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ETHICS, LEGISLATIVE RESTRICTIONS AND TRANSPARENCY IN THE USE OF AI IN STATE SYSTEMS

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Abstract. *The article offers a comprehensive analysis of the relationship between ethics, transparency, and legal regulation in the context of governmental use of artificial intelligence. This approach allows for the development of a conceptual model that integrates ethical principles into administrative practice through legal mechanisms and transparency policies. The novelty of the study also lies in the systematization of international experience based on a sectoral approach to AI regulation and the justification for creating a universal White Paper as a tool for global legal harmonization. The purpose of the article is to examine the ethical foundations, regulatory constraints, and principles of transparency in the application of artificial intelligence within public administration systems, taking into account international experience and current challenges. The findings demonstrate that artificial intelligence is being actively integrated into various areas of public governance, including healthcare, security, transportation, public services, administration, and environmental monitoring. In response, governments such as the United States, the European Union, and the United Kingdom are introducing regulatory measures to address potential risks. Specifically, the EU has developed the AI Act, the US is implementing initiatives at the state level, and the UK has proposed a White Paper that adopts a sectoral, adaptive regulatory framework. At the same time, the research highlights that the absence of unified global standards leads to legal fragmentation, complicates effective oversight of AI systems, and poses a threat to the protection of citizens' rights. The practical significance of the study lies in providing recommendations for implementing ethical and legal standards for AI in public administration.*

Keywords: *artificial intelligence, ethics, transparency, digital governance, legislation.*

Introduction

In the 21st century, artificial intelligence (AI) is gradually becoming a fundamental component of public administration transformation, serving as a catalyst for digital modernization in public service delivery, infrastructure monitoring, data analytics, and administrative decision-making. A number of countries have already successfully integrated AI into the operations of public institutions, while others are just beginning this process, facing challenges of technological adaptation, regulatory uncertainty, and low levels of public trust [10].

Despite the rapid implementation of intelligent systems, the general public's readiness to accept their use in the public sector remains limited. According to the 2024 UK Public Attitudes to Data and AI Tracker, the most common response to AI use is fear. For instance, 43% of respondents believe AI will negatively affect their career prospects; others cite a decline in human creativity (35%), loss of control over

technologies (34%), threat of cyberattacks (23%), lack of transparency (23%), and risk of discrimination (14%) [5]. These findings point to significant socio-psychological barriers accompanying the algorithmization of public governance.

Particular attention should be given to the local government level, where there is a critical lack of regulatory frameworks. As of May 2023, only 15% of local authority services in the EU had published a policy on the use of AI [10]. Most implementations of intelligent systems were not supported by the development of public regulations or accountability mechanisms, which threatens the basic principles of democratic legitimacy in administrative decision-making.

Furthermore, empirical research conducted in Australia, Spain, and the United States revealed a significant gap between citizens' general awareness of AI and their understanding of how it is used by local governments. Over 75% of respondents were aware of AI and its growing role in everyday life, but nearly half were unaware that local authorities were already using these technologies. Even more concerning, 68% of those surveyed had no information about the existence of AI regulatory policies in their municipalities [10]. This information vacuum undermines the transparency of government communication and makes effective public oversight impossible.

As intelligent systems become more deeply embedded in urban governance practices – from traffic analysis to monitoring environmental sustainability – the risks of ethical violations, technological discrimination, structural bias, and uncontrolled data circulation increase [10]. These risks highlight the urgent need for clear ethical guidelines, legislative regulation, and accountability in the implementation of AI in public administration.

The issues of ethics, legislative constraints, and transparency in the use of artificial intelligence in state systems have been extensively explored in international academic literature. Notable contributions include the work of K. Reinhardt [6], who emphasizes the need for trust as a key ethical criterion in the adoption of AI in public governance. L.T. Moretti [5], in a comprehensive review, examines governmental and big tech responses to the new challenges posed by AI, addressing both political and regulatory dimensions. Of particular importance is the study by B. Lund et al. [4],

which proposes concrete standards and regulatory frameworks to ensure the transparency of AI algorithms used in government structures. The issue of transparency is also thoroughly analyzed by M. Stankovich et al. [9], who stress the importance of accountability and the accessibility of algorithmic decisions affecting citizens. This body of research is further enriched by a report from the Public Law Project [8], which discusses meaningful transparency in the application of AI by public institutions.

The current state of AI use in Ukraine's public sector is addressed in publications by A. Fridman [3] and analyst T. Yigitcanlar et al. [10], which highlight the deployment of AI at the local level without adequate public awareness or clear regulatory frameworks.

Although there is a considerable amount of literature on the topic, a lack of systematized material remains. Therefore, using various methods of scientific inquiry, the information was analyzed, categorized, and structured to align with the focus of this research.

The purpose of the article is to examine the ethical foundations, regulatory constraints, and principles of transparency in the application of artificial intelligence within public administration systems, taking into account international experience and current challenges.

Research results

The issue of regulating the use of artificial intelligence (AI) in public systems is currently at the center of intense international debate. It gained particular prominence during the 2024 World Economic Forum in Davos, where world leaders, AI developers, and representatives of national governments held in-depth discussions on approaches to regulating this technology. Participants emphasized the need to strike a balance between fostering innovation and ensuring ethical and legal safeguards in the application of AI in public governance.

Andrew Ng, founder of DeepLearning.AI and one of the event's keynote speakers, expressed concern over the direct regulation of AI development processes. He argued that such regulation could stifle innovation and, in practice, strengthen the monopolies of large tech corporations by undermining the role of open-source

software. According to Ng, excessive restrictions in this field could deprive society of significant benefits offered by AI, particularly in enhancing the efficiency of public services and accelerating scientific and technological progress [7].

An alternative regulatory approach was presented by Khalfan Belhoul, CEO of the Dubai Future Foundation, who highlighted the difficulty of creating a universal regulatory framework for AI due to its heterogeneous nature. He emphasized that AI is not a single, uniform technology but rather a collection of interconnected solutions with varied functional and societal effects depending on the area of application. His proposal for sector-specific regulation, involving adaptive and individualized strategies tailored to each area of AI use, was recognized as a more practical and effective way to manage technological risks [7].

This principle of sectoral regulation has gained support not only from experts but also from several high-tech governments, including the United States, the United Kingdom, EU member states, and others. These countries are actively implementing impact assessment mechanisms for AI across specific domains – from healthcare to criminal justice. The widespread adoption of such approaches reflects a global consensus that AI cannot be effectively regulated through a one-size-fits-all legislative model without considering the practical context of its use.

The integration of AI into public systems has become a global phenomenon, encompassing both technologically advanced and rapidly developing nations. At the national and municipal levels, AI is increasingly used to optimize public service delivery, improve administrative efficiency, manage risks, and enhance public safety. In the United States, for example, state authorities are actively using AI in areas such as healthcare facility inspections, enhancing citizen services, and improving road safety. At the same time, public debates continue about potential abuses and unforeseen consequences associated with automated systems [1]. In the European Union, the digital strategy promotes the development and regulation of AI to improve transportation sustainability, boost energy sector efficiency, and support healthcare and manufacturing [2].

Ukraine is showing dynamic progress in this field through the implementation of

the Diia platform, which utilizes AI to automate citizen request processing, analyze public service performance, operate chatbots, and introduce digital identification. In financial monitoring, algorithms are applied to detect suspicious transactions and combat tax evasion [3].

Across European cities, artificial intelligence is performing a wide range of functions. In Madrid (Spain), the VisitMadridGPT chatbot provides tourist assistance; in Boston (USA), a bot system was launched during the COVID-19 pandemic to deliver food while accounting for citizens' social vulnerability; in Logan (Australia), AI is used to inform drivers about available parking; in Hangzhou (China), it helps classify household waste; and in Chicago (USA), it predicts crime-prone areas using sensor networks and algorithms, resulting in a 25% reduction in gun violence [10].

Despite the active expansion of AI technologies in public authorities, the legal regulation of their application remains inconsistent and fragmented. In recent years, countries around the world have begun to develop legal frameworks aimed at minimizing risks associated with AI use in the public sector, protecting human rights, and ensuring technological accountability.

The European Union has proposed a comprehensive legislative model in the form of the Artificial Intelligence Act (AI Act), which categorizes AI systems by risk level – from unacceptable to high – and sets strict requirements for developers, particularly regarding transparency, registration, and legal compliance [5].

In the United States, in 2025, 48 states and Puerto Rico initiated consideration of AI-related bills, with 26 of them already enacting more than 75 regulatory acts. These legislative initiatives address issues such as copyright for AI-generated content (Arkansas); protection of critical infrastructure (Montana); combating harassment through robotic systems (North Dakota); whistleblower protection (New Jersey); and transparency of automated decision-making in public administration (New York) [1].

In the United Kingdom, a "sector-specific regulation" approach is applied through existing legislation – including the UK GDPR, the Equality Act 2010, and others – with a focus on data protection, non-discrimination, product safety, financial supervision, and labor protection. There is currently no specialized AI regulator in the

public sector, but compliance with general standards is overseen by institutions such as the Information Commissioner's Office (ICO) and the Equality and Human Rights Commission (EHRC) [8].

Table 1 - Key risks of using AI in public administration

Type of risk	Description
Behavioral or cognitive manipulation	Use of AI to exert psychological influence, particularly on vulnerable groups (such as children), which may lead to harmful consequences.
Social scoring	Classification of individuals based on behavior or status to assess their "value" to society.
Biometric identification in public spaces	Use of facial recognition or other biometric data in real-time, posing threats to privacy and enabling mass surveillance.
Product safety violations	Integration of AI into transportation, medical devices, or toys may pose risks to health and life.
Violation of fundamental rights	Risks of discrimination or biased decisions in education, employment, justice, and social services.
Lack of transparency and accountability	Absence of explanations for AI decision-making prevents verification, oversight, and the possibility of appeal.
Systemic risk from generative models	Potential for large-scale harm — spreading disinformation, fake news, deepfakes, and similar threats.

Source: [5]

The main challenge in legislative regulation lies in the fact that AI is a multidimensional, adaptive, and self-evolving technology, which complicates its governance within a unified legal framework. This is why the UK government proposed the development of a White Paper – a regulatory and conceptual document that outlines a "principled approach" to AI governance. It sets out five core principles: safety, transparency, fairness, accountability, and the right to contest [8].

One of the core tasks of the White Paper in the field of AI regulation is to ensure the principle of transparency in the development, implementation, and use of intelligent systems in public administration. In this context, transparency should be understood as the systematic provision of clear, complete, and accessible information about the functioning of AI systems, the sources of training data, and the logic behind their decision-making processes [6].

Adhering to the principle of transparency serves a dual purpose: on one hand, it supports compliance with ethical standards and legal requirements; on the other, it builds public trust in the state's digital tools. Empirical studies show that users express significantly higher levels of trust in AI-generated decisions when they can understand the data sources, algorithmic logic, and expected outcomes of the system's operation [6].

Transparency is also a key factor for timely detection and correction of errors in AI systems. This is especially critical when handling sensitive personal data, where confidentiality, authorized access, and ethical data analysis are of utmost importance. Algorithm-based decisions can have a significant impact on individuals' rights, which means that citizens must be informed about the types of data used, processing mechanisms, and the outcomes produced by AI systems [4].

Table 2 - Key aspects of transparency in the use of artificial intelligence systems in public administration

№	Aspect of transparency	Content
1	Openness of algorithms and decisions	Providing access to descriptions of algorithms, decision-making criteria, and operational logic
2	Explainability	Ability to interpret AI outcomes and clarify the decisions made
3	Accountability	Clear identification of responsible entities and the availability of mechanisms for appealing decisions
4	Personal data protection	Compliance with personal data processing standards, in line with GDPR requirements
5	Data quality and structure	Use of accurate, structured, and relevant data during training and decision-making
6	Adaptability to change	Transparent communication about algorithm updates, including documentation of reasons and timing of changes

Systematized by the author based on the study [9]

One of the main challenges facing national governments is the information gap between developers, operators of state AI systems, and the citizens affected by these systems. Transparency serves as a tool to bridge this gap: it allows citizens not only to learn about the principles of how AI functions but also to actively participate in their evaluation, challenge decisions, and initiate their review through legal procedures. At the same time, transparency should not compromise the security aspects of system

operation or create opportunities for algorithm manipulation. This highlights the need to balance openness with safeguards against misuse. It also requires the development of institutional infrastructure for independent audits, technical certification, and mechanisms for public oversight [9].

Overall, only under conditions of sufficient transparency can the implementation of AI in the public sphere be legitimized by society as safe, ethical, and effective. Thus, transparency is not only a technical or legal requirement but a key condition for the long-term operation of AI in the interests of both citizens and the state.

From an ethical perspective, the instruments of transparency and regulation are not merely technical requirements but essential components of the ethical legitimacy of government AI systems. As K. Reinhardt notes, trust in artificial intelligence does not arise automatically but is the result of practices that demonstrate ethical justification, openness, and accountability in algorithm-driven decision-making. Trust in AI must be based not only on the reliability of outcomes but also on the trustworthiness of the processes that produce them [6].

In other words, the ethical nature of AI in the public sector is reflected not only in the absence of harm but also in the creation of conditions that ensure:

- the ability to be an informed user;
- protection from opaque or biased decisions;
- a real opportunity to defend one's rights in the context of automated administration.

In this regard, the initiative to create a universal White Paper appears both timely and strategically sound. Such a document could serve as an integrative framework for aligning transparency, regulatory standards, and ethical norms at the global level, while remaining adaptable to specific national contexts. Its implementation could not only standardize the use of AI but also enshrine trust as a foundational principle in the interaction between individuals, algorithms, and the state.

Conclusions

Artificial intelligence is rapidly being integrated into public administration systems around the world, spanning areas such as healthcare, public services,

transportation, security, administration, and environmental monitoring. In response to these transformations, various jurisdictions — from the US to the EU and the UK — are developing legislative tools to address the risks associated with AI. These include the European Union's AI Act, regulatory initiatives from individual US states, and the UK's White Paper, which proposes a principled approach to adaptive, sector-specific regulation. However, the absence of unified global standards creates a legal gap that complicates oversight and the protection of citizens' rights.

Transparency in the functioning of AI systems is essential for building trust in digital governance. It entails openness of algorithms, explainability of decisions, accountability of responsible actors, protection of personal data, accuracy of the data used, and notification of changes in system operations. Transparency helps close the information gap between developers and users, ensures the legitimacy of automated decisions, and maintains a balance between openness and cybersecurity. The ethics of AI use in the public sector are grounded in trust, accountability, and a non-discriminatory approach. As emphasized by K. Reinhardt, trust in AI is rooted not only in system performance but also in transparent, ethically sound procedures. Ethical legitimacy means users must be properly informed, have access to appeal mechanisms, and the state must prevent biased or discriminatory decisions. In this context, the creation of a universal White Paper is an important step toward shaping a global ethics of digital governance focused on human rights and technological responsibility.

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