institutional performance. Furthermore, the study highlighted the Algerian government's efforts to activate governance mechanisms, as well as the challenges associated with their implementation.

In this regard, the establishment of the Algerian Governance Center in October 2010 in Algiers—initiated by the Algerian Business Working Group—represents a significant milestone in consolidating governance reforms. Building on the success of the Corporate Governance Guide, the Center aims to assist Algerian companies in adhering to governance principles and adopting internationally recognized best practices. Its activities contribute to strengthening governance standards, improving transparency, and enhancing accountability across economic institutions.

The Algerian Governance Center also provides an important platform for the national business community to demonstrate its commitment to improving the economic and institutional environment. By promoting the values of responsibility, integrity, and transparency, these governance initiatives support democratic foundations and foster a more sustainable and resilient economic system. Ultimately, the integration of e-government with governance mechanisms constitutes a strategic pathway for improving public sector performance, reinforcing institutional trust, and achieving sustainable development in Algeria (National Authority for the Prevention and Combating of Corruption, n.d.).

Ethical Considerations

This study adheres to internationally recognized ethical standards in academic research. All data used were obtained from publicly available institutional sources and official documents, and no personal or confidential information was collected or disclosed. The research was conducted with integrity, objectivity, and respect for institutional and professional ethics.

Author Contributions

- Abdelali Dahmani: Conceptualization of the study, theoretical framework development, data analysis, and manuscript drafting.
- Djamel Adidou: Methodological design, critical revision of the manuscript, contextual analysis, and validation of findings.

All authors have read and approved the final version of the manuscript.

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Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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