

Artificial Intelligence in Public Administration: Human Rights Implications, Benefits, Challenges, and Regulatory Needs

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Abstract

In today's digital context, artificial intelligence (AI) has become an essential tool in transforming public administration. This technology promises to streamline government institutions by automating processes, reducing bureaucracy, and improving the quality of public services, thus contributing to more transparent and accessible governance. However, the large-scale application of AI in the public sector raises significant risks, especially concerning the protection of fundamental human rights. This study analyzes the implications of AI use in public administration, with a focus on resulting legal and ethical issues. The methodology is qualitative and based on comparative analysis of international and European legislation, examination of official EU documents, and identification of regulatory gaps. Findings show that while AI enhances efficiency, it also poses challenges related to decision-making transparency, data protection, and algorithmic discrimination. The study's implications emphasize the need for a coherent legal and ethical framework, human oversight, and public policies that ensure citizens' rights are respected in relation to emerging technologies. The paper offers concrete recommendations for the responsible implementation of AI in the public sector, balancing technological innovation with the protection of democratic values.

Keywords: artificial intelligence, public administration, human rights, regulatory framework, digital transparency.

JEL Classification: K10, K23, K24, K41

1. Introduction

In recent years, it has become evident that Artificial Intelligence (AI) has evolved into an essential tool for modernizing public administration, promising increased efficiency, reduced bureaucracy, and the optimization of administrative processes. The implementation of AI in the public sector enables better resource management, the automation of repetitive tasks, and the delivery of faster and more accessible services to citizens. However, the use of this technology also raises significant challenges related to fundamental human rights, decision-making transparency, and personal data protection.² A thorough analysis is crucial to understanding how AI can be integrated into public administration without jeopardizing citizens' rights. Proper regulation and the application of strict ethical principles are necessary to ensure that the automation of administrative processes does not lead to the exclusion or discrimination of vulnerable social groups. It is equally important to maintain human oversight over AI systems and to establish mechanisms for transparency and legal accountability regarding

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² Saar Alon-Barkat & Busuioc, Mădălina. *Human-AI interactions in public sector decision making: "Automation bias" and "selective adherence" to algorithmic advice.* (2022), „Journal of Public Administration Research and Theory”, 33(1), pp. 153–169.

the use of advanced technologies in the public sector. Across the European Union and globally, states are developing strategies to integrate AI into public institutions, aiming to modernize administration and enhance the relationship between citizens and the government.

Nonetheless, the adoption of AI in the public sector brings forth a series of legal and ethical challenges, particularly concerning the transparency of decision-making processes, the protection of personal data, and the risk of algorithmic discrimination. Regulating the use of AI in public administration has thus become a key concern for governments and international organizations, such as the European Union and the Council of Europe, which seek to balance the benefits of technological innovation with the safeguarding of citizens' fundamental rights. It is increasingly apparent that, as AI is integrated into administrative decision-making, significant challenges emerge regarding the protection of fundamental rights, fairness of procedures, and the necessity of human supervision.³

The central question of this research is how the use of AI in public administration affects the safeguarding of citizens' rights, particularly in light of the risks of algorithmic discrimination, lack of transparency, and potential administrative abuse. The novelty of this study lies in its integrated legal and institutional approach, offering a comparative analysis of practices in European countries and the United States, in correlation with EU regulations on the protection of vulnerable persons.

The structure of the research follows a logical progression: the influence of AI on public administration is addressed (Sections 2 and 3), followed by a comparative analysis of its implementation in selected European countries and the United States (Section 3 and subsections), the European Union's policy on protecting human rights from abuses stemming from the use of AI in public administration (Section 4), and finally, conclusions (Section 5).

The methodology employed in this study is qualitative, adapted to a complex topic that intersects law, public administration, and emerging technologies. To understand how AI is used in administration and what risks it may pose, several methods were applied. First, official documents — national, European, and international legislation, along with EU regulations and directives — were analyzed to understand the current legal framework. Then, a comparison was made between how several European countries (such as France, Germany, and Estonia) and the United States integrate AI into their administrative systems. This comparative approach made it possible to identify differences, best practices, and common trends. Academic literature and doctrinal opinions in the fields of law and administrative sciences were also consulted to gain insight into how this subject is perceived in specialized scholarship. Lastly, a critical analysis of the associated risks was conducted: what issues may arise, what rights may be infringed, and where legal gaps exist.

This approach enabled the formulation of concrete proposals and solutions for a clearer and more balanced legal framework that aligns with current digital realities. For AI to be used responsibly in public administration, a series of well-grounded and concrete measures is required.

³ Anne Mette Møller, *Inside the digital state: frontline work in the context of digital layering*, „Journal of Public Administration Research and Theory”, Volume 35, Issue 2, April 2025, pp. 133–147, <https://doi.org/10.1093/jopart/muaf001>.

First, a clear legal framework should be adopted to explicitly regulate how AI can be applied in the public sector, emphasizing transparency, fairness, and human oversight. It is essential that each state establish an independent authority to monitor and evaluate the algorithms used in administration, ensuring that they do not violate citizens' fundamental rights. Moreover, citizens must have the right to understand how an automated decision was made and to challenge it when they believe it is incorrect or abusive. Another crucial step is the training of public officials: they must understand not only how AI operates, but also its ethical and legal implications. Finally, a coordinated approach at both the European and international levels is needed, so that technology serves as a genuine support for administration, without compromising individual rights and human dignity.

2. The influence of artificial intelligence use in public administration

The use of Artificial Intelligence (AI) in public administration has a significant impact on the entire legal system governing public administration, continuously generating major challenges as well as important opportunities. One study analyzes the impact of AI on efficiency in the public sector, highlighting a reduction in administrative costs by up to 30% in cases of process automation. However, the authors warn that transparency is often sacrificed, with the risk of alienating citizens⁴.

The regulation of personal data protection, fundamental citizens' rights, and administrative process transparency, as well as the integration of AI in the public sector, have profoundly influenced the existing legal framework.

The use of Artificial Intelligence (AI) in public administration can bring multiple benefits, but also risks. These influences may affect various aspects of public administration, from the efficiency of administrative processes to the protection of citizens' rights.⁵

The main influences of AI use in public administration include: the efficiency of administrative processes, reduction of bureaucracy and human errors, improvement in access to public services, ethical and legal challenges, impact on transparency and accountability, exclusion of vulnerable groups, cybersecurity, and data protection.⁶

2.1. Efficiency of administrative processes

One of the most important benefits of using AI in public administration is the increased efficiency of administrative processes. AI can automate repetitive and large-scale tasks by reducing the time required to process requests and administrative documents. By implementing AI technologies such as data analysis and machine learning, civil servants working in public administration institutions are better equipped to report, manage, and deliver public services, offering quicker and more accurate

⁴ Colin van Noordt, Gianluca Misuraca, *Artificial intelligence for the public sector: results of landscaping the use of AI in government across the European Union*, (2022) „Government Information Quarterly” Volume 39, Issue 3, pp. 876–89.

⁵ Roehl, Ulrik B. U., Morten Balle Hansen. *Automated, Administrative Decision-Making and Good Governance: Synergies, Trade-Offs, and Limits*. (2024) „Public Administration Review” 84(6): 1184–99.

⁶ Mergel, Ines, Helen Dickinson, Jari Stenvall, and Mila Gasco. 2023. “Implementing AI in the Public Sector.” *Public Management Review*, July, 1–14. doi:10.1080/14719037.2023.2231950.

responses to citizens' needs.

Recent studies claim that the use of AI in public administration can reduce administrative costs by up to 30%, particularly through the automation of repetitive tasks⁷. At the same time, this technology provides significant opportunities to increase the accessibility of public services and reduce human errors.⁸ However, researchers also highlight major challenges posed by the lack of transparency and the risk of excluding vulnerable groups.⁹

For instance, in the field of taxation, AI can automate tax collection, verify tax returns, and detect fraud. Likewise, in public health services, AI can facilitate more efficient management of medical records, reducing waiting times for diagnoses and treatments. In the fiscal sector, AI-based automated systems can radically transform the way data is collected and verified. Romania's Digital ANAF uses algorithms to analyze tax declarations and identify anomalies in real time, reducing the risk of fraud. Citizens benefit from virtual assistants that answer questions about tax exemptions or obligations, eliminating long queues. In healthcare, digital management of medical records enables the synchronization of lab results, imaging, and treatments in a single virtual space. This reduces diagnostic waiting times and allows doctors to make faster and more informed decisions.

Estonia has become a global model of e-governance through innovations such as the X-Road platform, which connects state institutions into a unified digital system. Citizens can obtain documents in just a few clicks, while the e-Residency program attracts entrepreneurs worldwide, eliminating traditional bureaucracy. However, success comes with its downsides: recent studies reveal that heavy reliance on technology has created cybersecurity vulnerabilities. While the Digital Agenda 2030 promises more ethical algorithms, experts warn that not everything can be automated—some human decisions remain essential. A conclusive example: an entrepreneur from Germany starts a company in Estonia without ever leaving his country. Through the e-Residency platform, he receives a digital identity, signs documents online, and accesses banking services within 48 hours. The system relies on automatic identity verification and anti-fraud algorithms. In 2023, over 100,000 non-Estonian citizens used this system. Nevertheless, 2021 scandal exposed vulnerabilities when 300,000 digital certificates were temporarily compromised due to a bug in X-Road.

In Denmark, the tax administration reduced tax evasion with the help of AI by analyzing suspicious transactions in real time. Citizens authenticate quickly through NemID, but data protection remains a sensitive issue. A 2024 report shows that although fraud detection increased by 40%, the lack of transparency in AI decisions caused public dissatisfaction. The government now aims to extend these technologies into education, but the issue of the right to privacy remains unresolved. In 2024, SKAT recovered €1.2

⁷ Geneviève David, *Artificial intelligence: Opportunities and challenges for public administration*. (2024), Canadian Public Administration, 67(3), pp. 388–406., <https://doi.org/10.1111/capa.12580>.

⁸ Vatamanu, Anca Florentina, and Mihaela Tofan. 2025. *Integrating Artificial Intelligence into Public Administration: Challenges and Vulnerabilities*, „Administrative Sciences” 15, no. 4: 149. <https://doi.org/10.3390/admsci15040149>.

⁹ Pablo Cerezo-Martínez, Alejandro Nicolás-Sánchez & Francisco J. Castro-Toledo, *Analyzing the European institutional response to ethical and regulatory challenges of artificial intelligence in addressing discriminatory bias*, (2024), „Frontiers in Artificial Intelligence”, (7), p. 22, <https://doi.org/10.3389/frai.2024.1393259>.

billion using algorithms that analyzed 15 million transactions.¹⁰

A notable case: a Danish entrepreneur declared income of €500,000, but the algorithm detected unjustified payments to an offshore company in Panama. The system issued an automatic alert, and the tax team launched an investigation. The entrepreneur contested the decision, claiming the algorithm did not explain how it identified the anomaly—a conflict between efficiency and the right to information.

Finland launched AuroraAI, a system that personalizes services from healthcare to education. In hospitals, AI predicts the need for beds or medication, reducing waiting times by 30%. Still, not everything is ideal: a 2019 law allows medical data to be used for research, raising public concerns about potential algorithmic bias. More transparency is needed, and the ethical AI strategy through 2027 seeks to address these challenges. A case that triggered significant discontent: a patient in Helsinki experiencing chest pain was admitted to a hospital. AuroraAI analyzed his medical history, ECG results, and data from wearable devices, suggesting a high risk of heart attack. Doctors confirmed the diagnosis in 20 minutes (compared to two hours previously). In 2023, the system reduced rehospitalization rates by 18%. However, a regional hospital error misrouted patients to overcrowded departments because the algorithm failed to consider medical staff on leave.

France uses AI to track tax evaders — its APASP algorithm scans millions of transactions annually, identifying complex schemes. However, the Health Data Hub project, which was intended to revolutionize public health, was temporarily suspended after citizens protested the storage of data on foreign servers.¹¹ Technology can improve efficiency, but without public trust, it fails. Although the 2016 law mandates transparency, many institutions still conceal how their algorithms operate. In 2021, the French government announced that the medical data of 70 million citizens would be stored on U.S. servers, triggering massive protests. The project was frozen, and in 2023, France launched a European alternative with servers in Strasbourg. It cost an additional €200 million, but now the data remain within the EU. Recently, several of the EU's political institutions have put forward definitions of digital sovereignty and related terms. Ursula von der Leyen, President of the European Commission, has referred to “tech sovereignty” as the capacity of Europe “to make its own choices, based on its values, respecting its own rules”.¹²

In contrast to Estonia: in 2023, a patient in Bucharest waited six months for a specialist consultation. The online appointment system (*Programări Online*) was down for three weeks due to a failed update. Doctors returned to using paper files, and 15,000 appointments were lost. This demonstrates the need not only for AI software, but for AI experts.

These examples show that in public administration, people are more important than the technology itself—and although AI brings enormous efficiency gains, it also

¹⁰ Coded Injustice: *Surveillance and Discrimination in Denmark's Automated Welfare State* 2024, published by Peter Benenson House, London WC1X 0DW, UK.

¹¹ Jaana Leikas, Aditya Johri, Marko Latvanen, Nina Wessberg, Antti Hahto, *Governing Ethical AI Transformation: A Case Study of AuroraAI* (2022) „Frontiers in Artificial Intelligence”, vol 5, 836557, <https://doi.org/10.3389/frai.2022.836557>.

¹² Huw Roberts, Josh Cowsls, Federico Casolari, Jessica Morley, Mariarosaria Taddeo, Luciano Floridi., *Safeguarding European values with digital sovereignty: an analysis of statements and policies*. (2021). Internet Policy Review, 10(3), <https://doi.org/10.14763/2021.3.1575>.

introduces risks that require regulation and transparency.

The new EU Artificial Intelligence Act, which came into force in 2024, is like a watchdog trying to run after a speeding train. On one hand, it seeks to protect citizens from risks — classifying AI applications by how dangerous they may be (from children's games to surveillance systems). On the other hand, countries like Estonia or Denmark already have the train in motion: using AI to automate taxation, guide patients in hospitals, and offer digital citizenship. In contrast, in countries like Romania, the train has barely left the station: online healthcare scheduling systems crash, and public servants are still rushing to learn how to use email.

In Brussels, there is talk of “interoperability” and “common standards,” but in practice, each country charts its own path. There is a growing risk that Europe could split in two: one part where the SARA chatbot processes social assistance requests in 10 minutes, and another where pensioners stand in line at a government counter to submit a scanned request form.¹³

2.2. Reducing bureaucracy and human error

AI can contribute to the reduction of bureaucracy through the digitalization of administrative processes. In this way, a public official no longer processes information manually, but rather, through the use of AI, data is managed automatically — eliminating human errors and improving accuracy. The automation of administrative decision-making reduces delays and complications that may arise from bureaucratic procedures. Thus, the implementation of AI can lead to a simpler and much more efficient administrative system.

Artificial Intelligence (AI) has the potential to significantly transform the functioning of public administration, particularly by reducing bureaucracy and human errors. The digitalization of administrative processes enables the automation of repetitive tasks and the efficient handling of large volumes of information. As a result, public servants no longer need to manually process data, which considerably reduces the risk of mistakes and enhances the precision of administrative decisions.¹⁴

Moreover, AI-based automation helps eliminate delays caused by traditional bureaucratic workflows, leading to faster and more efficient governance. The implementation of these intelligent solutions results in a modernized administrative system, where human resources can focus on strategic activities, while operational tasks are delegated to algorithmic systems¹. In addition, AI contributes to greater decision-making transparency and improved interaction between citizens and public authorities.¹⁵

¹³ Kgoale, Thupane J. and Kola O. Odeku. *An analysis of the international and European Union legal instruments for holding artificial intelligence accountable*. (2023), „Juridical Tribune - Tribuna Juridica”, vol. 13(3), pp. 427-440.

¹⁴ Ieva Mainardi, *Change management: artificial intelligence (AI) at the service of public administrations*. „AI & Society” 40, 3953–3981 (2025). <https://doi.org/10.1007/s00146-024-02136-2>

¹⁵ Wirtz, Bernd W., Jan C. Weyerer, and Carolin Geyer. 2018. “Artificial Intelligence and the Public Sector—Applications and Challenges.” *International Journal of Public Administration* 42 (7): 596–615. Doi: 10.1080/01900692.2018.1498103.

2.3. Improving citizens' access to public services through artificial intelligence

Artificial Intelligence (AI) plays an increasingly important role in facilitating citizens' access to public services by digitalizing and automating essential administrative processes. In recent years, public institutions in various countries have begun to adopt modern technological solutions such as chatbots, virtual assistants, or automated platforms, allowing citizens to interact with the administration quickly and efficiently, without the need for physical visits to public offices.

A concrete example is the implementation of virtual assistants capable of providing clear and immediate responses to citizens' requests—whether related to obtaining a license, paying a tax, or requesting official documents. These tools not only help reduce waiting times but also lower costs for public administration. Moreover, they offer genuine support to citizens living in remote areas or to those who, for various reasons, face difficulties in accessing traditional services.

In the Portuguese context, author Ricardo Pedro emphasizes in a recent study that the use of AI in public administration must be accompanied by clear legal safeguards to ensure the transparency and accountability of decisions made by these systems¹⁶. At the international level, the city of Amarillo, Texas, has implemented an interactive digital assistant that functions as a digital version of the 311 service and can communicate in multiple languages, thus facilitating access to public services even for immigrant communities.¹⁷

These initiatives demonstrate that AI can make a real contribution to the modernization of public administration, offering citizens easier, fairer, and faster access to the services they need.

2.4. Ethical and legal challenges and measures for protection and regulation

One of the major risks associated with the use of AI in public administration lies in the ethical and legal challenges it raises. AI systems can lead to discrimination when automated decisions are based on historical data that reflect biases and stereotypes. For example, an algorithm (an algorithm is an essential tool that enables complex processes to be carried out automatically, with applications in various fields including public administration, finance, healthcare, and education) used to evaluate eligibility for a public loan might discriminate against certain social groups based on factors that are not ethically or legally justifiable. A well-known example of algorithmic discrimination occurred with credit companies in the United States, where allegations emerged that certain credit algorithms discriminated against ethnic minorities, particularly Black individuals. These algorithms analyzed factors that did not accurately reflect a person's real payment capacity but tended to negatively affect individuals from less privileged communities.

¹⁶ Ricardo Pedro, *Artificial Intelligence on Public Sector in Portugal: First Legal Approach*, (2023), „Juridical Tribune - Tribuna Juridica”, Vol. 13, Issue 2, pp. 149-170.

¹⁷ Axios Media Inc., *A digital assistant will help immigrants in Amarillo, Texas*, 20 September 2023. available at: <https://www.axios.com/2023/09/20/amarillo-ai-avatar-webiste-digital-assistant>, accessed on 10 May 2025.

Another example involves recruitment algorithms used by large corporations, which have been accused of indirect discrimination against women or ethnic minorities. Although the algorithms were technically “neutral,” the models trained on historical data ended up systematically favoring certain social groups.¹⁸

Algorithmic discrimination can occur when an algorithm evaluating eligibility for public loans uses data or factors that are ethically or legally irrelevant. Well-known international cases — such as credit scoring algorithms in the United States or automated recruitment systems in global companies — demonstrate how AI can generate indirect discrimination against ethnic minorities or women. Such decisions can be profoundly unfair and unlawful, which is why legislation must provide clear mechanisms for oversight and sanction. Ricardo Pedro, in his analysis of the early uses of AI in the Portuguese public sector, emphasizes the need to uphold principles of fairness and transparency in algorithm-assisted administrative processes.¹⁹

These decisions can further perpetuate inequalities and social biases already present in society. Legally, such practices are often prohibited, and authorities must regulate the use of AI to prevent such abuses. AI must therefore be designed in a way that respects fairness and fundamental rights and must be implemented in a manner that prevents both intentional and unintentional discrimination.

There is also a risk that citizens’ fundamental rights may be violated if automated data processing fails to comply with personal data protection regulations (e.g., the GDPR). For this reason, states must implement clear and transparent safeguards to prevent abuses and to ensure respect for citizens’ rights.

AI may also affect decision-making transparency in public administration, as automated decisions can be difficult for citizens to understand or interpret. In these cases, the issue of legal accountability arises — particularly when AI makes incorrect or unfair decisions. It is essential that states implement rules in AI-based decision-making processes that citizens can understand and that clearly explain how decisions are made and how they affect them. Citizens affected by AI decisions must have the right to understand how those decisions were made, to challenge them, and to request human intervention. The lack of a clear explanation can lead to a loss of trust in public institutions and the inability to seek effective legal protection. In this regard, Maria Manuela Barbosa proposes a civil liability framework for the state in cases of errors caused by AI, stressing that liability cannot be avoided by delegating decisions to an automated system.²⁰

In this context, legal regulations — such as those governing AI and data protection — must include provisions that guarantee human accountability for automated decisions, ensuring that public authorities can be held responsible for technological errors.

One of the negative effects of AI use in public administration is the risk of digital exclusion for vulnerable groups, such as the elderly, persons with disabilities, or

¹⁸ Predescu, Ovidiu, Ovidiu Roland Predescu, *Artificial Intelligence Today: A Perspective on Law, Human Rights, Ethics, and Beyond*, Universul Juridic, Bucharest, 2024, p. 277.

¹⁹ Ricardo Pedro, *op. cit.*, pp. 149-170.

²⁰ Maria Manuela Barbosa, *Responsabilidade civil do Estado pelo recurso a sistemas de inteligência artificial na tomada de decisão*, in C. A. Gomes, R. Pedro, T. Serrão (eds.), *O regime de responsabilidade civil extracontratual do Estado e demais entidades públicas*, AAFDL, Lisboa, 2022, pp. 213-246.

individuals with limited access to technology. These groups may face difficulties interacting with automated systems, and their access to public services may be impaired. Authorities must take measures to ensure that AI technologies are accessible to all citizens, regardless of their technological skills. States must create user-friendly platforms and provide specialized training for vulnerable populations.

The use of AI in public administration must also ensure cybersecurity. Automated systems that process sensitive citizen information must be protected against cyberattacks. Ensuring cybersecurity is a priority for governments adopting such technologies, as a breach in an AI system could have devastating consequences for the confidentiality and integrity of citizens' data.

2.5. Advantages and risks of using AI in public administration

There are numerous advantages to implementing AI, and these are increasingly felt, especially through its capacity to automate administrative processes, saving time and resources. It can process documents and citizen requests much faster than humans, allowing authorities to respond more rapidly to inquiries, eliminate unnecessary steps, and reduce bureaucratic procedures. As a result, citizens can interact more quickly with public administration without needing to physically visit offices to submit requests or obtain information. AI can contribute to the creation of digital platforms that are accessible to everyone, even to those without advanced technical knowledge. Furthermore, AI can be used as a tool for inclusion, helping persons with disabilities or those from disadvantaged backgrounds to access public services — e.g., through voice interfaces or virtual assistants.

AI-based digital platforms can be designed to be user-friendly and accessible even to individuals without advanced digital skills. Moreover, AI can be a valuable instrument for social inclusion through the integration of voice assistants or intuitive interfaces that facilitate access to services for people with disabilities or those in marginalized environments. According to a recent study, AI has the potential to personalize public services according to citizens' needs, contributing to a more responsive and efficient administration.²¹

However, there are also undeniable risks associated with AI use. AI systems can learn from existing data, and if such data contain biases — such as those related to gender, race, or social status — these biases can be amplified. Automated decisions made by AI may also be difficult for citizens to understand, making decision-making transparency harder to achieve (for example, what factors determine a citizen's eligibility for certain services). This lack of transparency can create feelings of injustice or confusion among the population. Moreover, AI systems are vulnerable to cyberattacks, and when a system is compromised, it can lead to data breaches or misuse. Governments must protect these systems through appropriate security measures and implement policies that ensure the confidentiality and safety of data.

The number of smart home devices is increasing. These devices are used by vulnerable individuals, whether they are specifically designed for them or intended for the general population (e.g., smart door locks, intelligent alarms, or voice assistants).²²

²¹ Wirtz, Bernd W., Jan C. Weyerer, and Carolin Geyer. *op. cit.*, p. 601.

²² Stanislaw Piasecki, Jiahong Chen, *Complying with the GDPR when vulnerable people use smart devices*,

Another major risk is the digital exclusion of certain groups, such as the elderly, persons with disabilities, or those from disadvantaged backgrounds who lack access to advanced technologies. For example, someone who does not know how to use a computer or smartphone could be excluded from the digitized administrative process.

The most significant risk in using AI is the potential centralization of decision-making power, meaning that public authorities might make decisions without considering the perspectives or real needs of citizens. Automated AI decisions cannot replace human empathy and understanding in interactions with the public, and this can lead to citizens' distrust toward public administration.²³

To address these risks and challenges, public authorities must adopt clear regulations to protect citizens' rights through transparency and explainability in AI-driven decisions, ensuring that people understand how decisions are made and what selection criteria are applied.²⁴

States must focus their efforts on implementing strict data protection rules, in accordance with international standards (such as the GDPR), and also ensure access to digital services for all citizens — including through digital education and support for those who lack advanced technological skills.²⁵ Most importantly, authorities must retain human oversight over automated decisions and establish mechanisms for verifying these decisions in order to prevent abuses or errors, ensuring that technology serves the public interest and does not create inequalities or enable abuse.

3. The use of artificial Intelligence (AI) in public administration in European countries and the United States

Most countries are using artificial intelligence to improve administrative processes, reduce bureaucracy, and provide more efficient and transparent services to citizens. The implementation of AI varies depending on each country's needs and priorities, but its impact is clearly positive in most cases, resulting in cost savings, increased efficiency, and improved user experience.

3.1. The use of artificial intelligence in public administration in the United Kingdom

In the United Kingdom, AI is widely used in public administration, especially to improve the efficiency of public services and combat fraud. The UK is among the European countries that have invested significantly in adopting artificial intelligence in the public sector. The British government views AI as an essential tool for modernizing administration, enhancing efficiency, and delivering faster and more personalized

(2022) „International Data Privacy Law”, Volume 12, Issue 2, pp. 113–131, <https://doi.org/10.1093/idpl/ipac001>.

²³ Ibid, p. 115.

²⁴ Benjamin Phillips, *UK further education sector journey to compliance with the general data protection regulation and the data protection act 2018*, (2021), „Computer Law & Security Review”, Volume 42, 105586, p. 31, <https://doi.org/10.1016/j.clsr.2021.105586>.

²⁵ European Commission, High-Level Expert Group on Artificial Intelligence (2020), *Ethics Guidelines for Trustworthy AI*. Bruxelles. Available at: <https://ec.europa.eu/futurium/en/ai-alliance-consultation>, accessed on 10 May 2025.

services to citizens.

In this regard, in February 2025, UK authorities published the *Artificial Intelligence Playbook*, a guide providing clear recommendations for the use of AI in public institutions. It emphasizes the importance of transparency, fairness, and human oversight, ensuring that the technology is used responsibly and remains centered on citizens' needs.²⁶

Also in 2025, the *AI Opportunities Action Plan* was launched, highlighting collaboration between government, academia, and the private sector in promoting AI applications in public administration. The plan aims to leverage technology to improve public services while simultaneously protecting individuals' fundamental rights.²⁷

There are numerous examples of concrete AI applications. The National Health Service (NHS) uses AI to detect certain eye diseases at early stages, helping to prevent medical complications. In education, some teachers use intelligent platforms to generate lesson plans, while in human resources, AI helps government departments streamline recruitment processes by better matching candidates to available positions.²⁸

In addition to these advancements, the British government established the *AI Safety Institute* — a national body dedicated to evaluating AI-related risks and setting safety standards. Launched in November 2023, this institute reflects the UK's commitment to balancing technological innovation with democratic and social values.

Thus, the United Kingdom offers an example of good practice in integrating artificial intelligence into the public sector: a combination of innovation, responsibility, and citizen protection.²⁹

3.2. The Use of Artificial Intelligence in Public Administration in France

France has adopted AI across various government sectors to improve transparency, optimize public services, and combat tax fraud. The French government actively promotes the use of digital technologies to enhance public service delivery. AI is employed to automate administrative processes and create accessible digital solutions for citizens.

AI is also used in the education sector to analyze student performance, personalize educational materials, forecast training needs, and improve school curricula.

France employs AI to detect tax fraud by analyzing taxpayer behavior and reviewing tax returns to identify anomalies. The digitalization of public services has increased governmental transparency, facilitated citizen access to information, and reduced tax fraud — contributing to higher public revenues. In education, AI has brought measurable benefits by optimizing instruction and professional training. It has enabled

²⁶ UK Government. (2025a). *Launching the Artificial Intelligence Playbook for the UK Government*. Available at: <https://gds.blog.gov.uk/2025/02/10/launching-the-artificial-intelligence-playbook-for-the-uk-government/>, accessed on 10 May 2025.

²⁷ UK Government. (2025b). *AI Opportunities Action Plan*. Available at: <https://www.gov.uk/government/publications/ai-opportunities-action-plan/ai-opportunities-action-plan>, accessed on 10 May 2025.

²⁸ The Times. (2024). *How civil servants really use AI, from lesson plans to recruitment*. Available at: <https://www.thetimes.co.uk/article/how-civil-servants-really-use-ai-from-lesson-plans-to-recruitment-k8nzhbn8>, accessed on 10 May 2025.

²⁹ Time. (2025). *Inside the U.K.'s Bold Experiment in AI Safety*. Available at: <https://time.com/7204670/uk-ai-safety-institute/>, accessed on 10 May 2025.

personalized learning and better forecasting of long-term training needs.

A concrete example is the *Albert* system — a virtual assistant specifically developed for French civil servants. It assists in drafting responses to citizens and managing repetitive tasks such as processing administrative requests or generating standardized recommendations. Its purpose is to reduce bureaucratic workload and provide faster, more coherent responses, thereby improving the overall efficiency of public services.

Beyond practical applications, the French government also places significant emphasis on safety and regulation. In 2024, the *National Institute for the Evaluation and Safety of Artificial Intelligence (INESIA)* was established. Its role is to analyze the impact of AI technologies from scientific, ethical, and cybersecurity perspectives. The institute brings together experts from various fields — including cybersecurity, research, and law — and works in partnership with institutions such as ANSSI and INRIA. Its mission is to ensure that AI used in the public sector aligns with democratic values, protects citizens' data, and avoids producing unintended negative effects.³⁰

Through these initiatives, France is reinforcing its position as a promoter of ethical and transparent artificial intelligence in Europe, demonstrating that digital transformation can go hand in hand with responsibility and public trust.

3.3. The use of artificial intelligence in public administration in Romania

In Romania, public administration has gradually begun adopting digital technologies to improve services offered to citizens, and AI is part of these initiatives. A key reference is the study by Androniceanu, which also provides an analysis of the current situation in Romania. According to the data presented, the level of AI adoption in Romanian public administration remains low — in 2023, Romania recorded the lowest rate of AI adoption in the European Union (only about 1.5% of companies using such technologies), lagging behind countries like Denmark (15%) and Belgium (14%).

This slow adoption is attributed to a lack of awareness of AI's benefits, limited resources and technical expertise within institutions, and an uncertain regulatory framework. However, Romania has begun to address these challenges through targeted policies — for example, the *National Artificial Intelligence Strategy 2024–2027*, which aims to support the development of digital and AI skills, build technical infrastructure, and promote the ethical use of these technologies in the public sector.

Examples of AI integration in Romania's public sector include: automating repetitive administrative processes (to reduce manual workload, costs, and processing time); using big data analytics to support decision-making based on large datasets; offering personalized public services tailored to individual citizen needs; implementing chatbots and virtual assistants to provide fast information and support; and deploying fraud detection systems or tools for efficient resource allocation in emergencies.³¹

³⁰ Campus France. (2025). *Création d'un institut national pour l'évaluation et la sécurité de l'IA*. Available at: <https://www.campusfrance.org/en/actu/creation-d-un-institut-national-pour-l-evaluation-et-la-securite-d-e-l-ia>, accessed on 10 May 2025.

³¹ Armenia Androniceanu, *Generative artificial intelligence, present and perspectives in public administration*, (2024), „Administrație și Management Public”, nr. 43, pp. 105-119, DOI: <https://doi.org/10.24818/amp/2024.43-06>.

These examples demonstrate AI's potential to improve the quality and responsiveness of public services, as well as the citizen experience in interactions with administration. On the other hand, the study also highlights significant challenges associated with large-scale AI implementation in public administration. These include the need to ensure algorithmic transparency and accountability (to maintain public trust and avoid discrimination or opaque decisions), ethical concerns and data protection (as automation raises questions regarding privacy and information security), and pragmatic issues related to costs and resources — developing and maintaining AI-based systems can be expensive and require consistent investment in digital infrastructure and staff training.

Nonetheless, the use of Artificial Intelligence in public administration is still in its early stages in Romania, but it holds significant potential for improving the efficiency, transparency, and accessibility of public services. However, for AI to be implemented fairly and responsibly, it is essential that authorities adopt clear regulations and safeguard fundamental rights to prevent abuses and enhance public trust in digital governance processes.

3.4. The use of artificial intelligence in public administration in the United States

In the United States, AI plays an essential role in managing public resources and protecting national security. AI is used for big data analysis and to support informed decision-making.

The Office of Management and Budget (OMB) uses AI to analyze data on government expenditures and to detect anomalies or risks in public budgets. The Department of Homeland Security (DHS) employs AI to assess national security threats. Machine learning algorithms are used to detect cybersecurity threats and prevent cyberattacks. AI is also used to analyze behavioral patterns and data at borders in order to identify potential security risks and illegal activities.

AI was deployed in the management of the COVID-19 crisis, where algorithms helped analyze pandemic data and forecast its evolution. Additionally, AI was used to manage public health data and to allocate resources in hospitals.

The use of AI has contributed to the analysis and optimization of public spending, improved governmental efficiency, prevented cyberattacks, and protected critical infrastructure.

Cultural and political factors also play a significant role in how countries implement AI. For instance, countries with centralized governance traditions, such as China, have been more successful in the rapid implementation of AI in public administration because governments can enforce stricter regulations and more efficiently control the use of technologies. In contrast, democratic countries — such as those in the European Union — face greater challenges due to concerns related to the protection of fundamental rights and governmental transparency.

4. The European Union's policy on protecting human rights against abuses arising from the use of artificial intelligence in public administration

The European Union has taken significant steps to regulate the use of artificial intelligence, particularly in sensitive areas such as public administration, where automated decisions can have a direct impact on citizens' rights. With the adoption of the Artificial Intelligence Regulation (AI Act) in 2024, the EU has established a globally unique legal framework aimed at ensuring the ethical, safe, and transparent development and use of AI systems.³²

One of the main objectives of the AI Act is to protect individuals' fundamental rights, such as the right to privacy, non-discrimination, and equal access to public services. Accordingly, the regulation prohibits certain high-risk uses of AI — such as social scoring or real-time facial recognition in public spaces. In addition, AI systems used in public administration are classified as “high-risk,” meaning they must comply with strict requirements concerning transparency, human oversight, and impact assessment on citizens' rights.

The regulation also stipulates that individuals must be informed when interacting with an automated system and must have the right to request explanations regarding decisions that affect them. In this way, the AI Act promotes responsible digital governance, ensuring that technology is used without compromising human dignity or the principles of the rule of law.

In parallel, the Council of Europe adopted a Framework Convention on AI and Human Rights in 2024, which complements EU regulations by establishing binding general principles and a framework for international cooperation in the field of AI.

The use of artificial intelligence in public administration brings numerous benefits but also significant risks when not properly regulated. The European Union has adopted a clear stance in favor of the responsible development of such technologies, seeking to strike a balance between innovation and the protection of citizens' fundamental rights.

Among the most evident benefits is increased institutional efficiency. AI can automate repetitive processes, shorten the time needed to process requests, and reduce the workload of public employees. It can also facilitate citizen access to services via user-friendly digital platforms available 24/7. Additionally, AI enables decisions to be made based on concrete data, reducing the risk of human error and contributing to more informed governance.

However, these advantages come with serious risks. AI may reflect or even amplify existing biases in historical data, leading to discriminatory decisions—a phenomenon known as “algorithmic discrimination.” Furthermore, the way these systems make decisions is often difficult to understand, both for citizens and for public authorities. The lack of transparency and explainability can create distrust and a sense of injustice. Moreover, elderly persons, people with disabilities, or those with limited access to technology may be excluded from digitalized processes, creating new forms of inequality. Finally, AI use involves processing large volumes of personal data, raising

³² European Parliament. (2024). *EU Artificial Intelligence Act: First Regulation on AI*. Available at: <https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence>, accessed on 10 May 2025.

concerns about privacy and information security. In addition, the regulation introduces a distinct category of "high-risk artificial intelligence systems" related to Schengen border control, whose use is permitted only under stricter legal requirements.³³ In response to these challenges, the European Union has proposed several concrete measures through the AI Act. These include mandatory impact assessments on fundamental rights before any AI system is deployed in public administration. Citizens must also be informed when interacting with an automated decision and must have the right to receive clear explanations in accessible language. AI decisions should not be final — they must be subject to review by a human official. To prevent abuse, regular audits of deployed systems are recommended, along with strict oversight by independent authorities.

Additionally, it is essential for member states to provide support for those at risk of digital exclusion — through training programs, assistance points, and accessible alternatives for interacting with administration. AI can be a powerful ally in modern governance, but only if it is deployed with care, transparency, and respect for human dignity.

A question that increasingly arises is whether, in the near future, a legal framework could be adopted that would entirely exclude human involvement in public administration — and what the effects on the human being would be.

The assertion that a legal framework could completely eliminate human involvement in public administration is not realistic at present, at least not in terms of a full replacement of public servants. However, the evolution of technologies — particularly artificial intelligence — may lead to a significant transformation of how administrative activities are conducted. Most likely, AI will be used to automate repetitive tasks, optimize processes, and support decision-making in public administration, rather than fully replace human officials. In many countries, including within the European Union, there is deep concern about the ethical implications of using AI in administration. Completely excluding human activity would raise serious questions about transparency, accountability, and accessibility, as well as the potential for abuse or discrimination.

If AI technologies were to advance significantly in public administration, the effects on the human being could include both advantages and significant challenges.

The full or partial replacement of human interaction in the administrative process could lead to alienation and a lack of empathy in the relationship between citizens and public institutions. Many administrative situations require a human approach, where compassion and an understanding of individual context are essential.

In the future, public administration will increasingly use AI to improve the efficiency, transparency, and accessibility of public services — but will remain dependent on human involvement for essential decisions.

5. Conclusions

The digital transformation of public administration through the use of artificial

³³ Evelien Brouwer, *Schengen and the Administration of Exclusion: Legal Remedies Caught in between Entry Bans, Risk Assessment and Artificial Intelligence*, „European Journal of Migration and Law”, 23 (2021) 485–507.

intelligence (AI) represents one of the greatest challenges — and simultaneously, one of the greatest opportunities — of our time. If implemented correctly and responsibly, AI can significantly contribute to increasing institutional efficiency, improving access to public services, and enhancing the relationship between citizens and the state. However, in the absence of clear safeguards, technology risks becoming a source of inequality, opacity, or even administrative abuse.

The European Union has responded to these challenges through the adoption of the AI Act, an ambitious regulation that sets clear standards for the use of AI within the European space, particularly in "high-risk" sectors such as public administration. This legal framework is an important step toward the ethical use of artificial intelligence. Nevertheless, to ensure real and effective protection of fundamental rights, general regulations must be complemented by concrete institutional and administrative initiatives adapted to national and local realities.

In this regard, three strategic directions of action should be considered:

1. Establishment of an Ombudsman for Automated Decisions. Given the complexity of AI-generated decisions, citizens often struggle to understand why a request was rejected or how to contest a decision "made by a computer". Therefore, we propose the creation of an independent institution, similar to a national ombudsman, specifically tasked with supervising and monitoring the use of AI in the public sector. This Ombudsman would have the authority to investigate citizen complaints, issue recommendations, request reviews of automated decisions, and publish annual reports on the protection of rights in the context of administrative automation. Such an institution would serve as an additional guarantee of transparency and fairness, strengthening public trust in digital governance.

2. Introduction of an Algorithmic Labeling System. Currently, many citizens are unaware that they are interacting with AI systems in their dealings with public authorities. For this reason, the proposal to introduce a visible digital label for any application, form, or public interface using artificial intelligence would be a major step forward. This label — similar to a "conformity declaration" — should include essential information in accessible language: what type of decision is automated, what data are used, whether the decision can be contested, and who supervises it. Algorithmic transparency must not be a technical luxury, but a fundamental right. Such a measure would encourage institutional accountability and enable citizens to understand, evaluate, and consciously participate in the digital administrative process.

3. Allocation of a Dedicated Budget for Digital Inclusion and Personalized Human Support. One of the greatest threats posed by the digitalization of public administration is the exclusion of vulnerable individuals: the elderly, people with disabilities, citizens from rural areas, or those with limited internet access. In this context, every public institution implementing AI should allocate a fixed percentage of its digitalization budget to support measures for these groups. These could include: physical assistance points with trained personnel, helplines, explanatory materials in accessible formats (audio, visual, translated), and free digital literacy courses. In this way, we ensure that digital administration is inclusive and equitable — not just efficient.

These proposals do not contradict the European vision expressed in the AI Act; rather, they complement it, offering concrete tools to ensure that the digital transition of public administration benefits all citizens — not just those who already possess the

necessary skills or resources to understand and access the technology.

In conclusion, a smart administration is not just one that is digitalized, but one that uses technology with discernment, responsibility, and care for people. For AI to truly serve the public interest, more than algorithms are needed: vigilant institutions, clear norms, and an administrative culture that places human dignity at the center of the process.

A well-regulated legal framework for AI will enable the improvement of public services without compromising the fundamental rights and freedoms of citizens. Humans must retain full control over AI in matters that directly affect fundamental rights, individual safety, and the ethical principles of public administration. Although AI can help enhance efficiency and reduce administrative errors, it cannot replace human judgment in important and sensitive decisions. Thus, AI must remain a support tool — not a complete substitute for public officials. A well-regulated legal framework, transparency of algorithmic processes, and human accountability are key to the responsible and fair implementation of AI in public administration.

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