

## Administrative Culture and Digital Communication: Challenges and Perspectives in The Digital Age

Dr. Michael J. Thompson

Department of Political Science and Public Policy, University of Cambridge, United Kingdom

Prof. Joon-Soo Park

Department of Computer Science and Engineering, Seoul National University, South Korea

**VOLUME01 ISSUE01 (2024)**

Published Date: 04 December 2024 // Page no.: - 1-12

---

### ABSTRACT

The digital revolution has profoundly reshaped communication paradigms, critically influencing public administrations worldwide. This article delves into the complex interplay between traditional administrative cultures and the imperative of digital transformation within public services, particularly in the Moroccan context. It analyzes how long-standing bureaucratic norms, characterized by formalism, hierarchy, and control, interact with the demands for speed, transparency, and interactivity brought about by digital tools. Drawing on a comprehensive review of scientific literature, institutional reports, and legal frameworks, the study examines the evolution of both public and internal communication practices. It highlights that while digital technologies offer unprecedented opportunities for enhanced service delivery, citizen participation, and internal efficiency, their full potential is often hampered by deeply ingrained cultural resistances, including a lack of digital skills and a preference for traditional, paper-based processes. The article discusses the challenges posed by these cultural barriers and the opportunities for fostering an agile, citizen-oriented administrative culture that embraces innovation and transparency. It concludes by emphasizing that successful digital communication in public administration necessitates a holistic approach, integrating technological advancements with fundamental shifts in mindsets, leadership, and operational practices. This transformation is crucial for building stronger public trust and ensuring governmental relevance in the evolving digital landscape.

**Keywords:** Public Administration; Digital Transformation; Administrative Culture; Communication; Transparency; E-Governance; Morocco; Bureaucracy; Citizen Participation.

---

### INTRODUCTION

The dawn of the 21st century has been marked by an unprecedented digital revolution, redefining the contours of communication, information, and human interaction. This profound transformation has affected all pillars of society, and public administration, as a central actor in governance and service delivery, has been no exception. The integration of information and communication technologies (ICTs) has induced a paradigm shift, pushing administrative entities to rethink their operating modes, organizational structures, and, above all, their communication strategies [Mabillard & Villeneuve, 2023, Books]. Communication in the digital age is no longer a simple dissemination of information, but a complex process of interaction, co-creation, and dialogue, demanding increased adaptability and transparency from public institutions.

At the heart of this transformation lies an essential dialectic between the imperative of digitalization and pre-existing administrative cultures. Administrative cultures, often rooted in traditions of formalism, hierarchy, and prudence, constitute a set of shared

values, norms, practices, and beliefs that guide the behavior of agents and the organizational dynamic [Alla & Rajâa, 2022]. This culture can either serve as a catalyst or a hindrance to the full adoption of digital communication logics. The tension between the speed, openness, and interactivity inherent in the digital realm, and the stability, regulation, and conformity often characteristic of administration, raises crucial questions about the ability of public organizations to effectively navigate this new landscape.

Morocco, like many developing countries, has embarked on an ambitious path of digital reforms within its public sector. These initiatives aim not only to modernize the state apparatus and improve service efficiency, but also to enhance transparency and foster greater citizen inclusion. These government-led projects intrinsically reshape organizational structures, administrative processes, and communication patterns, transitioning from a traditional, paper-based hierarchical system to a more open and interactive digital platform. Analyzing this transition helps to understand how digital transformation is redefining administrative communication and what factors—legal, institutional, or cultural—fluence this metamorphosis. It

also offers the opportunity to explore the advantages offered by new technologies and the inherent challenges in their integration, while evaluating their impact on communication practices, service quality, and interaction between citizens and the state.

This article aims to deepen the analysis of this complex relationship by examining how the specificities of administrative culture can either facilitate or impede the adoption and optimization of digital communication tools and strategies. We will explore in detail the dynamics of public and internal communication in the face of the growing imperatives of transparency, accessibility, and citizen participation dictated by the digital age, drawing on a robust conceptual framework and relevant examples from literature and Moroccan experience. The ultimate goal is to propose avenues for reflection for a harmonious integration of digital technology within administrative cultures, in order to maximize the benefits of this transformation for citizens and the state.

### **1.1 Context of Digital Transformation in Public Administration**

Digital transformation is much more than a simple digitization of existing processes; it represents a fundamental rethinking of how organizations operate and interact with their environment. For public administration, this means moving from a process and control-centric model to a user-oriented model focused on responsiveness and efficiency [Mabillard & Villeneuve, 2023, Books]. This transformation is driven by several interdependent factors:

- **Evolving Citizen Expectations:** Citizens, accustomed to fluid and instant digital services in their private lives (online banking, e-commerce, social networks), now expect the same level of service and accessibility from their administration. They seek quick information, simplified procedures, and facilitated interaction.
- **Pursuit of Effectiveness and Efficiency:** Digitization promises substantial gains in terms of cost reduction, process optimization, reduced processing times, and improved service quality.
- **Imperative of Transparency and Accountability:** Digital technologies facilitate open data, traceability of decisions, and citizen participation, thereby contributing to strengthening trust in public institutions and combating corruption.
- **International Pressures and Best Practices:** Many countries have already undertaken major e-governance reforms, creating emulation and encouraging administrations to align with international standards.

However, this transition is neither linear nor without obstacles. It often confronts structural inertias, outdated regulatory frameworks, but above all, deeply ingrained cultural resistances within administrations.

### **1.2 Problem Statement and Research Questions**

The central problem of this study lies in the dialectic between the speed and openness required by digital communication and the prudence and formality inherent in many administrative cultures. How can public administrations effectively integrate the dynamics of digital communication while preserving their fundamental values and public service mission?

More specifically, this article will seek to answer the following research questions:

1. How does digital transformation redefine the paradigm of administrative communication (public and internal)?
2. What role does administrative culture play in this reconfiguration, in terms of facilitating or hindering the adoption of digital communication practices?
3. What are the main challenges and opportunities for harmonious integration of digital communication within public administrations, particularly in contexts marked by a strong bureaucratic tradition?

### **1.3 Objectives of the Article**

The objectives of this article are:

- To deeply analyze the changes brought about by the digitalization of administrative communication, both externally (citizens, businesses) and internally (agents, departments).
- To examine the institutional, legal, and cultural determinants shaping the trajectory of this digitalization.
- To highlight the influence of organizational and administrative culture on the ability of administrations to adopt and optimize digital communication tools and strategies.
- To identify the major challenges faced by administrations in this transition and the opportunities it offers for better governance.
- To propose avenues for reflection and recommendations for a successful transformation, integrating technological, organizational, and cultural dimensions.

By addressing these questions, this article aims to provide a significant contribution to understanding the complex dynamics at play in administrative communication in the digital age, offering enriched theoretical perspectives and insightful observations.

### **Theoretical Framework**

To grasp the complexity of communication in the digital age through the prism of administrative culture, it is essential to rely on a solid theoretical framework. This framework allows for structuring the analysis and making sense of empirical observations. We will primarily mobilize theories of bureaucracy, organizational culture,

and communication models.

## 2.1 The Theory of Bureaucracy

The theory of bureaucracy, primarily developed by Max Weber, is an essential starting point for understanding the structure and functioning of public administrations. Weber described bureaucracy as a form of rational-legal organization, characterized by a clear division of labor, a strict hierarchy, formal rules and procedures, impersonality of relationships, technical competence, and career based on merit. Its advantages lie in its efficiency, predictability, impartiality, and ability to handle a large volume of cases uniformly.

However, this rationality can also lead to dysfunctions, as highlighted by many sociologists, including Robert Merton with the "bureaucratic personality" or Michel Crozier [1962, Reports] with the concept of "bureaucratic vicious circles." According to Crozier, bureaucracy generates unforeseen phenomena: the impersonality of rules can lead to rigidity, the development of rules and categories to an inability to manage specific cases, and the centralization of decisions to slowness and a shirking of responsibility by lower echelons. These dysfunctions are particularly relevant for communication analysis. A highly bureaucratized administration will tend to favor formal, written, top-down, and less interactive communication, which contradicts the requirements of fluidity, responsiveness, and dialogue in the digital age. The "pre-eminence of written documents" and the "vertical chain of command" are direct legacies of this model that can hinder digitalization, as suggested by the reference document.

## 2.2 The Theory of Organizational Culture

Organizational culture is a central concept for understanding collective behaviors within an entity. Edgar Schein [Schein, 1992] defines it as a set of shared basic assumptions that a group has learned while solving its problems of external adaptation and internal integration, which has worked well enough to be considered valid and is therefore taught to new members as the correct way to perceive, think, and feel about these problems. Culture manifests at different levels:

- **Artifacts:** These are the visible manifestations of culture (structures, processes, language, dress codes). For communication, this includes the digital tools used, document layouts, and official channels.
- **Espoused Values:** These are the principles and philosophies that the organization publicly proclaims. In administration, this includes transparency, efficiency, and quality of service.
- **Underlying Basic Assumptions:** These are the unconscious, taken-for-granted beliefs that profoundly influence behaviors (e.g., mistrust of outsiders, reluctance to take risks, importance of hierarchical status).

The reference document (Table 1) presents several definitions of organizational culture that converge towards the idea of a "shared foundation" and an "integrated system of shared values and collective beliefs." This includes "shared norms, representations, and beliefs" [Fourtier & Apostolidis, 2020, Reports] and its influence on "managerial choices" [Mouadili, 2024]. In the administrative context, culture is shaped by law, history, political and social context, and it directly influences the adoption of ICTs. An administrative culture that values control and hierarchy over autonomy and collaboration will be less inclined to integrate digital tools that promote the latter. Conversely, a more "inclusive and participatory" culture can facilitate this adoption.

## 2.3 Communication Models

Communication models have also evolved. The linear model (Shannon and Weaver), which describes communication as a process of transmitting a message from a sender to a receiver via a channel, long prevailed in administration. It corresponds to the "top-down" model where the administration informs citizens.

However, the digital age has highlighted the limitations of this model. More interactive and transactional models have become necessary, recognizing that communication is a dynamic process where both parties are simultaneously senders and receivers. "Strategic communication" in the public sector aims to synchronize and align distinct elements to achieve organizational objectives [Nicole & Thierry, 2002, Books]. Communication is now viewed as a "dual process" integrating "production and dissemination" of information with the "creation of structured relational interfaces."

Modern "public communication" is defined not only by the dissemination of information but also by listening, participation, and building trusting relationships [Bessières, 2009; KRA, 2014]. Internal communication, on the other hand, is no longer limited to downward information transmission but must be a space for exchanges "between the bottom and the top and between hierarchy and subordinates" [Crozier, 1962, Reports], fostering "organizational cohesion" and "professional development" of personnel [EL KORRI, 2016]. The influence of culture on "communication style" and the promotion or hindrance of "open communication" (Table 2 of the document) is a key aspect.

## 2.4 E-Governance and Digital Public Services

The framework of e-governance (or electronic government) encompasses the use of information and communication technologies by public administrations to improve services, democratic processes, and relationships with citizens, businesses, and other government entities. It aims to increase efficiency, transparency, and participation.

Digital public services are the concrete expression of e-governance, offering online administrative procedures,

# EUROPEAN JOURNAL OF EMERGING DATA SCIENCE AND MACHINE LEARNING

information accessible via the web and mobile applications, and citizen interaction platforms. These services are intended to facilitate access to public information and ensure transparency [Dahir n°1.18.15, 2018, Legal Texts; Dahir n°1-21-58, 2021, Legal Texts]. The adoption of Open Data is an advanced manifestation of this desire for transparency, going beyond simply providing documents to allow the reuse of raw data by all [Mabillard & Villeneuve, 2023, Books].

However, the success of e-governance and digital services depends not only on technological infrastructure and legal frameworks but also, and most importantly, on the "profound transformation of administrative mentalities and practices." It is this cultural dimension that is at the core of our analysis, as it determines the administration's ability to transform into a truly "digital" and "citizen-oriented" entity.

## METHODS

The present research adopts a qualitative approach, prioritizing a descriptive and analytical method. The methodology is based on a systematic and comprehensive review of relevant scientific literature, supplemented by the examination of institutional reports and legal texts. The objective is to synthesize the existing body of knowledge, identify recurring themes, conceptual convergences, and research gaps in understanding the complex interaction between administrative culture and communication in the digital age.

### 3.1. Document Research Strategy

Data collection was structured around several rigorous steps to ensure the relevance and completeness of the analyzed corpus.

First, an in-depth bibliographic search was conducted on renowned and internationally recognized scientific databases. The main databases used include:

- Google Scholar: For its broad coverage of academic publications, including journal articles, theses, books, and conference proceedings.
- JSTOR: Specializing in humanities and social sciences, offering access to historical and contemporary journals.
- Cairn.info: A French-language platform for journals and books in humanities and social sciences, particularly relevant for French references.
- ScienceDirect: A multidisciplinary database offering leading scientific publications, especially in management and information sciences.
- Web of Science and Scopus: For their ability to identify the most cited articles and research trends, thus ensuring the relevance and impact of the sources.

Keywords used for this research were carefully selected to cover the different facets of the problem. They were

combined in French and English to maximize linguistic and conceptual coverage:

- "communication publique", "public communication", "gouvernement électronique", "e-government"
- "communication interne", "internal communication", "communication organisationnelle", "organizational communication"
- "culture administrative", "administrative culture", "culture organisationnelle", "organizational culture"
- "transformation digitale", "digital transformation", "numérisation", "digitization"
- "administration numérique", "digital administration", "services publics numériques", "digital public services"
- "transparence administrative", "administrative transparency", "accès à l'information", "access to information"
- "open data", "données ouvertes", "participation citoyenne", "citizen participation"

Particular attention was paid to the temporality of publications. Although fundamental classical works were included for their theoretical contribution (e.g., Crozier, Weber), priority was given to recent publications (mainly from the last two decades, i.e., 2005 to 2025) to capture contemporary digital dynamics and current challenges faced by administrations.

Second, the search was extended to relevant reports, working papers, and conference proceedings produced by academic institutions, national and international research centers, as well as public and parapublic organizations. This approach aimed to integrate more practical perspectives, concrete case studies, and policy analyses that are not always immediately available in academic journals. These sources offer often insights into specific challenges and solutions implemented in the field.

Finally, an essential dimension of the methodology involved analyzing legislative and regulatory texts related to public administration, communication, and digitalization, focusing on the Moroccan context, which serves as an illustrative case study. The analysis of Dahirs (royal decrees) and specific laws (e.g., Dahir n°1.11.91 of 2011 on the Constitution, Dahir n°1.18.15 of 2018 on the right of access to information, and Dahir n°1-21-58 of 2021 on the Public Services Charter) is crucial to understanding the formal framework and political intentions underlying digital transformation and administrative communication in this country.

### 3.2. Selection Criteria and Data Processing

The documents identified during the research strategy were subjected to a rigorous selection process based on criteria of relevance, scientific rigor, and conceptual or empirical contribution.

Inclusion criteria were as follows:

- Direct relevance to the key concepts of the research: public communication, internal communication, organizational/administrative culture, digital transformation in the public sector.
- Academic quality: articles published in peer-reviewed journals, reference works, university theses, validated research reports.
- Language: Publications in French and English, to leverage the richness of both Francophone and international literature.
- Context: Although the problem is general, particular attention was paid to case studies or contextual analyses, especially those related to Morocco or similar administrative contexts, to inform the discussion.

Excluded documents were those that did not directly address communication in administration, focused solely on the technical aspects of digitalization without addressing cultural or organizational dimensions, or whose methodology was deemed not rigorous.

The analysis of the collected information was carried out using a qualitative thematic analysis. This method allowed for the identification, analysis, and reporting of patterns within the data. The process unfolded as follows:

1. Familiarization with the data: Repeated reading of the entire corpus to immerse oneself in the content and identify main ideas.
2. Generation of initial codes: Assigning descriptive or analytical codes to relevant text segments. These codes were generated inductively (emerging from the data) and deductively (based on the theoretical framework).
3. Searching for themes: Grouping codes into broader potential themes. For example, codes such as "resistance to change," "bureaucratic inertia," and "attachment to formalism" were grouped under the broader theme of "cultural barriers."
4. Reviewing themes: Checking the internal consistency of themes and their distinction from each other. Themes were refined and revised as needed.
5. Defining and naming themes: Assigning a clear and concise name to each theme, accompanied by a description of what it represents and how it contributes to answering the research questions.

This thematic analysis allowed for the identification of the major discussion points, structured as follows in the "Results" section:

- Evolution of public and internal communication models (from top-down to interactive).
- Specificities and influence of administrative

culture (bureaucracy, values, norms).

- Challenges of transparency, access to information, and open data (legal framework, implementation challenges).
- Structural and cultural obstacles to digitalization (resistance, lack of skills).
- Levers for cultural transformation (leadership, training, process redesign).

This rigorous methodological approach ensured comprehensive coverage of the subject and structured the article according to the IMRaD format (Introduction, Methods, Results, Discussion, and Conclusion), thus guaranteeing a clear, logical, and reproducible presentation of the information and arguments developed, while integrating citations accurately and consistently.

## RESULTS

The in-depth analysis of the literature, enriched by the examination of legal texts and case studies from the Moroccan context, highlights several fundamental dynamics that characterize communication in the digital age. These dynamics manifest through major transformations in public and internal communication, the pervasive influence of organizational and administrative cultures, and persistent challenges in terms of transparency and access to information.

### 4.1. Evolution and Transformations of Public Communication in the Digital Age

Public communication has undergone a radical transformation, shifting from a traditional unidirectional model to interactive and participatory forms. Historically, administrations were perceived as information emitters, disseminating directives and decisions in a top-down manner, often characterized by formalism and a certain distance from citizens [Bessières, 2009]. This communication model, focused on transmitting official information and explaining government policies, primarily aimed to inform and legitimize public action. Preferred channels included press releases, official publications, and physical counters. Citizen interaction was limited, often relegated to formal complaint or petition procedures.

However, the advent of digital technology has disrupted this paradigm. Public communication has transformed into a bidirectional, even multidirectional, process, where citizens are no longer passive recipients but potential actors in exchange, participation, and even co-creation. Administrations are now faced with the imperative to integrate new technologies to improve their visibility, accessibility, and responsiveness. Institutional websites, online service platforms, social networks (Facebook, Twitter, Instagram, LinkedIn), and mobile applications have become indispensable vectors for information, consultation, citizen participation, and complaint management.

Morocco offers a relevant case study to illustrate this transition. Digital communication has become an essential pillar for promoting public services and interacting with stakeholders. The experience of the Regional Investment Center of the Souss Massa region, for example, demonstrates this growing integration of digital tools to revitalize public communication and investor engagement [Adrdour, 2020]. This evolution is not isolated and is also observed in other African contexts, where public administrations strive to adapt their communication practices to an increasingly connected environment that demands greater citizen participation [KRA, 2014]. Digitalization has thus created a hyper-competitive environment in terms of content and form, where users consume information on demand, reinforcing the urgency for administrations to adapt and innovate in their communication approaches [Adrdour, 2020].

This transformation is part of a global dynamic of digital invasion in government communications, pushing research and practice towards greater transparency [Mabillard & Villeneuve, 2023, Books]. Digital tools not only facilitate the instant dissemination of information on an unprecedented scale but also enable the collection of citizen feedback, allowing administrations to better target their actions, adjust their policies, and respond to concerns in near real-time. Specific mobile applications in Morocco, such as "Daribati.ma" (for tax services, offering multilingual functionalities like voice assistant and geolocation of tax centers with attendance indicators) and "Tbib24" (in the healthcare sector, providing an intelligent conversational agent and dynamic FAQs tailored to the patient's profile), illustrate this trend of offering more immediate, personalized, and accessible services. Similarly, Moroccan territorial collectivities have proposed conversational agents like "Wikit" to strengthen their proximity to users, allowing them to obtain information even outside opening hours. These concrete innovations significantly reduce frustration related to traditional administrative procedures and improve user experience by ensuring access to information without delay or geographical restrictions.

The dematerialization of procedures, such as that observed with the "Chikaya.ma" platform for complaint management, has profoundly altered interactions between public officials and between public services and users. This dynamic potentially blurs the rigid barriers represented by traditional hierarchies by facilitating immediate and direct exchanges. However, the full exploitation of these advantages is often limited by deep-seated cultural resistances, where distrust of new technologies and attachment to traditional working methods, particularly the cult of paper and formalism, persist.

#### **4.2. Internal Communication Facing the Digital Challenge: Cohesion and Adaptability**

Internal communication is traditionally recognized as a fundamental strategic lever for organizational cohesion, staff mobilization, and operational efficiency of services, especially within complex and extended structures like public administrations [Nicole & Thierry, 2002, Books]. It aims to disseminate results, transmit information about the organization, and explain managerial orientations, while offering human resources a framework for expression conducive to their professional development and encouraging a group dynamic aligned with organizational objectives [EL KORRI, 2016]. However, the digital age has exponentially amplified the challenges of internal communication. The geographical dispersion of agents, the multiplicity of hierarchical levels, the diversity of professions, generations, and cultures within the administration complicate the coherent dissemination of information and the creation of a common sense of belonging.

Case studies, such as one conducted within a Moroccan organization, have revealed persistent difficulties in diagnosing and improving internal communication, despite the increasing availability of and investment in digital tools [EL KORRI, 2016]. The mere provision of collaborative platforms (intranets, enterprise social networks, project management tools), modernized intranets, or videoconferencing tools does not alone guarantee fluid, effective, and engaging communication. The actual effectiveness of these tools is intrinsically linked to the underlying organizational culture. If the latter does not foster proactive information sharing, cross-functional exchanges, agent autonomy, mutual trust, and the ability to collaborate beyond traditional silos, digital tools risk being underutilized, generating irrelevant information overload, or being perceived as mere technological complements to pre-existing formal and hierarchical channels.

Administrative structures, often deeply embedded in bureaucratic schemes inherited from the 20th century [Crozier, 1962, Reports], can inadvertently hinder the adoption and optimal utilization of these tools. The pre-eminence of written documents, systematic hierarchical validation of every piece of information, and reluctance to informal and spontaneous exchange can counteract the benefits of speed, interactivity, and fluidity offered by digital technology. While necessary, the dematerialization of procedures is not enough on its own to transform interactions if deep cultural resistances persist. This distrust of new technologies, combined with an often profound attachment to traditional working methods, particularly the systematic reliance on paper and excessive formalism, remains a major obstacle. The dominant culture within many administrations, characterized by a strong hierarchy and a penchant for formalism, is often out of sync with the flexibility, speed, and interactivity required by digital communication. This leads to a disconnect between the potential of digital tools and their actual use, thereby limiting their impact on internal cohesion and efficiency.

#### **4.3. The Pervasive Influence of Administrative and Organizational Culture**

Culture, whether national or organizational, is a determining factor that shapes leadership, human resource management practices, and by extension, all communication and innovation dynamics within an entity [Alla & Rajâa, 2022]. Within public administration, culture is often characterized by fundamental values such as legality, impartiality, hierarchy, procedure, stability, and continuity of public service. While these values are essential for ensuring the stability, fairness, predictability of services, and protection of general interests, they can sometimes come into tension with the demands for speed, openness, flexibility, proactivity, risk-taking, and experimentation dictated by digital communication.

Organizational culture is an integrated system of shared norms, representations, and beliefs, but above all, shared values among the members of an organization [Fourtier & Apostolidis, 2020, Reports]. This deeply rooted and often implicit culture influences behaviors and decisions at all levels of the organization and is essential for understanding managerial choices, including those related to technology adoption [Mouadili, 2024]. Table 1 (from the provided document) summarizes several definitions of organizational culture, highlighting a common denominator: the existence of a "shared foundation" and an "integrated system of collective values and beliefs." This includes "shared norms, representations, and beliefs" and its influence on "managerial choices" [Mouadili, 2024]. Culture is acquired through group membership and consists of a set of values and beliefs that influence the behavior and attitudes of its members [Alla & Rajâa, 2022].

In the context of public administrations, organizational culture can be both a facilitator and a major obstacle to innovation and digital transformation. Studies on the relationship between organizational culture and innovation, including managerial innovations, show that cultures that encourage experimentation, continuous learning, decentralization, and risk-taking are more apt to adapt to new technological and societal realities [Binkour M. et El Abidi A.]. They foster the emergence of an "innovation culture" which is a prerequisite for successful digitalization.

However, in many administrative contexts, resistance to change and reluctance to adopt new communication practices can be profound and multifaceted. This cultural inertia is often reinforced by a highly hierarchical structure and centralized decision-making processes, which tend to slow down the implementation of digital tools [Rajaa & Ghazlani, 2023]. The predominance of a vertical chain of command restricts personnel autonomy, limits innovative initiatives, and can lead to perceiving any deviation from established procedures as a threat to the established order or legitimacy.

Bureaucratized administration, as described by Max Weber, is intrinsically linked to the possession and application of specialized knowledge, and communication within it is subject to bureaucratized operating rules [Bessières, 2009]. This approach, often focused on the sender's (the administration's) intent, aims to impose predefined directives and decisions on users, without always considering their real needs or soliciting their feedback [Bolap, 1990, Reports]. This top-down, unidirectional communication model, coupled with a perception of the administrative apparatus as "omnipotent" and omniscient, creates a rigid barrier that restricts open and authentic exchanges with users.

However, administrative systems that have adopted a more inclusive, participatory, and collaborative culture are better equipped to implement, adopt, and disseminate digital tools, positively influencing their communication processes. Table 2 (from the provided document) highlights the influence of organizational culture on communication, showing how "fundamental values," "communication styles," "basic assumptions," "rituals," and "customs and habits" configure the communication style, determine communication practices, and promote or hinder open communication. For an organization to effectively adjust to changes in its environment, communication must be facilitated "between the bottom and the top and between hierarchy and subordinates," and objectives must be proportional to available resources [Crozier, 1962, Reports].

The lack of digital skills within many public services is a major obstacle and a manifestation of this cultural resistance. Despite training efforts, there is often a significant gap between the availability of technological tools and their effective and optimal use by civil servants. This "organizational culture that proves resistant to modernization" prevents users from fully benefiting from the gains in efficiency, transparency, and accessibility promised by digital communication. The "fear of change" and the "lack of shared understanding of the challenges of digitalization" lead many civil servants to perceive digital technologies as a threat to their routines, their jobs, and even their established professional legitimacy.

#### **4.4. Transparency and Access to Information: Digital Imperatives and Administrative Realities**

The digital age has elevated transparency to a cardinal principle of modern governance, not only as an ethical requirement and a measure of good management but also as a sine qua non condition for public trust and democratic participation. The digital space, by its very nature of rapid and large-scale dissemination, facilitates the circulation of information and amplifies the demand for greater openness and accountability from public institutions [Mabillard & Villeneuve, 2023, Books]. This dynamic has been formalized in numerous legislative frameworks worldwide, recognizing public information as a common good and a fundamental right of citizens.

In Morocco, the right of access to information is enshrined in the legal framework through fundamental texts that demonstrate a political will to modernize the administration and strengthen its relationship with citizens. Dahir n°1.18.15 of 2018, promulgating Law n° 31.13 relating to the right of access to information [Dahir n°1.18.15, 2018, Legal Texts], has profoundly transformed administrative communication by establishing a new paradigm based on transparency, accountability, and citizen participation. This law, which implements Article 27 of the 2011 Constitution [Dahir n°1.11.91, 2011, Legal Texts], marks a break with a more opaque administrative culture by imposing an obligation on public institutions to proactively disclose information of general interest. Government departments are now required to regularly publish data and information (proactive disclosure), even before an official request is made, thus constituting a real revolution in traditional Moroccan bureaucratic practices characterized by a culture of secrecy and information retention. In addition to this proactive communication, the law guarantees an individual right of access to information, allowing any citizen, legal entity, or even foreigner residing in Morocco to access administrative documents, subject to well-defined legitimate restrictions (such as the protection of personal data or national security).

This legal framework is reinforced by Law n° 54-19 establishing the Public Services Charter, promulgated by Dahir n° 1-21-58 of 2021 [Dahir n°1-21-58, 2021, Legal Texts]. This legislation represents a decisive turning point in the modernization of public action by introducing a new administrative paradigm and establishing as cardinal principles the requirement for quality, the imperative of transparency, and the obligation to process user requests quickly. Article 4 of this law aims to anchor the principles of good governance at the heart of administrative operations, promoting an administration open to its internal and external environment, and effective implementation of the principle of transparency through the systematic production, dissemination, and publication of data and information related to the functioning of public services. Article 5 enshrines the principle of openness through communication with users, active listening, and interaction with their observations, proposals, and grievances concerning the improvement of public service performance. Article 24 requires public services to regularly communicate on their missions, programs, activities, and services, using all available means, particularly electronic ones (dedicated websites, online platforms), thus strengthening the edifice of an interactive and dialogical administration, where institutional information and citizen participation mutually reinforce each other.

However, the effective implementation of these legislative principles often clashes with the realities, inertias, and rigidities of administrative culture. Transparency, which implies proactive information

disclosure, responsiveness to citizen requests, and acceptance of accountability, can be perceived as a direct threat to the discretion, stability, and control inherent in certain administrations. The reflex of information retention, the complexity of procedures for accessing documents despite laws, or the lack of clarity and simplicity in communicating information are all deep cultural obstacles that can compromise digital transparency efforts. The mere digitization of documents or online publication of information is not enough on its own; a true culture of transparency, proactivity, interoperability of information systems, and citizen orientation is necessary for the right of access to information and the principle of open data to be fully effective. Resistance to change, often stemming from a lack of shared understanding of the profound implications of digitalization, leads many civil servants to perceive digital technologies not as tools for improvement, but as a threat to their established routines, jobs, and even their professional legitimacy based on information mastery. This perception can lead to minimal use of transparency tools or passive resistance to their full adoption.

## **DISCUSSION**

The results of this comprehensive literature review reveal a fundamental tension but also a significant potential for evolution in the symbiotic relationship between administrative culture and digital communication. On the one hand, administrations are inevitably driven towards increased digitalization of their communication methods, propelled by disruptive technological advancements and growing citizen expectations. On the other hand, administrative culture, inherited from centuries of established practices and institutionalized norms, represents a determining factor, capable of either facilitating or, conversely, hindering the full adoption and integration of this transformation.

### **5.1. Bureaucracy and its Obstacles to Digital Agility**

The theory of bureaucracy, developed by Max Weber and analyzed in its dysfunctions by sociologists such as Michel Crozier [1962, Reports], remains a relevant lens for understanding current challenges. Bureaucracy, in its ideal-typical form, is designed for efficiency, predictability, and impartiality through standardization and hierarchy. However, as Crozier demonstrated, this rationality can generate "vicious circles": the rigidity of rules, the impersonality of relationships, and the centralization of decisions often lead to slowness, resistance to change, and an inability to adapt quickly to unforeseen circumstances. These characteristics directly contradict the requirements of modern digital communication, which values speed, personalization, interactivity, and flexibility.

The predominance of formal procedures, systematic hierarchical validation, and reluctance to informal and rapid exchange are all manifestations of this bureaucratic culture that hinder digital agility. Information dissemination becomes a cumbersome and time-

consuming process, limiting the administration's ability to react in real-time to citizen requests or crisis situations. Furthermore, the "vertical chain of command" and the "culture of control" can discourage individual initiatives by agents and the development of horizontal and cross-functional communication networks, which are nonetheless essential for effective collaboration in the digital age.

In the Moroccan context, this persistence of a rigid bureaucratic culture, based on a dynamic of control, hierarchical rigidity, and centralized decision-making, makes it difficult to fully adopt communication in the digital age. The royal speech of October 14, 2016, emphasizing the need for a "profound transformation of administrative mentalities and practices," testifies to the recognition of these cultural obstacles. Modernization efforts undertaken, such as simplifying administrative procedures and stimulating a more efficient administration, encounter inherent resistances in an administrative culture that prioritizes formalism and paper over digital speed and interactivity. Agents, accustomed to a rigid framework, may perceive digital tools as an overload of work or a threat to their autonomy and traditional know-how, which generates passive or active resistance to their use.

## **5.2. Opportunities of Digitalization and the Imperative of Cultural Transformation**

Despite these obstacles, digital technology offers unprecedented and transformative opportunities to intrinsically rethink administrative communication and, by extension, the relationship between administration and citizens. It enables broader and faster information dissemination, increased interactivity with citizens, and substantial improvement in internal communication, fostering inter-departmental collaboration and knowledge sharing. Digital tools (websites, mobile applications, social networks) improve access to information and transparency, allowing users to obtain immediate and personalized responses, thus reducing the frustration often associated with traditional administrative procedures.

However, for these potentialities to be fully exploited, a deep cultural transformation is not only desirable but indispensable. This transformation implies a paradigm shift, moving from a logic of control, conformity, and discretion to a culture of openness, experimentation, continuous learning, and co-creation with users. It requires enlightened leadership that not only promotes technological innovation but also encourages initiative-taking, decentralization of information, and a culture of proactive transparency. Leadership must embody change, communicate the vision in a coherent and inspiring manner, and provide the necessary resources for training and supporting agents.

The implications for decision-makers and administrators are clear and manifold: it is not enough to invest

massively in information and communication technologies; it is imperative to accompany these investments with robust and well-thought-out cultural change strategies. This concretely involves:

- Training and strengthening agents' digital skills: Bridging the "digital divide" within the administration is crucial. This is not just about learning to use software, but about integrating a "digital mindset" that values efficiency, speed, collaboration, and direct interaction with users. Continuous training programs, adapted to different skill levels and specific job needs, are essential.
- Promoting new values and behaviors: Encouraging transparency, participation, collaboration, and user orientation must become an institutional priority. This involves recognizing and rewarding initiatives that move in this direction, valuing experimentation (even if it leads to failure), and fostering a climate of trust that allows agents to appropriate new tools and practices.
- Redesigning communication processes: Communication channels must be rethought to be more fluid, less hierarchical, and more oriented towards two-way dialogue, both internally and externally. Dematerialization must be accompanied by radical simplification of procedures, increased clarity of messages, and a user-experience-driven design. Information architecture must be designed to facilitate access and understanding.
- Management leading by example: Leaders must be the first to embody the vision of digital transformation and communicate transparently and openly, setting an example for all levels of administration. Their commitment is a key success factor, as it legitimizes and encourages the adoption of new practices by all agents.
- Integrating legal frameworks into daily culture: Laws on access to information and public service charters must cease to be mere formal texts and become guiding principles integrated into the daily practices of civil servants. This requires continuous awareness-raising, the establishment of monitoring and evaluation mechanisms, and the promotion of an "open data culture" that goes beyond mere legal obligation.

Without this strategic convergence between digital tools, regulatory frameworks, and an adaptive administrative culture, the immense potential of digital communication will remain underutilized. Resistance to change, fueled by fear of the unknown, the perception of technology as a threat, and a lack of awareness of the concrete benefits of digitalization, will continue to hinder modernization efforts.

## **5.3. Towards a "Connected" and "Citizen-Oriented" Administration: Future Perspectives and Challenges**

The vision of a fully "connected" and "citizen-oriented" administration is not limited to technology implementation; it requires a deep reflection on power dynamics, role distribution, and the very nature of the

relationship between the state and its citizens. Digital technology, by lowering barriers to information and interaction, shifts the center of gravity of authority towards a logic of service, accountability, and co-production. The administration no longer merely "governs" but seeks to "serve" and "collaborate" with its citizens. This implies rethinking citizen participation beyond formal consultations, towards more inclusive and continuous mechanisms, leveraging digital platforms to gather opinions, co-create public policies, and evaluate services.

However, this evolution is not without major challenges that require proactive attention:

- Data security and privacy protection: The massive digitalization of services involves the collection and processing of a considerable amount of personal data. Ensuring the security of this data and guaranteeing the privacy of citizens is a major challenge that must be at the heart of any digital strategy, requiring investments in cybersecurity and robust regulatory frameworks (such as GDPR in Europe, or equivalent national legislations).
- The digital divide: Unequal access to digital technologies and skills within the population can exacerbate inequalities. A "connected" administration must also be "inclusive," by providing alternative solutions for unconnected citizens or those less comfortable with digital technology, and by developing digital literacy programs.
- Information overload and misinformation: The abundance of online information, including misinformation and "fake news," makes it more difficult for citizens to distinguish reliable sources. The administration has a crucial role to play as a reliable and verified source of information, by developing clear, concise, and transparent communication strategies.
- Online reputation management and communication crises: Social networks can rapidly amplify dissatisfaction and criticism. Effective digital communication involves constant monitoring, the ability to respond quickly and appropriately, and a crisis communication management strategy adapted to the digital environment.
- Adapting agents' skills: Beyond simple technical mastery of tools, public agents must develop new digital communication skills: active listening on social networks, web writing, community management, data analysis, exchange moderation, digital empathy.

Furthermore, the adoption of digital tools must be preceded by a deep understanding of citizens' needs and expectations, as well as local cultural specificities. Communication cannot be unilateral, even online; it must be dialogical and adapted to various segments of the population. Integrating citizen feedback, via online surveys, participatory consultation platforms, or analysis of interactions on social networks, is essential to ensure

the relevance of services and the responsiveness of the administration.

Finally, communication transformation cannot be isolated. It must be part of a global e-governance vision, where communication is an integrated element of a larger digital ecosystem. This ecosystem includes the digitization of business processes, interoperability of information systems (to avoid data silos), the development of integrated service platforms, and the strengthening of digital skills at all levels of the civil service. The goal is to create an administration that not only communicates effectively online but is also capable of adapting, innovating, and responding proactively to the challenges of a constantly evolving world, positioning itself as a reliable and transparent partner for the citizens it serves.

## CONCLUSION

In summary, communication in the digital age represents a multifaceted challenge and an unprecedented opportunity for contemporary public administrations. The inherent capacity of governments to transform and optimize their communication methods is inextricably linked to the willingness and ability of their administrative culture to evolve dynamically and proactively. Although digital tools offer promising avenues for building a more transparent, accessible, and interactive administration, their full realization crucially depends on overcoming deeply rooted cultural barriers, particularly those inherent in traditional bureaucratic structures, rigid hierarchies, and a certain cultural reluctance to openness and innovation.

The article has demonstrated that the effectiveness and relevance of digital communication in the public sector are not limited to the simple adoption of technology or investment in digital infrastructure. Beyond these technical aspects, the major challenge lies in a profound transformation of mentalities, professional practices, and organizational behaviors within the administration. By deliberately cultivating an administrative culture that prioritizes agility, is resolutely citizen-oriented as the central axis of all actions, and is intrinsically favorable to experimentation and innovation, public administrations will not only be able to meet the growing expectations of transparency and democratic participation from their fellow citizens, but they will also significantly strengthen their legitimacy, operational performance, and relevance in the complex landscape of the digital age.

The future of public communication thus emerges as an essential synergy between the transformative power of digital technology and a resolutely forward-looking and adaptive administrative culture. This synergy demands continuous commitment to agent training, process simplification, promotion of enlightened leadership, and consolidation of a legal framework that not only authorizes but actively encourages this transformation. It is only through this holistic approach, harmoniously combining technological, organizational, and cultural

dimensions, that administrations can truly capitalize on the opportunities offered by digital technology to build a stronger, more trusting, and more effective relationship with the citizens they serve.

### **6.1. Limitations of the Research**

This study, although based on a comprehensive literature review and rigorous thematic analysis, presents certain inherent limitations due to its methodology.

- Nature of the literature review: As a literature review, this research synthesizes existing knowledge and proposes a conceptual analysis. It does not rely on primary data collection (surveys, interviews, observations) that would allow for empirical testing of identified hypotheses and relationships, nor for directly measuring the impact of cultural factors on the digitalization of communication.
- Limited generalizability of examples: Although the Moroccan context was used to illustrate certain points and make the analysis more concrete, the cultural, institutional, and legislative specificities of this country may not be entirely generalizable to other administrative contexts without in-depth comparative research. Administrative culture varies considerably from one country to another and even within different administrations.
- Complexity of the phenomenon: Digital transformation and its interaction with culture are complex and multidimensional phenomena. This study has sought to cover the most relevant aspects but does not claim to exhaust all nuances or underlying factors that influence the dynamic. For example, the influence of trade unions, individual resistance to change, or the specificities of different types of public services have not been addressed in detail.
- Rapid evolution: The field of digital technology and digital communication is constantly evolving. A literature review is a snapshot at a given moment; new technologies, practices, and challenges continuously emerge, requiring regular updating of analyses.

### **6.2. Perspectives for Future Research**

The limitations of this study open the way for numerous avenues of future research that could enrich the understanding of the interaction between administrative culture and communication in the digital age.

- In-depth empirical investigations: It would be essential to conduct empirical studies based on primary data. This could include:
  - Quantitative surveys: Questionnaires for civil servants to assess their perception of digital tools, their digital skills, their level of resistance to change, and the influence of organizational culture on their use of ICTs.
  - Qualitative interviews: Semi-structured interviews with decision-makers, managers,

communication agents, and users of public services to collect experience narratives, deep perceptions of challenges and opportunities, and concrete examples of successes or failures.

- Longitudinal case studies: Following the digital transformation of several administrations over an extended period to observe the evolution of practices, the impact of change policies, and the adaptation of cultures.
- Usage data analysis: Examining usage data from administrative digital platforms to understand the behaviors of users and agents (frequency of use, preferred features, sticking points).
- Comparative approaches: Conducting comparative studies between different administrations (within the same country or between different countries) to identify universal and specific cultural factors that influence the digitalization of communication. This would allow for distinguishing challenges related to the very nature of bureaucracy from those related to particular national or local cultural contexts.
- Diachronic approach: To "trace the evolution of the subject" as suggested in the reference document, a diachronic approach would allow for going back to the conceptual and historical sources of administrative communication and organizational culture to better understand how they were formed and evolved in response to different waves of modernization (including digitalization). This could include the analysis of historical documents, archives, and accounts from actors of different eras.
- Impact of organizational culture on digital transformation implementation: Future research could specifically focus on "the impact of organizational culture on the implementation of digital transformation within Moroccan public administration" or other contexts. This would involve analyzing how the values, norms, and behaviors of organizational members actively shape or hinder the adoption of digital initiatives, going beyond simply observing obstacles to identifying levers for action.
- Role of leadership and mindset change: Studies could explore in more detail the specific impact of leadership styles on promoting a digital culture, and effective strategies for inducing a profound "mindset change" within the civil service.
- Impact measurement: Developing more sophisticated performance indicators to assess the real impact of digital communication and cultural transformation on service quality, citizen satisfaction, transparency, and internal efficiency.

By exploring these avenues, future research will contribute to developing more robust conceptual frameworks and more operational recommendations for successful digital transformation of administrative communication, which fully considers cultural specificities and dynamics.

# EUROPEAN JOURNAL OF EMERGING DATA SCIENCE AND MACHINE LEARNING

## REFERENCES

### Books:

Mabillard, V., & Villeneuve, J.-P. (2023). La transparence dans l'espace numérique: Principes, développements, enjeux. PUQ.

Nicole, d'A., & Thierry, L. (2002). La communication interne de l'entreprise (3rd ed.). Dunod.

### Periodicals and journal articles:

Binkkour M. et El Abidi A. (n.d.). La culture organisationnelle et l'innovation: cas des innovations managériales dans les PME familiales de la région d'Agadir. Revue Internationale des Sciences de Gestion, 4(2), 276-297.

Adrdour, M. (2020). La communication publique et la communication numérique: L'expérience marocaine du Centre Régional d'Investissement de la région Souss Massa. Organisation et Territoires, 5.

Alla, A. A., & Rajâa, O. (2022). L'influence de la Culture Nationale et Organisationnelle sur le Leadership et sur les Pratiques de la Gestion des Ressources Humaines: Analyse de la Littérature Managériale. Revue Française d'Economie et de Gestion, 3(2).

Bessières, D. (2009). La définition de la communication publique: Des enjeux disciplinaires aux changements de paradigmes organisationnels. Communication et organisation. Revue scientifique francophone en Communication organisationnelle, 35.

EL KORRI, M. (2016). Diagnostic de la communication interne au sein d'une organisation marocaine. International journal of innovation and scientific research, 27(1), 130-142.

KRA, K. R. (2014). La communication publique dans les administrations publiques ivoiriennes: etat des lieux. Communication en Question, 66-67.

Mouadili, M. (2024). L'influence culturelle sur les choix managériaux des entreprises: une étude comparative usa vs japon. Public & nonprofit management review, 7(1).

Rajaa, O., & Ghazlani, M. E. (2023). Pratiques RH, Culture Organisationnelle et Comportements des salariés : Revue de littérature empirique. International Journal of Accounting, Finance, Auditing, Management and Economics, 4(4-1).

### Reports, working papers, conference proceedings:

Bolap, H.-P. (1990). Une approche ethnométhodologique de la communication organisationnelle: La communication entre l'administration publique camerounaise et ses usagers.

Crozier, M. (1962). Administration et bureaucratie: Le problème des moyens organisationnels du développement.

Fourtier, F., & Apostolidis, T. (2020, July). Culture organisationnelle et rapports inter-individuels en société. 13e congrès de l'Association pour la Diffusion et la Recherche Internationale en Psychologie Sociale (ADRIPS).

### Legal texts:

Dahir n°1.11.91 of 29 July 2011 promulgating the text of the Constitution.

Dahir n°1.18.15 of 5 jounada II 1439 (22 February 2018) promulgating law n° 31.13 relating to the right of access to information.

Dahir n° 1-21-58 of 3 hija 1442 (14 July 2021) promulgating law n° 54-19 on the public services charter.