

Implications of the first regulation in the field of artificial intelligence on public administration.
Study case: Romania

Camelia-Raluca VOINEA

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ABSTRACT

In this paper, we focus on analyzing the importance of digital technology adoption within an organization, focusing on the skills required and acquired due to using digitization and digitalization and with the analysis of artificial intelligence. The paper presents aspects covered by the first legislation in the field of artificial intelligence that has already entered into force starting August 1, 2024, but which will effectively take effect in a phased manner, starting February 2025. Although a National Strategy in the field of Artificial Intelligence 2024-2027 has been designed at the level of Romania as an EU member state, it has emphasized the innovation brought by the use of AI systems and less on the integration of ethics in the use of AI, an aspect that needs to be corrected to align with the provisions of the EU Regulation on Artificial Intelligence.

KEYWORDS: *artificial intelligence, digital transformation, regulation, ethics and transparency, governance.*

1. Introduction: digital transformation and specific tools

The digital transformation at the European Union level is one of the priorities assumed by the European Commission and represents a complex and ambitious process of sustainable and prosperous digitalization. At the core of the strategy is the respect for fundamental human rights and values in the implementation of the digital transformation concerning precisely defined objectives: strengthening Europe's capabilities in new digital technologies, opportunities for business and consumers, supporting the green transition, supporting the achievement of climate neutrality by 2050, supporting digital skills acquisition and training and digitization of public.



services. About the digitization of public services, including in Romania, we have written in previous articles¹, as well as the impact of artificial intelligence on public services in Romania².

Digital transformation refers to the action of integrating digital technologies into all aspects of an organization to improve efficiency, drive innovation and better meet needs. It is a process specific to individuals, whatever their form of organization, individual or associative, as well as to public institutions. This process implies the possibility of integrating essential digital levers, mechanisms and elements into current activities, including:

- Integrating digitization (converting information from analog to digital form; for example, converting handwritten documents into computer records) and digitization (applying digital technologies to improve existing processes (e.g. using software to automate repetitive tasks)³. At the beginning of the digital age, technologies were mainly used for business, promotion and marketing. Gradually, they spread to many areas primarily of social, educational and administrative life;
- Continue digitization by introducing innovative technologies such as Artificial Intelligence, Internet of Things (IoT), and augmented and virtual reality into the organization's work⁴ and by using remote server networks (cloud computing) to store, manage and process data, including ensuring the accessibility and scalability of IT resources⁵;
- New strategies for business evolution in organizations, based on process automation solutions to reduce errors and increase operational efficiency; on the use of advanced data analytics to gain valuable insights and make informed decisions; on promoting a culture of innovation and flexibility to encourage the adoption of new technologies; on investing in human resources, in continuous training of employees to develop the necessary digital skills; on offering personalized services and creating and improving user experiences through efficient communication.

For the field of public services in Romania, the digital transformation started in the early 2010s and continues today. The latest example of national interest shown in the digitization of

¹ Voinea, RC., Steps towards digitization of the public sector. Pași spre digitalizarea sectorului public, in Administrație și justiție socială Administrație și justiție sociale Administration and social justice Administration and social justice equity, inclusion, legality, Editura Universitara, 2023, ISBN 978-606-28-1738-1, pg 270-288.

² Voinea, RC., The Impact of Artificial Intelligence on Public Services in Romania in Academic Journal Of Law And Governance, no. 11.1-11.2, 2023, pg. 21-31, available on line <https://tppublishing.eu/files/ajlg-n11.1-11.2/3.Camelia-Raluca-VOINEA.pdf>.

³ Westerman, G., Leading Digital: Turning Technology Into Business Transformation, ED. Harvard Business Review Pr, 2014, ISBN 9781625272478, pg.178 and following.

⁴ Siebel, TM., Digital Transformation: Survive and Thrive in an Era of Mass Extinction, 2019, Ed. Rosettabooks, ISBN-10 1948122480, ISBN-13 9781948122481, pg. 89 and following.

⁵ El-Gazzar, R.F. (2014) A Literature Review on Cloud Computing Adoption Issues in Enterprises. In: Bergvall-Kåreborn, B., Nielsen, P.A. (eds) Creating Value for All Through IT. TDIT 2014. IFIP Advances in Information and Communication Technology, vol 429. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-662-43459-8_14.

public administration is the National Program for the Digital Transformation of Local Public Authorities, known as Digi Local.⁶ This program, managed by the Ministry of Research, Innovation and Digitalization, aims to integrate digital technologies in local public administration to improve the efficiency and accessibility of public services.

2. Digital transformation tools used in public administration

Being a lengthy process, digital transformation requires the use of specific tools for the domain to be digitized⁷. Thus, the public administration in Romania, to achieve the objectives proposed in the field of digital transformation, has already gone through a series of steps and has used several tools, among which we mention:

- Implementation of the Government Cloud infrastructure within Component 7 – Digital Transformation of the National Recovery and Resilience Plan through the implementation of the Single Digital Portal of Romania, developed by the Romanian Digital Authority for the Digitalization of Romania, which centralizes access to digital public information and services;
- Development of ghișeul.ro, an official platform for online payments, which allows simple and fast purchases of digital public services;
- Using cloud computing services to store and manage data on remote servers, ensuring accessibility and scalability, and applications such as Office 365 to access software over the internet without requiring local installation;
- The use of Artificial Intelligence in data analytics to predict citizen trends and behaviors to improve decisions, improve customer service and automate repetitive tasks;
- Using the Internet of Things (IoT) to connect devices to collect, analyze and transmit data in real-time;
- Cyber security systems to protect data and systems against cyber threats.
- A series of mobile applications to facilitate access to services and information, both for civil servants and citizens.

⁶ The information is taken from the website <https://www.mcid.gov.ro/programe-nationale/programul-national-for-digital-transformation-of-local-public-authorities-digilocal/>.

⁷ Stăiculescu O., Challenges and benefits of digitalization for public institutions in Romania, in "Annals of the "Constantin Brâncuși" University of Târgu Jiu, Economy Series, nr. 1, Editura Academica Brâncuși, ISSN 2344-3685/ ISSN-L 1844-7007, 2024, pp. 94-100, available on: <https://ideas.repec.org/a/cbu/jrnlec/y2024v1p94-100.html>.

3. Effects of digital transformation on public services

The digital transformation of public administration has brought benefits for all actors involved in the digitization process⁸.

Thus, individuals, citizens or entrepreneurial or civil society associations, have benefited from easy access to public services through online platforms, reducing the need for physical presence at various institutions. They have also experienced increased satisfaction with their importance to public administration by simplifying processes and providing quick and efficient solutions to their problems.

On the opposite side, public administration, through the mechanism of digitization, has improved the efficiency of administrative processes, reducing the time needed to complete the requirements and documents; it has shown an increased degree of transparency in its current activity, allowing public access to relevant data and information, which has contributed to better accountability and integrity; it has reduced administrative costs and allowed optimization of available resources. Moreover, the launch of digitization programs with non-reimbursable funds for public administration has created competition among local governments, making them more competitive and eager to provide governed citizens with solutions for their convenience and satisfaction of general needs. The National Interoperability System in Romania, for example, has facilitated the integration of public administration databases, allowing the efficient transfer of data between different institutions⁹.

The process of digital transformation of organizations presents a series of cognitive effects on the competencies that workers have or should acquire. In the applicable context of new technologies, several legal competences become relevant:

- Legal professionals must be experts in compliance and enforcement of the General Data Protection Regulation (GDPR) and similar legislation in other jurisdictions;
- Skills in identifying and managing cyber security risks, including incident response and protection of sensitive information;
- Understanding the legal implications of artificial intelligence, including regulatory, liability, ethical and liability issues;
- Knowledge of blockchain technologies and cryptocurrency regulations, including issues related to smart contracts and financial transactions, as well as the ability to draft and interpret smart contracts automatically executed through blockchain technology;
- Using e-discovery and document management software to streamline legal processes;

⁸ Stăiculescu O., From Bureaucracy to Digital Efficiency: AI Adoption in Romania's Public Sector, Acad. JL & Governance, 11, pp.15, 2023. Available at: https://www.ttpublishing.eu/index.php?show=journal&id=ajlg&do=current_issue.

⁹ <https://www.adr.gov.ro/adr-a-lansat-sistemul-national-de-interoperabilitate-primul-proiect-de-interconnecting-databases-of-public-administration-in-romania/>.

- Familiarization with industry-specific technology regulations such as telecommunications, internet and e-commerce¹⁰;
- Knowledge of international standards and cross-border regulations, essential in a globalized economy;
- Navigating the ethical challenges related to the use of technology, ensuring compliance with the principles of confidentiality and professional integrity;
- Understanding legal responsibilities in case of technological errors or failures to protect the interests of customers/users.

4. The first artificial intelligence regulation

The legislative path of the first Artificial Intelligence Regulation and its content

In 2020, the European Commission launched a public consultation followed by an impact assessment of the first form of the draft regulation, which appeared in April 2021. Over the next 3 years, the draft regulation was shaped and on August 1, 2024, the first law regulating, at the European level, the use of AI technology according to the risk it poses to humans entered into force¹¹. The first legal effects will take place 6 months after entry into force for all EU states in banning unacceptable risk systems. Within one year of entry into force, the second set of legal effects will occur, i.e. the obligation for Member States to designate the authority that will be in charge of national enforcement and implementation of general-purpose rules for AI. Two years after the entry into force, from August 2026, the rest of the legal provisions of this European legislation will come into force. After three years, high-risk AI systems start to comply with additional requirements. After four years, high-risk AI systems used by public authorities and in existence before the law comes into force will comply with the new rules. A national and European report will be submitted to the European Parliament and the Council every four years.

Aim¹² The Regulation pursued by the European legislator is to promote the adoption of human-centered artificial intelligence by ensuring a high level of protection of health, safety and fundamental rights in the context of democracy, the rule of law and the environment against the harmful effects of AI systems in the Union.

The Regulation applies to suppliers, implementers, importers, distributors placing on the market or putting into service AI systems or general-purpose AI models.

¹⁰ Stăiculescu O., Unlocking Economic Growth: The Benefits of Digitalization for Public Institutions in Romania, Journal of Political Science. Revue des Sciences Politiques, No. 81, pp. 212-222, 2024. Available at: https://www.researchgate.net/profile/Oana-Staiculescu-2/publication/379804433_Unlocking_Economic_Growth_The_Benefits_of_Digitalization_for_Public_Institutions_in_Romania/links/661a8ab639e7641c0bbe754a/Unlocking-Economic-Growth-The-Benefits-of-Digitalization-for-Public-Institutions-in-Romania.pdf.

¹¹ https://eur-lex.europa.eu/legal-content/RO/TXT/?uri=OJ%3AL_202401689.

¹² https://eur-lex.europa.eu/legal-content/RO/TXT/?uri=OJ%3AL_202401689.

Given the specific characteristics of AI, against which systems will be classified, namely opacity (the limited ability of the human mind to understand how certain AI systems work), complexity of systems, continuous adaptation and unpredictability of AI, autonomous behavior and functional dependence on data and data quality, the Regulation imposes specific requirements for high-risk AI systems¹³ and obligations for the operators of these systems. It also lays down transparency rules for certain IA systems and some obligations for providers: Establishment of a quality management system; Implementation of a conformity assessment procedure; Drafting the technical documentation; Ensuring traceability of the IA system; Implementing appropriate cybersecurity measures; Monitoring the performance of the IA system after its commissioning.

The Regulation also provides several definitions for key terms related to AI, including *deepfake*, *general-purpose AI system* and *serious incidents*.

Within a year of entry into force, the EU and Member States will develop a system of governance, with clearly defined responsibilities and competencies, and an EU database of high-risk AI schemes overseen by national supervisory authorities will be set up.

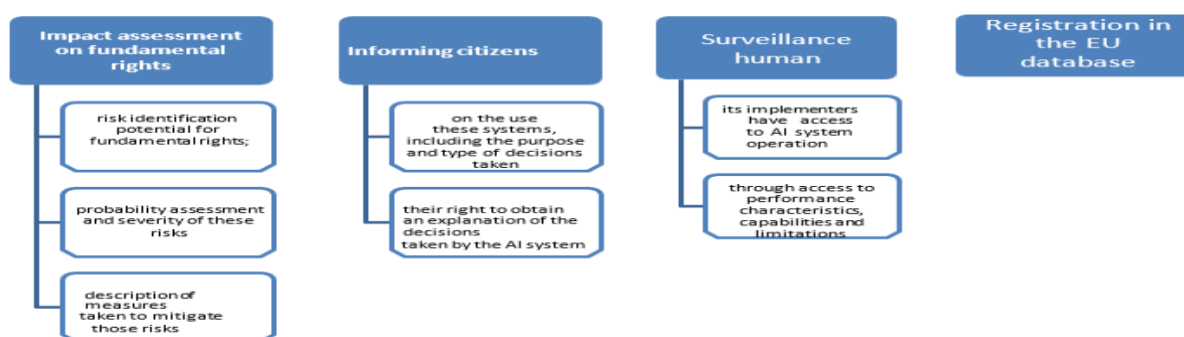
To ensure compliance, Member States establish a system of dissuasive sanctions, including fines, warnings and non-monetary measures, but also a list of offenses relevant to the use of AI and specific areas where AI systems are considered high risk.

The regulation provides for a regular evaluation of its functioning, with public reports to the European Parliament and the Council every four years, with the first report due by August 2, 2029.

Implications of the EU AI Regulation for Public Services

The main implications emerging from the text of the Regulation relate to specific obligations and requirements for public authorities developing, implementing or using AI systems.¹⁴

Fig. 1: own source: Obligations for public authorities as implementers of high-risk AI systems

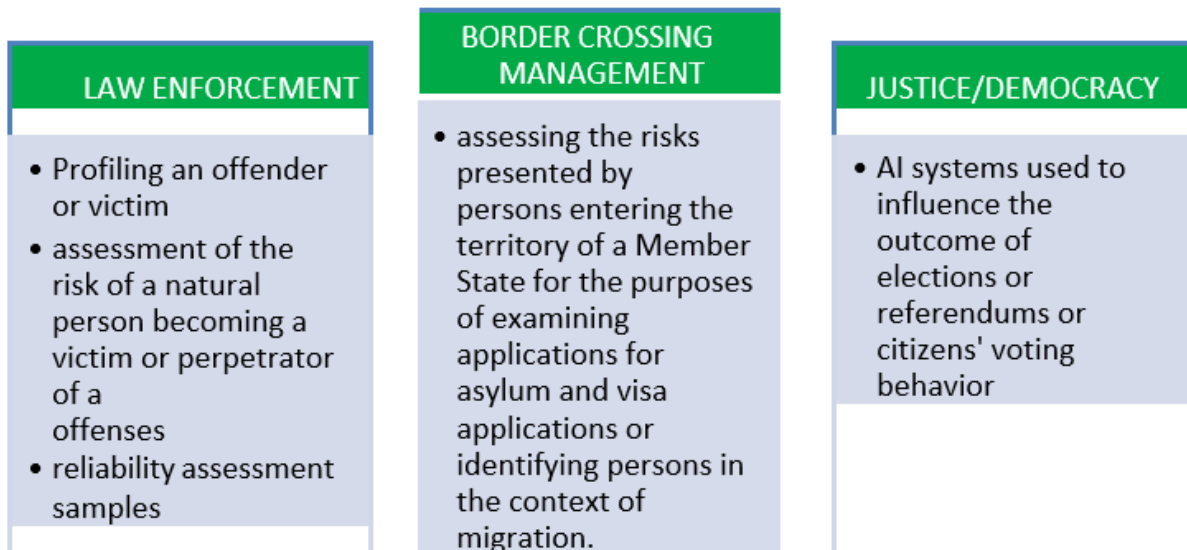


¹³ Manchev. World's first law for artificial intelligence. legal, ethical and economic aspects. *Works and Technologies*, 15(1):225-228. doi: 10.26883/2010.241.5985.

¹⁴ Mir.O., (2024). The AI Act from the Perspective of Administrative Law: Much Ado About Nothing?. *European journal of risk regulation*, 1-13. doi: 10.10173/err.2024.54.

In the Regulation¹⁵ are expressly provided for, but not limited to, a number of areas of public administration in which the use of AI systems presents a high risk for the authorities:

Fig.2: Own source: fragile areas for using AI systems



5. How to influence the Regulation implementation of the National Strategy for Artificial Intelligence 2024-2027?

Analyzing the National Artificial Intelligence Strategy 2024-2027¹⁶ and taking into account the entry into force of the Regulation, it is possible to observe some influences brought by the European legislation on AI systems.

Thus, at the time the Strategy was finalized, there was no legislation in the field of IA. The entry into force on August 1, 2024 of the Regulation requires national authorities to update the Strategy to integrate the provisions of the EU Regulation and to establish clear mechanisms for its implementation at the national level.

The Strategy mentions the principle of liability in the development and deployment of AI systems but does not clarify in detail who is liable for any damage caused by the misuse of AI systems. In contrast, the EU Regulation sets out a clear system of liability with specific obligations for suppliers, importers, distributors and implementers of AI systems. The Strategy therefore needs to clarify and align the concept of liability with the EU Regulation.

¹⁵ https://eur-lex.europa.eu/legal-content/RO/TXT/?uri=OJ%3AL_202401689.

¹⁶ <https://adr.gov.ro/wp-content/uploads/2024/03/Strategie-Inteligenta-Artificiala-22012024-1.pdf>.

The Strategy notes the lack of effective mechanisms for monitoring and surveillance of the impact of AI on society, although the Strategy refers to this need. The EU Regulation, instead, sets up a system of market surveillance and product compliance, with specific competencies for national and European authorities. In the period of organizing the implementation of the provisions of the Regulation, the national authorities will have to integrate this surveillance system and define the role of the Romanian authorities in monitoring the implementation of the EU Regulation.

To align the European provisions of the Regulation with national legislation, it is necessary to integrate ethics in the development and use of AI in public administration and beyond. Conceived before 2024, but with the draft European act published for public consultation by the Commission as early as 2021, the Strategy prioritizes innovation over ethics and emphasizes stimulating innovation in AI, but does not sufficiently address the ethical aspects of AI development and use. But the EU regulation sets clear ethical principles for AI, prohibiting certain practices considered unacceptable, such as subliminal manipulation or exploiting the vulnerabilities of certain groups.

However, taking into account that the Strategy is the approach realized through the implementation of a program on "Strategic framework for the adoption and use of innovative technologies in public administration 2021-2027 - solutions for streamlining the work"¹⁷, which supports efforts to standardize, operationalize and regulate the development of AI and leverage positive effects, but focuses more on innovation in public administration, some alignments of the Strategy with the requirements of the EU Regulation are necessary, regarding:

- Compliance obligations: the EU Regulation establishes a set of mandatory requirements for high-risk AI systems, including those used in the public sector;
- Definition and categorization of AI systems: among the regulations in the Regulation, the notions of "AI system" are defined and methodologies are established for their categorization according to the risk they present. The Romanian legislator will have to use these definitions and methodologies to identify and classify AI systems developed or used in Romania, ensuring a common understanding of the associated risks;
- Testbeds: The EU Regulation encourages the creation of AI testbeds to allow providers, including public sector providers, to test AI systems in a controlled environment before they are placed on the market. Romania will need to promote and facilitate access to these test facilities to support the responsible development and deployment of AI;
- Transparency and governance: the EU Regulation places a strong emphasis on transparency and governance in the use of AI, imposing obligations to inform citizens and to document the decisions taken by AI systems. These principles must be integrated into all national legislative initiatives, ensuring a high level of accountability and public trust in the use of AI.

¹⁷ <https://adr.gov.ro/wp-content/uploads/2024/03/Strategie-Inteligena-Artificiala-22012024-1.pdf>.

6. Conclusions

The EU regulation on AI imposes several challenges for national legislation, requiring a careful analysis of national strategies and their adaptation to the new European legislative framework. Romania needs to work together with the EU institutions and other Member States to ensure effective implementation of the regulation and to capitalize on the opportunities offered by AI, while respecting the fundamental rights of citizens.

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ABOUT THE AUTHOR

Camelia-Raluca VOINEA, PhD, Lecturer at the Faculty of Law, University of Craiova, Romania.

E-mail: ralucavoinea1412@gmail.com; Tel: +40.745261778

