



DIGITALIZATION, A MAIN PILLAR IN THE EFFICIENCY OF THE MEANS OF DIRECT PARTICIPATION OF CITIZENS IN THE ACT OF GOVERNANCE WITH AN EMPHASIS ON PUBLIC ADMINISTRATION

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Abstract: *We will try to touch on the most important topics related to the proposed theme:*

- 1. What are the main barriers to the full implementation of digitalization in public administration in Romania?*
- 2. How can citizens' personal data be protected in the context of the expansion of digital government services?*
- 3. What are the international success models in the digitalization of citizen participation in the act of governance and how can they be adapted in the Romanian context?*

The digitalization of citizen participation is no longer an option, but a strategic necessity for the modernization of democratic systems. It fundamentally transforms the relationship between the state and the citizen, offering increasingly sophisticated instruments of direct and transparent involvement.

Research demonstrates that the success of this transformation depends on a coherent vision, sustained investments in infrastructure and, above all, on political commitment to change.

Keywords: *digitalization, citizen participation, e-government, transparency*

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INTRODUCTION

Digitalization is a fundamental element in transforming the way citizens interact with public institutions. According to the Digitalization Guide, published by the Ministry of Research, Innovation and Digitalization, the digitalization process involves a series of essential services and components for the modernization of public administration. Therefore, according to this concept, the objectives of digital transformation in public administration are:

a) reducing public spending, combating bureaucracy and corruption at the level of public institutions; b) increasing the degree of transparency in the use and administration of public funds; c) improving access to public information and services in accordance with the legislation on the protection of personal data and free access to information of public interest; d) eliminating direct contact between the clerk at the counter and the citizen or economic agent; e) providing quality public information and services through electronic means; f) strengthening the administrative capacity of public institutions to fulfill their role and objectives and to ensure the transparent provision of public information and services; g) promoting collaboration between public institutions; g) promoting collaboration between public institutions for the provision of public services by electronic means; h) redefining the relationship between citizens and public administration, respectively between the business environment and public administration, in order to facilitate their access to public services and information, through information technology; i) promoting cutting-edge technologies within public institutions, renouncing the use of the rail file.

The Romanian public administration has identified several main directions of digitalization that facilitate the direct participation of citizens in the act of governance. Among the essential online services are, for example:

-digital front-office services that include complex platforms that allow citizens to interact efficiently with public institutions, the following are mentioned in the Digitalization Guide: a. Online services for citizens (taxes and duties, agricultural register, urban planning). The online services application includes functionalities through which administrative procedures can be initiated by citizens, companies, partner institutions. The respective procedures will be automatically taken over from the online services application in the registry and electronic document management system, in order to be assigned a registration number. Electronic services will be able to be used in an authenticated or unauthenticated manner; b. Online payments via the Internet for local taxes and fees. The application must ensure electronic payment made with bank cards via the Internet, for all tax obligations of individual and legal entity taxpayers; c. Communication with bailiffs' offices/notaries public. The concept will allow online consultation of the database by bailiffs and notaries public. It must allow a bailiff or notary to search for information related to taxpayers, according to predefined criteria: name, surname, CNP, CUI, address. The solution can be integrated with the tax and duties application to retrieve information on taxable assets.

-back-office components

a. Document Management (DMS – Document Management System): -Document management applications ensure the necessary operations throughout the life cycle and electronic administration of documents; -Registry; -Automatic registration of documents in the other modules; -Automates the circulation of documents within the institution and the existence of an activity panel for each person; -Electronic archiving.; b. Taxes and duties - The tax and duties management application must contain all the functionalities and processes specific to an institution for establishing, collecting and tracking revenues to the local budget with the obligation to comply with all legal requirements in the field, including the regulations imposed by the Ministry of Finance for IT applications.; c. Commercial and ANL contracts The application must provide the necessary



support for the process of managing rental/concession contracts, both commercial and ANL housing.; d. Agricultural Register The agricultural register application ensures electronic records of land use categories, agricultural production means and livestock that contribute to the development of agriculture and the good use of local resources, according to the Agricultural Register forms.; e. Urbanism The urbanism application facilitates the management of the specific activity of the urbanism department, covering the records of PUG / UTR, PUZ, PUD, automates the issuance of urbanism certificates and building permits, INS reports, manages work receptions and other specific operations, keeps records of street nomenclature.; f. Financial - accounting.; g. Human resources and payroll - The Human Resources functionality must provide the possibility of managing personal data, employment contracts and organizational structure, also facilitating the generation of reports based on the information managed.; h. Public procurement.; i. Social assistance The social assistance application will allow the unified management of beneficiaries of various types of social measures and the registration of files of services or benefits provided.; j. Local police and public order (with mobile component) - The application for local police must ensure operational planning, resource monitoring and dispatching of public order formations.; k. Electronic forms. (https://www.mcid.gov.ro/wpcontent/uploads/2024/07/20240702_Ghidul_Digitalizarii.pdf, p.55 - 63).

Currently, digital services are the creation of authorities “Today, digital public services are commonly produced by national, state or local authorities and are provided to citizens, businesses and other entities under their jurisdiction.” (J. Bertot, E. Estevez, T. Janowski, 2016, p. 211-222).

Digital wallet – a new paradigm

The digital wallet is a technological innovation that radically transforms the interaction of citizens with the administrative system. It offers: secure storage of personal documents, the possibility of accessing documents anytime and anywhere, electronic sharing of documents with authorities, eliminating the need to repeatedly present physical documents.

Although digitalization offers numerous benefits, its complete implementation is a complex process. Public administration must address a series of challenges such as: cybersecurity, personal data protection, ensuring accessibility for all categories of citizens, training civil servants to use new technologies.

Digitalization is no longer just an option, but a fundamental necessity for the modernization of Romanian public administration. Digital transformation offers the premises for a more efficient, more transparent and closer to the needs of citizens administration, thus representing an essential pillar of modern governance.

1. WHAT ARE THE MAIN BARRIERS TO THE FULL IMPLEMENTATION OF DIGITALIZATION IN PUBLIC ADMINISTRATION IN ROMANIA?

The digitalization of the Romanian public administration is a complex and multidimensional process, which faces numerous systemic barriers. According to a study prepared by the European Institute of Romania, digital transformation is not limited to technological implementation, but involves a fundamental change in mentality and organizational structure.

Institutional and cultural barriers

One of the main challenges is institutional resistance to change. The Romanian public administration presents a profound organizational inertia, characterized by rigid bureaucratic procedures and a limited understanding of the potential of digital transformation. Studies reveal that

there is a tendency to use the concepts of digitalization and digitization interchangeably, which demonstrates a superficial understanding of the digital transformation process.

Decisional and territorial fragmentation

Another significant barrier is the fragmentation of the administrative system, both at the decisional and territorial levels. The lack of a unified vision and effective coordination mechanisms between the different public institutions hinders the digitalization process. Researchers emphasize the need for an integrated approach that goes beyond traditional administrative boundaries.

(https://ier.gov.ro/wp-content/uploads/2021/07/Policy-brief-nr.-9iulie-2021_Final.pdf)

Technological and infrastructure challenges

From a technological perspective, Romania faces significant gaps in the digital economy. Although the country benefits from a developed mobile communications infrastructure and a significant number of software developers, significant challenges remain in competitiveness on the global digital market (https://ier.gov.ro/wp-content/uploads/2018/10/SPOS_2017_Studiul_3_FINAL.pdf).

Resistance to change and lack of political will

A crucial aspect is the resistance to change and the lack of consistent political will. According to the analyses carried out by av. drd. Alexandru Silviu Goga in the article entitled “Public Administration Revolution: Towards a Digital and Efficient Governance“, the digital transformation requires a profound constitutional reform, which would overcome narrow political interests and focus on the real efficiency of the administration.

Moreover, the author of the article points out the following issues “Constitutional Reform: Analysis of the Necessary Amendments. Legal AI. Current Constitutional Framework and Its Limitations. The Romanian Constitution, in its current form, establishes in Title III, Chapter V, the administrative-territorial structure based on communes, cities and counties. Article 3 paragraph (3) provides that “the territory is organized, from an administrative point of view, in communes, cities and counties”, and this rigid provision limits the possibilities for optimizing and streamlining public administration.

Proposals for Constitutional Amendments

Amendment of Article 3:

- Rewording paragraph (3) to allow for a more flexible administrative organization;
- Introducing the concept of “administrative region” as the main level of organization;
- Removing explicit references to the county structure.

Adaptation of Article 120:

- Introducing the principles of efficiency and sustainability in public administration;
- Adding a new paragraph on the mandatory digitalization of public services;
- Establishing clear economic viability criteria for administrative-territorial units.

Revision of Article 121:

- Redefining local public authorities in the context of the new regional organization;
- Introducing the concept of “regional councils” with extended powers;
- Establishing mechanisms for interregional cooperation.

Supplementing Article 122:

- Replacing the provisions regarding the county council with those regarding regional authorities;
- Clear definition of regional powers and responsibilities;
- Introduction of mechanisms to control the efficiency of public spending.

Impact of Constitutional Amendments

These amendments would allow:

- Implementation of a modern and efficient administrative structure;
- Reduction of bureaucracy and administrative costs;
- Optimization of public services through digitalization;
- Increasing transparency and accountability in the management of public money.

Constitutional Guarantees for Administrative Reform

The new constitutional provisions should include:

- Clear principles of financial efficiency and sustainability;
- Mandatory implementation of digital governance;
- Mechanisms for periodic evaluation of administrative performance;
- Guarantees for the financial autonomy of viable administrative-territorial units.

The Constitutional Reform Implementation Process

The implementation of these constitutional amendments requires a complex process that includes:

- Organizing a national debate on administrative reform;
- Consulting experts in constitutional law and public administration;
- Active involvement of civil society and academia;
- Developing a realistic timetable for implementing the changes.

This process must be transparent and inclusive, ensuring that all stakeholders have the opportunity to contribute to defining the new administrative framework.” (<https://www.juridice.ro/767491/revolutia-administratiei-publice-catre-o-guvernare-digitala-si-eficienta.html>).

Legislative and regulatory aspects

The current legislative framework presents significant obstacles to the full implementation of digitalization. Transposition of European legislation into the national context is slow, and the creation of the necessary frameworks for the development of the digital economy remains a complex and lengthy process.

Lack of digital skills

A fundamental barrier is the deficit of digital skills among civil servants. Digital transformation is not limited to technological implementation, but involves a profound change in mentality and capacity to adapt to new technological tools.

Conclusions and perspectives

Overcoming these barriers requires a systemic approach, combining political will, investments in infrastructure, professional training and a coherent vision of digital transformation. The cost of inaction is far greater than modernization efforts, and Romania has the opportunity to fundamentally transform its public administration through digital technologies.

Digital transformation is not just an option, but a pressing necessity for modernizing and streamlining the Romanian administrative system, which can bring transparency, reduced bureaucracy, and better service to citizens.



2. HOW CAN CITIZENS' PERSONAL DATA BE PROTECTED IN THE CONTEXT OF THE EXPANSION OF DIGITAL GOVERNMENT SERVICES?

Legal Framework for the Protection of Personal Data

Technological evolution has generated significant challenges in the field of personal data protection. According to recent legal research, the digital transformation of public administration involves a series of complex mechanisms for securing citizens' information. (<https://www.juridice.ro/746674/protectia-juridica-a-dreptului-la-viata-privata-in-contextul-prelucrarii-datelor-cu-caracter-personal.html>).

Professor Corneliu Bîrsan mentions that "the notion of private life, within the meaning of art. 8 of the Convention, as interpreted by the European Court of Human Rights, includes the person's right to intimate, personal privacy, their right to social privacy and the person's right to a healthy environment" (C. Bîrsan, 2005, p. 600.)

Ion Deleanu, in his work, emphasizes the fact that "private life, in the strict sense, corresponds to the secret sphere of the individual... it is the place where the individual has the right to be left alone." (I. Deleanu, 2006, p. 481).

European Regulation 679/2016 (GDPR) is the main legislative instrument that sets standards for the protection of personal data in the context of digital government services. "defines 'personal data' as any information relating to an identified or identifiable natural person, referred to as the data subject. An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to his or her physical, physiological, genetic, mental, economic, cultural or social identity." (Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC General Data Protection Regulation, Available at: <https://eur-lex.europa.eu/legal-content/RO/TXT/?uri=celex%3A32016R0679>, accessed on: 02.04.2025.)

Fundamental Principles of Digital Security

The protection of personal data in government digital services is based on several fundamental principles. The National Supervisory Authority for Personal Data Processing emphasizes the need to build a comprehensive data protection culture, involving all institutional actors.

Technical Security Mechanisms

Government digital services must implement several layers of security to protect personal data. Strong authentication is the first level of protection. Government digital systems use complex methods of identity verification, which go beyond traditional authentication methods. This involves the use of multiple identification factors, such as complex passwords, two-step verification and advanced biometric systems.

Explicit and Transparent Consent

A crucial element in the protection of personal data is obtaining explicit and transparent consent from citizens. Digital services must provide clear and detailed information about how personal data will be used, the purpose of the processing and the rights of the data subjects.

Emerging Challenges and Risks

The digitization of government services raises significant cybersecurity challenges. According to legal analyses, the main risks include: System vulnerabilities, Potential security



breaches, Risks of manipulation of personal data.

The Role of Artificial Intelligence in Data Protection

Artificial intelligence plays an increasingly important role in protecting personal data. AI-based systems can detect and prevent fraud attempts, monitor potential threats in real time, and implement proactive security measures (<https://www.juridice.ro/695467/ai-act-provocari-si-solutii-in-reglementarea-controversatei-inteligente-artificiale.html>).

According to the analyses of the two authors of the article “AI Act: Challenges and solutions in regulating the controversial artificial intelligence” - “Historically, there does not seem to be a more appropriate moment for the publication by the Parliament and the Council of the European Union of the proposal for a Regulation on artificial intelligence (“the Regulation” or “AI Act”). In the context of recent developments, the purpose of the Regulation is to regulate and implement mechanisms for the supervision and control of artificial intelligence (“AI”) systems.”

Institutional Responsibility

Public institutions bear full responsibility for the protection of personal data. Current legislation provides for severe sanctioning measures for institutions that do not comply with security and confidentiality standards.

Conclusions and Future Perspectives

Protecting personal data in digital government services is a complex process, requiring a multi-layered approach. Technology, legislation and organizational culture must work together to ensure a safe and transparent digital environment for citizens.

Digital transformation should not compromise the fundamental right to privacy, but provide modern and effective mechanisms to protect personal information.

3. WHAT ARE THE INTERNATIONAL SUCCESS MODELS IN DIGITALIZING CITIZEN PARTICIPATION IN GOVERNMENT AND HOW CAN THEY BE ADAPTED TO THE ROMANIAN CONTEXT?

The Estonian e-Government Model: A World Reference in Digital Participation

Estonia has become a true international model in the digitalization of citizen participation, radically transforming the way citizens interact with public institutions. According to research, the country has achieved a true digital revolution that deserves in-depth analysis.

The main features of the Estonian model include a comprehensive and coherent vision of digitalization. Their e-government system allows citizens to complete almost any municipal or state service online in just a few minutes. Official data shows that 99% of public services are available online 24/7, which represents an unprecedented level of digitalization.

A crucial element of their success is the integrated technological infrastructure. Their system is based on a centralized population database, where each person has a unique identifier containing complete and up-to-date information. This approach ensures total transparency and significantly reduces bureaucracy (https://www.mcid.gov.ro/wp-content/uploads/2024/07/20240702_Ghidul_Digitalizarii.pdf).

Hungarian Digital Platform: A Model of Centralization and Efficiency

Hungary has developed a distinct model for the digitalization of local public administration through Application Service Provider (ASP). Their system offers a centralized platform that connects over 93% of local administrations, standardizing and streamlining public services [1].



The main features of the Hungarian model include:

- A single e-government portal
- Automatically pre-filled online forms
- Centralized authentication system
- Interoperability between different administrative systems

The system allows citizens to initiate administrative procedures online, with pre-filled data from official registers, significantly reducing the time and effort required for interactions with authorities [1].

The Swedish Model: Transparency and Citizen-Oriented

Sweden has developed a distinct approach to the digitalization of public administration, focusing on the concept of the "24/7 Agency". Their vision is to create a public administration in which government authorities collaborate in networks, placing citizens and businesses at the center of decision-making processes [1].

Their strategic objective goes beyond the simple digitalization of services, aiming to "tear down administrative walls" and reinvent central administration as an open and transparent network organization.

Adaptation in the Romanian Context: Challenges and Opportunities

To implement these models in Romania, several strategic steps are needed. The Digitalization Guide developed by the Ministry of Research, Innovation and Digitalization emphasizes the importance of digital transformation as a complex process of organizational change.

The main directions of action should include:

- Investing in technological infrastructure,
- Developing digital skills of civil servants,
- Creating integrated communication platforms,
- Ensuring data security and confidentiality,
- Promoting a culture of transparency and active participation.

Conclusions

International models demonstrate that the digitalization of citizen participation is not just a technological option, but a strategic necessity for the modernization of public administration. Success depends on a coherent vision, sustained investments and commitment to institutional transformation.

Romania has the chance to learn from international experiences and build its own model adapted to the local context, which would increase transparency, efficiency and citizens' trust in government action.

Scientific foundations of the digitalization of citizen participation

The digitalization of citizen participation is a complex phenomenon that radically transforms traditional democratic mechanisms, offering new tools and platforms for direct citizen involvement in government processes. Recent scientific research emphasizes the strategic importance of this approach, highlighting several fundamental dimensions.

The paradigm of digital transformation of governance

Contemporary researchers define the digitalization of citizen participation as a multidimensional process that goes beyond the simple transposition of administrative services into the online environment. According to studies, digital transformation involves a fundamental reconstruction of the relationship between public institutions and citizens, based on the principles of transparency, accessibility and continuous interaction.

Technological mechanisms for direct participation



Successful international models, such as the Estonian one, demonstrate that the digitalization of citizen participation is based on several essential technological mechanisms:

Integrated digital infrastructure involves the creation of information systems that allow citizens to interact directly with public institutions. For example, Estonia has implemented a system in which 99% of public services are available online 24/7, radically transforming the administrative experience .

Electronic authentication is another fundamental pillar, ensuring the security and identity of users in the digital space. Modern systems use complex methods such as electronic identity cards with digital certificates, which allow electronic signing and accessing public services.

The democratic dimension of digital participation

Digitalization does not only mean technological efficiency, but also represents a new form of exercising democracy. Researchers emphasize that digital platforms offer citizens the opportunity to:

- Monitor decision-making processes
- Participate directly in public consultations
- Access government information in real time
- Provide feedback to public institutions

Epistemological Challenges and Barriers

However, implementing the digitalization of citizen participation poses significant scientific challenges. The main obstacles include:

- Institutional resistance to change
- Variable level of digital literacy
- Cybersecurity risks
- Need for significant technological investments

CONCLUSION

The digitalization of citizen participation is no longer an option, but a strategic necessity for the modernization of democratic systems. It fundamentally transforms the relationship between the state and the citizen, offering increasingly sophisticated tools for direct and transparent involvement.

Research demonstrates that the success of this transformation depends on a coherent vision, sustained investments in infrastructure and, above all, political commitment to change.

Nicoleta Loghin Dumitriu concluded in her paper that, however, implementing digitalization can be difficult and comes with its own challenges. Accessibility, data security and implementation are just some of the challenges governments face. At the same time, efficiency, transparency, citizen participation, reducing bureaucracy and increasing the quality of public services are important opportunities for which governments continue to invest by addressing the challenges associated with digitalized public administration. (N.L. Dumitriu, 2024, p. 72)



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