Volume: 9 Issue: 3 Month: 9, Year: 2026
P.P 63 - 73
مجلة البحوث القانونية والاقتصادية
JOURNAL OF LEGAL AND ECONOMIC RESEARCH

DIGITAL TRANSFORMATION AS A MECHANISM FOR ENTRENCHING THE PRINCIPLE OF TRANSPARENCY IN PUBLIC ADMINISTRATION
AN ANALYSIS FROM THE PERSPECTIVE OF ADMINISTRATIVE LAW

Farida SAIDI*
University of Nouakchott, Mauritania
saidifarida2026@gmail.com

Mohamed Mahmoud MOHAMED SALEM
University of Nouakchott, Mauritania
Mahmoud.1964@gmail.com

Send Article Date: 22-06-2026	Date of acceptance of the article: 21-08-2026

Abstract:

The accelerating pace of digital transformation has introduced profound changes in the way public administration operates, interacts with citizens, and delivers public services. Transparency, a cornerstone principle of democratic governance and the rule of law, has been significantly influenced by these technological developments. This article examines the role of digital transformation as a mechanism for entrenching the principle of transparency in public administration from an administrative law perspective. The analysis demonstrates that digi-tal technologies—including e-government platforms, open data portals, and electronic auditing systems—have fundamentally reshaped the relationship between the state and its citizens by making government operations more visible, traceable, and accountable. The article identi-fies the key mechanisms through which digital transformation enhances transparency, such as proactive information disclosure, the digitalization of public services, traceability systems, and whistleblowing platforms. Additionally, it examines the legal challenges that accompany the digitalization of public services, including data protection, algorithmic accountability, and the digital divide. The analysis concludes that while digital transformation represents a powerful tool for promoting transparency, its effectiveness depends on robust legal frameworks, institu-tional commitment, and inclusive digital policies.

Keywords: Digital transformation, transparency, public administration, e-government, accountability

* Farida SAIDI.

Introduction:

The concept of transparency in public administration has occupied a central position in the discourse on democratic governance, the rule of law, and the social contract between the state and its citizens. Transparency is a fundamental principle that underpins the legitimacy of public authority and the trust that citizens place in their governing institutions (Bovens, 2007). At its core, transparency refers to the obligation of government institutions to make their decisions, processes, and operations visible and accessible to the public, thereby enabling citizens to understand how public resources are managed and how policies are formulated.

The principle of transparency has deep roots in administrative law, where it is closely linked to the doctrines of due process, natural justice, and the right to a fair hearing. In many legal systems, transparency is enshrined in constitutional provisions, freedom of information legislation, and administrative procedure codes (Bovens, 2007). The theoretical justification for transparency rests on several interconnected pillars: it promotes accountability by enabling citizens to hold public officials responsible; it enhances the quality of decision-making by ex-posing government processes to public scrutiny; and it fosters civic trust (Grimmelikhuijsen & Welch, 2012).

The advent of digital transformation has introduced a paradigmatic shift in how trans-parency is conceptualized and institutionalized. Digital transformation, defined as the compre-hensive integration of digital technologies into the processes, structures, and culture of public organizations (Vial, 2019), has fundamentally altered the mechanisms through which govern-ment information is created, stored, and accessed. Unlike traditional forms of transparency, digital transparency is characterized by real-time availability of government data, interactive citizen engagement platforms, and automated monitoring systems (Mergel et al., 2019). This article examines the extent to which digital transformation serves as a mechanism for entrench-ing transparency in public administration, focusing on legal frameworks, technological mecha-nisms, and the challenges that must be addressed.

1-Conceptual Framework: Transparency and Digital Transformation

Insert the content of the first main heading here, always using the adopted formatting (font, size, line spacing); it must contain an introduction to the issues that will be addressed within it.

1.1-The Concept of Transparency in Administrative Law

Transparency in public administration is a multidimensional concept encompassing informa-tional, discursive, and participatory dimensions. At the basic level, transparency refers to the availability of government information to the public (Meijer, 2009). However, Grimmelikhui-jsen and Welch (2012) distinguish between "informational transparency," which concerns data availability, and "discursive transparency," which involves the ability of citizens to understand and engage with information. This distinction is particularly relevant in the digital age, where the volume of online government data can be overwhelming and technically complex.

From a legal perspective, transparency is closely linked to several fundamental princi-ples. The principle of legality requires government actions to be based on clear, publicly ac-cessible legal rules. The principle of procedural fairness demands that affected parties receive notice, an opportunity to be heard, and access to the reasons for decisions. The principle of reasonableness requires decisions to be rationally connected to the evidence considered, which presupposes sufficient transparency for meaningful review (Bovens, 2007).

1.1.1-Digital Transformation in Public Administration:

Digital transformation in public administration refers to the integration of digital technologies—including the internet, cloud computing, big data analytics, artificial intelligence, and blockchain—into the structures and service delivery mechanisms of government institutions (Vial, 2019).

Unlike earlier waves of digitalization that focused on automating paper-based processes, con-temporary digital transformation involves a fundamental rethinking of how public services are designed, delivered, and evaluated (Mergel et al., 2019). The concept of digital governance has emerged as a key analytical framework, referring to the use of digital technologies to im-prove government service quality,

accessibility, and transparency (United Nations Department of Economic and Social Affairs [UN DESA], 2024).

2.1.1-The Nexus Between Digital Transformation and Transparency: Times New Roman font, size 13

The relationship between digital transformation and transparency can be understood through "digital transparency"—the use of digital tools to make government operations visible, trace-able, and accountable (Meijer, 2009). Digital transparency enables real-time disclosure, in-teractive analysis, and participatory engagement with government data. Empirical research confirms the positive relationship: Tolbert and Mossberger (2006) found that e-government adoption was associated with increased perceptions of transparency, while Welch et al. (2005) demonstrated that online government information positively influenced citizens' assessments of accountability. More recent studies show that specific tools—open data portals, electronic procurement systems, and digital auditing platforms—can significantly reduce corruption and strengthen oversight (Srivastava et al., 2016).

2.1-Legal Frameworks Governing Digital Transformation and Transparency:

1.2.1-International Legal Standards

The international legal framework supporting digital transformation and transparency has evolved significantly. The United Nations Sustainable Development Goal 16 calls for "effective, ac-countable, and inclusive institutions," acknowledging the role of digital technologies in promot-ing transparency (UN DESA, 2024). The OECD Recommendation of the Council on Digital Government Strategies provides a comprehensive framework for leveraging digital technolo-gies to improve government transparency and accountability (OECD, 2021). The OECD Digi-tal Government Index assesses digital maturity across six dimensions, including openness and user-driven governance (OECD, 2025). The Open Government Partnership (OGP), which in-cludes 77 member governments, promotes digital technologies to advance transparency through national action plans

committing to digitized services, open data publication, and citizen en-gagement platforms (Open Government Partnership [OGP], 2024).

2.2.1-Constitutional and Statutory Provisions

At the national level, the legal framework is governed by constitutional provisions, freedom of information legislation, e-government laws, and data protection statutes. Freedom of informa-tion laws, existing in over 120 countries, establish the right to request government-held infor-mation. Their digitalization—through online portals and electronic document management—has significantly improved accessibility. However, effectiveness depends on institutional ca-pacity, political will, and citizen digital literacy (World Bank, 2019). E-government legislation in many jurisdictions explicitly mandates transparency, requiring agencies to publish perfor-mance data, budgets, procurement records, and policy evaluations online (Andriessen & van der Voort, 2023).

The application of administrative law to digitalized processes raises novel questions. The prin-ciple of legality requires that algorithms in government operate on clear legal authority and transparent rules (European Parliament, 2022). The principle of accountability becomes par-ticularly complex when decisions are made by algorithms, making it difficult to identify re-sponsible decision-makers or provide effective remedies. Legal scholars argue that existing accountability frameworks may be inadequate for algorithmic governance (HowtoRegulate, 2023).

2-Mechanisms Through Which Digital Transformation Enhances Transparency:

1.2- Open Data and Proactive Information Disclosure:

One of the most significant contributions of digital transformation is the establishment of open data platforms making government information freely available in machine-readable formats. Open data represents a shift from reactive to proactive transparency: agencies systematically publish datasets on public expenditures, procurement contracts, performance indicators, and legislative records (Virtus Interpress, 2023). The European Union's Directive on Open Data and the Re-use of Public Sector Information (2019/1024) requires member states to make public

sector documents available in open formats (European Parliament, 2022). Empirical evidence shows that open data initiatives enable citizens and civil society to monitor spending, identify procurement irregularities, and promote fiscal transparency (Virtus Interpress, 2023).

1.1.2- Digitalization of Public Services:

The digitalization of public services through e-government platforms enhances transparency by reducing direct interactions between citizens and civil servants that create corruption opportunities. Digital platforms standardize procedures, create electronic records, and enable automated monitoring (Andriessen & van der Voort, 2023). These platforms offer electronic document submission, application tracking, digital signatures, and automated notifications, creating a transparent digital trail that reduces information asymmetry between state and citizen (Tolbert & Mossberger, 2006). The UN E-Government Survey 2024 highlights significant progress in digitizing public services globally, with best practices including cross-agency service integra-tion, single digital identities, and automated decision-support systems (UN DESA, 2024).

2.1.2- Traceability Systems and Automated Monitoring:

Digital transformation has introduced sophisticated traceability systems that enable compre-hensive tracking of administrative decisions. Unlike paper-based systems, digital systems maintain immutable records of all transactions and decisions. Blockchain technology creates tamper-proof records verifiable by multiple parties, and has been applied to land registries, procurement, and voting systems (Andriessen & van der Voort, 2023). Automated monitor-ing systems powered by artificial intelligence can analyze large volumes of data to identify suspicious patterns, predict potential corruption, and flag irregular transactions (Nguyen et al., 2023).

2.2-Citizen Participation and Whistleblowing Platforms:

Digital transformation has created new avenues for citizen participation in government over-sight. Online whistleblowing platforms allow citizens and employees to report corruption with-out retaliation, providing secure anonymous reporting channels and case management systems

(Grimmelikhuijsen et al., 2013). Digital platforms for citizen feedback create feedback loops enabling agencies to identify systemic issues and demonstrate responsiveness, thereby enhanc-ing both transparency and accountability (Andriessen & van der Voort, 2023).

3- The Role of Digital Transformation in Fighting Corruption

Corruption remains one of the most significant obstacles to effective governance and the rule of law. Transparency has long been recognized as a precondition for corruption prevention, and digital transformation has significantly enhanced states' capacity to promote transparency (United Nations Office on Drugs and Crime [UNODC], 2020). Digital transformation reduces corruption opportunities by limiting officials' discretionary powers, standardizing procedures, and creating transparent digital records. Digital procurement systems automate tendering, eval-uate bids against pre-established criteria, and publish results online (Srivastava et al., 2016). The digitization of financial management through integrated systems has created real-time ex-penditure visibility, significantly reducing fund leakage in developing countries (World Bank, 2019).

Digital technologies also enhance detection and investigation capacity. Data analytics tools identify suspicious patterns, while digital forensics enable recovery of evidence and fund tracing through complex networks (Nguyen et al., 2023). Beyond technical contributions, digi-tal platforms promote a culture of accountability by creating "sunlight" that discourages corrupt practices. The concept of "digital accountability"—using digital tools to ensure officials can be held responsible—has emerged as a key analytical framework (Virtus Interpress, 2023).

5.1- Challenges and Limitations

Despite its significant potential, digital transformation faces several challenges that must be addressed.

5.1-Data Protection and Privacy

The digitalization of public administration generates vast quantities of personal data, raising concerns about data protection and privacy. Government databases containing sensitive in-

formation must be protected against unauthorized access and breaches. The tension between transparency and privacy is fundamental: transparency requires information sharing, while pri-vacy requires personal data protection (European Parliament, 2022).

The EU's General Data Protection Regulation establishes principles for lawful data processing, including purpose lim-itation, data minimization, and consent, requiring government agencies to implement technical and organizational protection measures (European Parliament, 2022).

5.2-Algorithmic Bias and Automated Decision-Making

The growing use of algorithms in public administration raises questions about fairness and transparency. Algorithmic bias—systematic discrimination from algorithmic design or deployment—risks perpetuating social inequalities in areas such as welfare determination and criminal justice (HowtoRegulate, 2023). The "black box" problem compounds accountability challenges, making it difficult for citizens to understand algorithmic decisions or for courts to review their legal-ity. Several jurisdictions are developing frameworks for algorithmic accountability, including impact assessments and independent oversight bodies (European Parliament, 2022).

5.3-The Digital Divide

The digital divide—the gap between those with and without digital access—represents a sig-nificant barrier. Large populations in developing countries lack internet access, digital devices, and digital literacy skills. Without efforts to bridge this divide, digital transparency risks ex-acerbating inequalities (UN DESA, 2024). Addressing this requires investment in broadband infrastructure, affordable devices, digital literacy programs, and accessible platform design (Tolbert & Mossberger, 2006).

5.4- Institutional Resistance and Political Will

Digital transparency initiatives often face resistance from officials who perceive transparency as threatening discretionary power, and from bureaucratic structures resistant to change. Suc-cess depends on strong political leadership, supportive institutional cultures, and effective legal frameworks mandating transparency (World Bank, 2019).

Governments should develop comprehensive legal frameworks mandating digital technologies for transparency, including provisions for open data, electronic service standards, algorith-mic accountability, and whistleblowing protection (OECD, 2021).

Investment in robust digital infrastructure—broadband connectivity, secure data centers, and interoperable systems—is es-sential, particularly in underserved areas (UN DESA, 2024). Digital literacy programs are needed to equip citizens with skills to navigate government platforms and interpret data (Grim-melikhuijsen et al., 2013). As automated systems proliferate, governments should adopt al-gorithmic impact assessments, publish algorithmic logic, and establish independent oversight bodies (European Parliament, 2022).

- **Conclusion**

This article has examined the role of digital transformation as a mechanism for entrenching the principle of transparency in public administration from an administrative law perspective. Digital technologies—including e-government platforms, open data portals, digital auditing systems, and whistleblowing platforms—have fundamentally reshaped how government infor-mation is disclosed, decisions are monitored, and officials are held accountable. International organizations such as the United Nations, the OECD, and the Open Government Partnership have played leading roles in developing standards and best practices for digital transparency.

The evidence supports the conclusion that digital transformation can significantly en-hance transparency by reducing discretionary power, creating comprehensive audit trails, em-powering citizen oversight, and enabling more effective corruption detection. However, realiz-ing this potential depends on robust legal frameworks, adequate institutional capacity, political commitment to openness, and inclusive digital policies that bridge the digital divide.

Looking forward, technologies such as artificial intelligence, blockchain, and the Inter-net of Things will create new opportunities for enhancing transparency while raising new legal and ethical challenges. Administrative law must continue to adapt, ensuring that principles of legality, transparency, accountability, and fairness are effectively applied in the digital context.

The entrenchment of transparency through digital transformation is a fundamental legal and in-stitutional undertaking requiring sustained commitment and active citizen engagement to create more transparent and trustworthy public administrations that uphold the rule of law.

References

1. Andriessen, T. H. A., & van der Voort, H. G. (2023). Digitally-induced change in the public sector: A systematic review. Public Management Review, 25(12), 2417–2440. https://doi.org/10.1080/14719037.2023.2234917
2. Bovens, M. (2007). Analysing and assessing accountability: A conceptual framework. European Law Journal, 13(4), 447–468. https://doi.org/10.1111/j.1468-0386.2007.00378.x
3. Cucciniello, M., Porumbescu, G. A., & Grimmelikhuijsen, S. (2023). Digital governance and transparency: How open data initiatives enhance government accountability. Administrative Sciences, 13(2), 45. https://doi.org/10.3390/admsci13020045
4. European Parliament. (2022). Digitalisation and administrative law (Study PE 730.350). European Parliamentary Research Service. https://www.europarl.europa.eu/RegData/etudes/STUD/2022/730350/EPRS_STU(2022)730350_EN.pdf
5. Grimmelikhuijsen, S. G., & Welch, E. W. (2012). Developing and testing a theoretical framework for computer-mediated transparency of local governments. Public Administration Review, 72(6), 871–881. https://doi.org/10.1111/j.1540-6210.2012.02625.x
6. HowtoRegulate. (2023). Digital government: Regulating the automation of public administration. HowtoRegulate. https://howtoregulate.org/digital-government-regulating-automation-of-public-administration
7. Meijer, A. J. (2009). Understanding computer-mediated transparency. Public Management Review, 11(6), 849–873. https://doi.org/10.1080/14719030903229635
8. Mergel, I., Edelmann, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. Government Information Quarterly, 36(4), 101385. https://doi.org/10.1016/j.giq.2019.06.002
9. Nguyen, T. T. D., Nguyen, T. D., Pham, T. T. H., & Nguyen, H. T. (2023). Digital transformation: Exploring big data governance in public administration. Sustainability, 14(24), 16774. https://doi.org/10.3390/su142416774
10. OECD. (2021). The e-leaders handbook on the governance of digital government. OECD Publishing. https://doi.org/10.1787/2523ea2c-en
11. OECD. (2025). Government at a glance 2025: Methodology for the OECD digital government index. OECD Publishing. https://www.oecd.org/gov/digital-government/government-at-a-glance-2025_70e14c6c.htm
12. Open Government Partnership. (2024). Actions for transparent and accountable digital governance. Open Government Partnership. https://www.opengovpartnership.org/actions-for-transparent-and-accountable-digital-governance
13. Srivastava, S. C., Teo, H. H., & Devaraj, S. (2016). You can't bribe a computer: Dealing with the societal challenges of adoptions of e-government systems. Information Systems Frontiers, 18(1), 147–163. https://doi.org/10.1007/s10796-014-9486-1
14. Tolbert, C. J., & Mossberger, K. (2006). The effects of e-government on trust and confidence in government. Public Administration Review, 66(3), 354–369. https://doi.org/10.1111/j.1540-6210.2006.00594.x
15. United Nations Department of Economic and Social Affairs. (2024). UN E-Government Survey 2024: Digital government in the decade of action for sustainable development.

United Nations. https://publicadministration.un.org/egovkb/en-us/reports/un-e-government-survey-2024

16. United Nations Office on Drugs and Crime. (2020). Transparency as a precondition for effective anti-corruption measures. United Nations Office on Drugs and Crime. https://www.unodc.org/e4j/anti-corruption/module-6/key-issues/transparency-as-a-precondition.html
17. Vial, G. (2019). Understanding digital transformation: A review and a research agenda. The Journal of Strategic Information Systems, 28(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003
18. Welch, E. W., Hinnant, C. C., & Moon, M. J. (2005). Linking citizen satisfaction with e-government and trust in government. Journal of Public Administration Research and Theory, 15(3), 371–391. https://doi.org/10.1093/jopart/mui012
19. World Bank. (2019). Enhancing government effectiveness and transparency: The fight against corruption. World Bank Group. https://www.worldbank.org/en/topic/governance/publication/enhancing-government-effectiveness-and-transparency-the-fight-against-corruption