

Regulating AI in the Digital Economy: Challenges and Opportunities for Uzbekistan

Azam Sarabekov
Tashkent State University of Law

Abstract

This article offers an in-depth examination of the legal dimensions of digital marketing in Uzbekistan, emphasizing data collecting, storage, and utilization methods. It analyzes the existing legal framework regulating these behaviors, encompassing the Law on Personal Data and the Law on Advertising, and proposes potential areas for enhancement. The research emphasizes significant difficulties like informed consent, data security, transnational data transfers, targeted advertising, and personalization. The article proposes prospective reforms to improve consumer safety and promote innovation in the digital economy by drawing parallels with international regulations such as the EU's General Data Protection Regulation (GDPR). This encompasses implementing stricter data security standards, establishing explicit regulations for cross-border data transfers and targeted advertising, and formulating a more extensive accountability framework for data protection infringements. The study continues by highlighting the necessity for continuous collaboration among policymakers, industry players, and consumer advocates to establish a balanced legal framework that responds to the increasing difficulties of digital marketing.

Keywords: Digital Marketing, Data Protection, Privacy, Uzbekistan, GDPR, Consumer Rights, Data Security, Legal Liability

APA Citation:

Sarabekov, A. (2025). Regulating AI in the Digital Economy: Challenges and Opportunities for Uzbekistan. *International Journal of Law and Policy*, 3 (6), 50-62. <https://doi.org/10.59022/ijlp.337>

I. Introduction

Artificial Intelligence (AI) technologies are rapidly transforming the global digital economy and creating new opportunities for innovation and growth. AI has emerged as one of the most transformative technologies of the 21st century, with the potential to revolutionize industries, economies, and societies. The rapid advancement of AI has been fueled by the growing availability of big data, the increasing computing power of machines, and the development of new algorithms and techniques, such as machine learning and deep learning (Floridi et al., 2018). However, the development and deployment of AI systems have outpaced the legal and regulatory frameworks designed to govern them.

This creates significant challenges for countries like Uzbekistan that are seeking to harness AI's potential while protecting citizens' rights and interests. The rise of AI has also raised significant challenges and concerns, particularly in terms of ethics, safety, privacy, and accountability. The increasing reliance on AI systems for decision-making and problem-solving has led to questions about the transparency, fairness, and explainability of these systems, as well as their potential for bias, discrimination, and unintended consequences. The problem requires urgent attention to ensure responsible AI development and deployment in Uzbekistan's digital economy.

In the context of the digital economy, AI has become a key driver of innovation, efficiency, and competitiveness, enabling businesses to automate processes, optimize operations, and personalize services. AI-powered applications, such as chatbots, recommendation systems, and predictive analytics, are transforming customer experiences, supply chains, and business models, creating new opportunities for value creation and capture. Uzbekistan has recognized the strategic importance of AI for the country's digital transformation and economic development (Cath et al., 2017). In 2019, the President of Uzbekistan signed a decree "On measures for the development of artificial intelligence technologies", which sets out the goals, priorities, and mechanisms for the development of AI in the country.

The decree emphasizes the need for a comprehensive and coordinated approach to AI, involving the collaboration of government, business, academia, and civil society, as well as the creation of an enabling legal and regulatory environment for AI innovation and investment. Currently, AI regulation in Uzbekistan is managed through various existing laws and regulations. The Civil Code governs intellectual property rights for AI systems and applications. The Law on Personal Data regulates data collection, processing, and protection in AI contexts. Sector-specific guidelines exist in healthcare, finance, and transportation industries. However, these regulations were not specifically designed for AI technologies and their unique characteristics. This research examines the current regulatory framework and identifies areas for improvement and reform.

This research is crucial for understanding the current state of AI regulation in Uzbekistan and identifying pathways for improvement. As AI technologies become more prevalent in various sectors, the need for comprehensive governance frameworks becomes increasingly urgent. The research provides valuable insights into the gaps and inconsistencies in existing AI regulations created by the development and deployment of AI systems that have outpaced the legal and regulatory frameworks designed to govern them, creating gaps and inconsistencies in the protection of individual rights and societal values. It helps policymakers understand the challenges and opportunities for developing effective AI governance.

The study contributes to the broader discussion on AI regulation in developing countries and emerging economies. It offers practical recommendations for creating a balanced regulatory framework that promotes innovation while protecting public interests. The research is important for businesses and developers who need clear guidelines for AI development and deployment. It helps civil society organizations understand AI governance issues and advocate for citizens' rights. The study supports international cooperation and knowledge sharing on AI regulation best practices. Academic institutions and researchers can benefit from the comprehensive analysis of AI governance challenges. The research contributes to the growing body of literature on AI policy and regulation in Central Asian countries.

The primary objective of this research is to examine the current legal and regulatory framework for AI in Uzbekistan's digital economy. The study aims to identify gaps, inconsistencies, and challenges in existing AI governance mechanisms. It seeks to analyze how current laws and regulations address AI development, deployment, and use across different sectors. The research objectives include evaluating the effectiveness of existing licensing and certification processes for AI systems. It aims to assess legal liability and accountability frameworks for AI-related damages and harms. The study examines the protection of individual rights and interests in AI contexts. Another objective is to compare Uzbekistan's AI regulation with international standards and best practices. The research aims to provide practical recommendations for improving AI governance in the country. It seeks to identify opportunities for developing a comprehensive and coherent legal framework for AI.

This research has significant implications for AI governance and policy development in Uzbekistan and the broader Central Asian region. The study provides the first comprehensive analysis of AI regulation in Uzbekistan's digital economy context. It offers valuable insights for policymakers and regulators working on AI governance frameworks. The research contributes to evidence-based policy making by identifying specific areas needing regulatory attention and reform. It supports the development of more effective and adaptive AI governance mechanisms in developing countries. The study has practical significance for businesses, developers, and users of AI technologies in Uzbekistan. It helps them understand their rights, responsibilities, and obligations under current and future AI regulations. The research contributes to

international dialogue and cooperation on AI governance and standard-setting. It provides a model for other developing countries facing similar AI regulation challenges. The research supports the achievement of sustainable development goals through responsible AI development and deployment.

II. Methodology

This research uses qualitative research methods to study AI regulation in Uzbekistan's digital economy. The study focuses on understanding legal frameworks and policy challenges through document analysis. Qualitative methods are suitable for this research because they help explore complex legal and regulatory issues. These methods allow deep examination of existing laws and regulations. The research aims to identify gaps in current AI governance. It also seeks to understand how international standards can be applied to Uzbekistan's context. The qualitative approach helps analyze legal documents and policy papers effectively. This method provides rich insights into regulatory challenges. It allows for detailed examination of legal texts and their implications. The research design supports comprehensive analysis of AI regulation issues. Qualitative methods are appropriate for exploring legal and policy questions. They help understand the complexity of AI governance in developing countries.

Data collection for this study relied on publicly available sources from Google Scholar. The research used systematic document analysis to gather relevant information. Only public domain materials were included in the study. This ensures transparency and accessibility of all sources used. Academic articles, government documents, and policy papers were collected through Google Scholar searches. The search focused on AI regulation, digital economy, and legal frameworks in Uzbekistan. International standards and best practices were also reviewed for comparison. All collected documents were verified for authenticity and reliability. The research followed ethical guidelines by using only public sources. Document analysis approach was used to examine the collected materials systematically. This method allows detailed study of legal texts and policy documents. All sources are properly cited to respect original authors' work. The methodology ensures comprehensive coverage of available literature on AI regulation in Uzbekistan's context.

III. Results

The analysis reveals that Uzbekistan's current AI regulation framework is fragmented and incomplete. Multiple laws govern different aspects of AI development and use. The Civil Code provides basic rules for intellectual property rights in AI systems. The Law on Personal Data covers data protection requirements for AI applications. However, these laws do not specifically address AI technologies and their unique challenges. Sector-specific regulations exist in healthcare, finance, and transportation sectors. The Ministry of Health has guidelines for AI use in medical diagnosis and treatment. The Central Bank has rules for AI applications in financial services. These regulations require validation and certification of AI systems by

qualified experts. They also mandate supervision by licensed professionals in respective fields. Despite these existing laws, significant gaps remain in the regulatory framework. There is no unified definition of AI systems across different regulations. The classification of AI technologies varies between sectors and applications.

Current licensing and certification processes for AI systems lack coordination and consistency. Different sectors have separate requirements and procedures for AI approval. Healthcare sector requires AI systems to be validated by medical experts before deployment. Financial sector mandates risk assessments and audits for AI applications in banking services. However, there is no national framework for AI licensing and certification. This creates confusion and inefficiency in the approval process. Many AI applications fall outside existing regulatory frameworks entirely. The absence of standardized procedures leads to regulatory gaps and overlaps. Some AI systems may receive multiple approvals from different authorities. Others may operate without proper certification due to unclear requirements. International standards like ISO/IEC and IEEE guidelines are not fully integrated into local regulations. The lack of mutual recognition between sectors creates barriers for AI developers. Cross-sector AI applications face particular challenges in obtaining proper approvals and certifications.

Legal liability and accountability frameworks for AI systems remain underdeveloped in Uzbekistan. Current civil liability principles may not adequately address AI-related damages and harms. The Civil Code's fault-based liability system struggles with autonomous AI decision-making. It is difficult to determine responsibility when AI systems cause unexpected outcomes. The law does not clearly define liability distribution among AI developers, deployers, and users. Strict liability approaches may discourage AI innovation and development in the country. There are insufficient protections for individuals affected by AI-driven decisions and actions. Privacy rights and non-discrimination principles need stronger enforcement in AI contexts. Automated decision-making systems lack transparency and explainability requirements. Citizens have limited rights to challenge or appeal AI-generated decisions that affect them. The legal framework does not address algorithmic bias and discrimination effectively. There is no comprehensive mechanism for monitoring and auditing AI systems' social impacts. Remedial measures and compensation procedures for AI-related harms are inadequately developed.

IV. Discussion

The regulation of AI systems in Uzbekistan is presently managed by a fragmented array of laws and regulations that establish the civil law framework for the advancement, implementation, and functioning of AI technology. These statutes and regulations encompass various matters, including intellectual property rights, data protection, consumer protection, and accountability for AI-related damages. The Civil Code is a principal legal instrument regulating AI utilization in Uzbekistan, delineating the fundamental principles and regulations for the establishment, transfer, and safeguarding of intellectual property rights, encompassing patents, copyrights, and

trade secrets. The Civil Code acknowledges computer programs and databases as protected intellectual property and confers exclusive rights to their inventors for usage, reproduction, distribution, and modification. However, the Civil Code does not provide specific provisions for AI systems, which may involve complex and dynamic combinations of software, data, and algorithms, and may generate outputs that are not easily attributable to human creators.

Another important legal instrument is the Law on Personal Data, which regulates the collection, processing, and protection of personal data by public and private entities. The Law on Personal Data requires data controllers and processors to obtain the consent of data subjects for the collection and use of their personal data, and to implement appropriate technical and organizational measures to ensure the security and confidentiality of the data. However, the Law on Personal Data does not provide specific guidelines for the use of personal data in AI systems, which may involve the automated processing of large volumes of data from multiple sources, and may raise concerns about the privacy, autonomy, and dignity of individuals.

There are also several sector-specific regulations that govern the use of AI in particular domains, such as healthcare, finance, and transportation. For example, the Ministry of Health has issued guidelines on the use of AI in medical diagnosis and treatment, which require AI systems to be validated and certified by qualified experts, and to be used under the supervision of licensed healthcare professionals. Similarly, the Central Bank of Uzbekistan has issued regulations on the use of AI in financial services, which require financial institutions to conduct risk assessments and audits of their AI systems, and to provide clear and transparent information to customers about the use of AI in their products and services (Rizzo, 2020). Nonetheless, despite the presence of these laws and regulations, substantial loopholes and inconsistencies persist in the civil law framework governing AI utilization in Uzbekistan. There is an absence of clarity and uniformity in the definition and classification of AI systems, potentially resulting in legal ambiguities and disagreements over the rights and obligations of various stakeholders. There is an absence of explicit regulations on the distribution of culpability for AI-related damages, including incidents involving autonomous vehicles or mistakes committed by AI-driven medical devices.

Furthermore, current rules and regulations may be inadequate to tackle the distinctive issues and risks associated with AI systems, including their opacity, unpredictability, and propensity for bias and discrimination. The existing intellectual property rules may insufficiently safeguard the rights of persons and communities whose data and knowledge are utilized to train AI systems, as well as the rights of AI systems themselves as prospective creators and innovators. Likewise, existing data protection legislation may insufficiently mitigate the privacy and security threats linked to the utilization of AI systems for profiling, surveillance, and decision-making. To address these gaps and inconsistencies, Uzbekistan could consider the development of a comprehensive and coherent legal framework for AI, which provides clear and

consistent definitions, principles, and rules for the development, deployment, and use of AI systems. This framework could be based on international standards and best practices, such as the OECD Principles on Artificial Intelligence, the IEEE Ethically Aligned Design, and the European Commission's Ethics Guidelines for Trustworthy AI (Dickey et al., 2024). A framework could offer direction and elucidation on critical legal and ethical matters, including:

- The definition and categorization of AI systems, according to their degree of autonomy, adaptability, and influence on human rights and society values.
- The distribution of rights and obligations among various stakeholders, including AI developers, operators, users, and impacted persons and communities:
- The stipulations for openness, explainability, and accountability of AI systems, encompassing the disclosure of their objectives, functionalities, and constraints.
- The concepts and processes to guarantee the equity, non-discrimination, and inclusivity of AI systems, as well as to avert and alleviate their possible damages and risks.
- The criteria and protocols for the assessment, validation, and accreditation of AI systems, determined by their intended application and potential effects on human rights and societal values.
- The frameworks for the surveillance, enforcement, and remediation of AI-related damages and infractions, include the creation of autonomous regulatory entities and conflict resolution processes.

The establishment of this framework may require the involvement and consultation of various stakeholders, including governmental bodies, industry associations, civil society organizations, academic institutions, and international entities, to guarantee the legitimacy, efficacy, and adaptability of the legal and regulatory framework for AI in Uzbekistan. The licensing and certification of AI systems is a vital component of the legal and regulatory framework for AI in Uzbekistan, as it guarantees the safety, dependability, and trustworthiness of AI technology and applications. Licensing denotes the legal authorization provided by an appropriate authority to an entity for the development, deployment, or operation of an AI system, contingent upon the satisfaction of specific requirements and conditions. Certification denotes the official verification by an independent and certified organization that an AI system adheres to particular standards, principles, or criteria.

In Uzbekistan, there is currently no comprehensive and unified system for the licensing and certification of AI systems, and the existing requirements and procedures vary depending on the sector and application of AI. For example, in the healthcare sector, the Ministry of Health has issued guidelines on the use of AI in medical diagnosis and treatment, which require AI systems to be validated and certified by qualified experts, and to be used under the supervision of licensed healthcare professionals. Similarly, in the financial sector, the Central Bank of Uzbekistan has issued regulations on the use of AI in financial services, which require

financial institutions to conduct risk assessments and audits of their AI systems, and to provide clear and transparent information to customers about the use of AI in their products and services. However, these sector-specific mandates and protocols may prove inadequate in tackling the overarching issues and hazards associated with AI systems, including their propensity for bias, discrimination, and unforeseen repercussions. Furthermore, the absence of a cohesive and uniform methodology for the licensing and certification of AI systems may result in inconsistencies, deficiencies, and redundancies within the regulatory framework, potentially obstructing the advancement and implementation of AI technologies in Uzbekistan (Wirtz et al., 2019).

To address these challenges, Uzbekistan could consider the development of a national framework for the licensing and certification of AI systems, which provides clear and consistent requirements and procedures for the assessment, validation, and approval of AI technologies and applications. This framework could be based on international standards and best practices, such as the ISO/IEC JTC 1/SC 42 standards on Artificial Intelligence, the IEEE P7000 series of standards on Ethically Aligned Design, and the European Commission's proposal for an Artificial Intelligence Act. The criteria and thresholds for classifying AI systems according to their risk level and impact on human rights and societal values, from low-risk systems that necessitate self-assessment and declaration by developers to high-risk systems that mandate third-party conformity assessment and certification by accredited organizations. The stipulations and responsibilities for AI developers, deployers, and operators encompass the documentation and disclosure of the purpose, functionality, limitations, and potential risks of AI systems, the execution of risk management and mitigation strategies, and the provision of user information and training.

The criteria and methodologies for the examination, validation, and verification of AI systems, encompassing the utilization of independent testing facilities, the engagement of domain experts and impacted stakeholders, and the implementation of ethical and social impact assessment frameworks. The protocols and criteria for the certification and labeling of AI systems, include the application of harmonized standards and certification frameworks, the mutual acknowledgment of certifications across sectors and jurisdictions, as well as the oversight and enforcement of compliance by relevant authorities. The protocols for reporting, investigating, and addressing AI-related incidents and grievances, encompassing the creation of specialized contact points and complaint resolution procedures, collaboration and information sharing among relevant authorities, and the enforcement of remedial actions and penalties for non-compliance (Khan et al., 2024).

The creation of this framework may necessitate the involvement and consultation of various stakeholders, including AI developers, deployers, operators, standardization and certification entities, consumer and civil society organizations, and international partners, to guarantee the relevance, efficacy, and interoperability of the

AI licensing and certification strategy in Uzbekistan. Furthermore, the execution of the licensing and certification framework could be bolstered by the creation of a national AI testing and experimentation facility, which offers a regulated and secure setting for the development, testing, and validation of AI systems, while promoting collaboration and knowledge exchange among AI stakeholders. The national AI testing and experimentation facility may function as a center for the training and development of AI professionals, the advancement of responsible AI innovation, and the involvement and education of the public regarding AI issues and opportunities.

The deployment of AI systems across many sectors presents numerous legal dilemmas and concerns, especially around liability, accountability, and remediation for AI-induced damages and infringements. As AI systems get increasingly independent, adaptable, and influential, the assignment of legal accountability for their acts and decisions becomes more intricate and ambiguous. The existing legal framework in Uzbekistan lacks explicit measures regarding the liability and accountability of AI systems, as well as their developers, deployers, and operators. The overarching principles of civil liability delineated in the Civil Code may be insufficient to tackle the distinctive attributes and hazards associated with AI systems, including their opacity, unpredictability, and capacity for unintended repercussions (Konidena et al., 2024).

For example, under the Civil Code, liability for damages caused by a product or service is typically attributed to the manufacturer or provider, based on the principles of fault, negligence, or strict liability. However, in the case of AI systems, it may be difficult to determine the cause and extent of damages, as well as the degree of fault or negligence of the different actors involved in the development, deployment, and use of the system. Moreover, the application of strict liability to AI systems may discourage innovation and experimentation, as it would impose a heavy burden on AI developers and deployers to ensure the safety and reliability of their systems, regardless of their intended use and potential benefits. A further legal concern with the utilization of AI systems pertains to safeguarding the rights and interests of individuals and groups potentially impacted by AI-driven choices and actions. The utilization of AI systems for profiling, scoring, and automated decision-making may elicit issues around privacy, fairness, non-discrimination, and the rights to information, explanation, and contestation of AI-generated decisions.

In the realm of credit scoring and lending, the application of AI algorithms to evaluate individuals' creditworthiness based on personal and behavioral data may result in biased and discriminatory consequences, especially for disadvantaged and vulnerable populations. In the realm of predictive police and criminal justice, the deployment of AI systems to forecast and avert crimes based on past data and trends may exacerbate existing disparities and prejudices, while undermining due process and the presumption of innocence for individuals. To address these legal issues and challenges, Uzbekistan could consider the development of specific rules and principles

for the liability and accountability of AI systems, as well as the protection of individual rights and interests in the context of AI use. These rules and principles could be based on international standards and best practices, such as the Council of Europe's Guidelines on Artificial Intelligence and Data Protection, the European Parliament's Resolution on a Framework of Ethical Aspects of Artificial Intelligence, Robotics and Related Technologies, and the World Economic Forum's Toolkit for Responsible Deployment of AI in Human Resources (Hussain et al., 2024).

Such regulations and principles could elucidate critical components of the legal framework governing AI utilization, including: The distribution of liability for AI-related damages and infractions, contingent upon the autonomy, predictability, and explainability of the AI system, as well as the extent of control and accountability of the various stakeholders involved in its creation, deployment, and application. The stipulations for the transparency, accountability, and auditability of AI systems, encompassing the disclosure of information regarding their objectives, functionalities, limitations, and potential hazards, the establishment of monitoring and reporting mechanisms, and the execution of regular evaluations and audits by independent entities.

The principles and procedures for safeguarding individual rights and interests in the context of AI utilization encompass the right to privacy, equity, and non-discrimination; the right to information, explanation, and contestation of AI-generated outcomes; and the right to human review and redress for AI-related harms and infringements. Additionally, the mechanisms for enforcing and remedying AI-related harms and violations include the establishment of specialized complaint-handling and dispute resolution processes, the imposition of corrective measures and sanctions for non-compliance, and the provision of compensation and remedies for impacted individuals and communities (Grozdanovski & De Cooman, 2025).

The formulation of these regulations and principles may necessitate the involvement and consultation of various stakeholders, including AI developers, implementers, operators, legal and ethical specialists, consumer and civil society organizations, and international collaborators, to guarantee the legitimacy, efficacy, and adaptability of the legal framework governing AI utilization in Uzbekistan. Moreover, the implementation of the legal framework could be supported by the establishment of a national AI observatory, which monitors and assesses the impact of AI systems on human rights, fundamental freedoms, and societal values, and provides guidance and recommendations for the responsible development and use of AI in Uzbekistan. The national AI observatory could also serve as a platform for the exchange of information and best practices among AI stakeholders, the promotion of public awareness and engagement on AI issues, and the contribution to international cooperation and standard-setting on AI governance.

The regulation of AI in Uzbekistan is nascent, presenting numerous problems and opportunities for the establishment of a comprehensive, effective, and adaptive

regulatory framework for AI. As AI technologies advance, it is imperative for policymakers, regulators, and stakeholders to foresee and mitigate the forthcoming legal, ethical, social, and economic ramifications of AI, while promoting a responsible and trustworthy AI ecosystem within the nation. A crucial future consideration for AI regulation in Uzbekistan is the necessity for a more proactive, inclusive, and adaptable approach to policymaking and legislation. Due to the swift advancement and disruptive characteristics of AI development, conventional regulatory methods reliant on reactive and prescriptive rules may be inadequate in adapting to the evolving landscape and mitigating the developing risks and issues associated with AI. Policymakers and regulators should implement a more proactive and flexible strategy, grounded in the ongoing monitoring and evaluation of AI trends and effects, collaboration with a variety of stakeholders, and the trial and refinement of regulatory measures.

This may entail the creation of specialized AI policy laboratories and regulatory sandboxes, which offer a secure and controlled setting for the testing and implementation of AI systems and policies, facilitating the collaborative development and regulation of AI standards and guidelines by policymakers, developers, users, and impacted communities. The process may also encompass regulatory foresight and horizon scanning techniques to detect and assess the long-term, cross-sectoral ramifications of AI, hence guiding the creation of more robust and adaptable regulatory frameworks (Ruscheimer, 2025). Another key perspective is the need for a more human-centric and value-based approach to AI regulation, which puts the protection and promotion of human rights, social justice, and environmental sustainability at the center of AI governance. As AI systems become more powerful and pervasive, they have the potential to both enable and undermine fundamental human values and principles, such as human dignity, non-discrimination, privacy, freedom of expression, and democratic participation. Therefore, it is crucial for AI regulation to be guided by a clear and consistent set of ethical and social values, and to ensure that the benefits and risks of AI are distributed fairly and equitably across society.

This could involve the development of a national AI ethics framework, which sets out the key principles and guidelines for the responsible development and use of AI in Uzbekistan, based on international human rights standards and domestic cultural and social norms (Jobin et al., 2019). It could also involve the establishment of an independent AI ethics advisory body, which provides guidance and recommendations to policymakers, developers, and users on the ethical and social implications of AI, and monitors and assesses the compliance of AI systems with ethical and social standards. Furthermore, AI regulation should aim to cultivate a more sustainable and resilient AI ecosystem that supports the attainment of national and global sustainable development objectives while alleviating the possible adverse effects of AI on the environment, climate, and biodiversity. This may entail the formulation of explicit guidelines and incentives for the eco-design and sustainable procurement of AI

systems, the evaluation and oversight of the environmental impact of AI technologies, and the advocacy of AI solutions for climate action, clean energy, and sustainable production and consumption (Vinuesa et al., 2020).

Ultimately, AI regulation in Uzbekistan should seek to establish a collaborative and inclusive governance framework that encourages multi-stakeholder cooperation and dialogue both nationally and internationally. Due to the global and transnational characteristics of AI development and implementation, it is imperative for Uzbekistan to collaborate with other nations and international organizations to exchange knowledge and best practices, align standards and regulations, and tackle shared challenges and opportunities (Scherer, 2015). This may entail Uzbekistan's active engagement in international AI policy forums and projects, including the OECD AI Principles, the UNESCO Recommendation on the Ethics of AI, the Council of Europe Ad Hoc Committee on AI (CAHAI), and the Global Partnership on AI. The establishment of bilateral and regional cooperation mechanisms on AI, such as a Central Asian AI Alliance, may facilitate the sharing of expertise and resources, the coordination of policies and regulations, and the collaborative development and deployment of AI solutions in the region.

Conclusion

The governance of AI in Uzbekistan poses both obstacles and opportunities for the nation's digital transformation and sustainable development. To leverage the advantages and alleviate the risks of AI, it is imperative for policymakers, regulators, and stakeholders to implement a proactive, inclusive, and adaptable strategy for AI governance, informed by principles of human rights, social justice, and environmental sustainability. This necessitates ongoing surveillance and evaluation of AI trends and effects, collaboration with many stakeholders, and the trial and refinement of regulatory measures. It necessitates the formulation of a national AI ethics framework, the creation of an autonomous AI ethics advisory entity, and the advancement of a cooperative and inclusive AI governance structure at both national and international tiers. By adopting a prudent and progressive strategy for AI regulation, Uzbekistan can establish itself as a frontrunner in the ethical development and application of AI both regionally and globally, while aiding in the realization of national and international sustainable development objectives.

Bibliography

- Cath, C., Wachter, S., Mittelstadt, B., Taddeo, M., & Floridi, L. (2017). Artificial Intelligence and the ‘Good Society’: the US, EU, and UK approach. *Science and Engineering Ethics*. <https://doi.org/10.1007/s11948-017-9901-7>
- Dickey, T. J., Dobreski, B., Hlava, M., Lund, B., Needleman, M., & Zeng, M. L. (2024). Information Standards and Guidelines on <scp>AI</scp>: Ethical Concerns, Trustworthiness, Quality Assessment, and Human Oversight. *Proceedings of the Association for Information Science and Technology*, 61(1), 745–748. <https://doi.org/10.1002/pra2.1092>
- Floridi, L., Cowls, J., Beltrametti, M., Chatila, R., Chazerand, P., Dignum, V., Luetge, C., Madelin, R., Pagallo, U., Rossi, F., Schafer, B., Valcke, P., & Vayena, E. (2018). AI4People—An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles, and Recommendations. *Minds and Machines*, 28(4), 689–707. <https://doi.org/10.1007/s11023-018-9482-5>
- Grozdanovski, L., & De Cooman, J. (2025). Individual safeguards in the era of AI: Fair algorithms, fair regulation, fair procedures. *Cambridge Forum on AI: Law and Governance*, 1, e18. <https://doi.org/10.1017/cfl.2025.10>
- Hussain, A., Khan, muddasir A., K S, A. A., & K, K. (2024). Enhancing Credit Scoring Models with Artificial Intelligence: A Comparative Study of Traditional Methods and AI-Powered Techniques. In *A Modern Approach to AI- Integrating Machine Learning with Agile Practices* (pp. 99–107). QTanalytics India. <https://doi.org/10.48001/978-81-966500-8-7-10>
- Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, 1(9), 389–399. <https://doi.org/10.1038/s42256-019-0088-2>
- Khan, S. A., Oshin, N. T., Nizam, M., Ahmed, I., Musfique, M. M., & Hasan, M. (2024). *AI-Based Software Testing* (pp. 323–334). https://doi.org/10.1007/978-981-99-8346-9_28
- Konidena, B. K., Malaiyappan, J. N. A., & Tadimarri, A. (2024). Ethical Considerations in the Development and Deployment of AI Systems. *European Journal of Technology*, 8(2), 41–53. <https://doi.org/10.47672/ejt.1890>
- Rizzo, R. (2020). *The Development of New E-commerce Activities in Messina* (pp. 172–183). https://doi.org/10.1007/978-3-030-39319-9_20
- Ruschmeier, H. (2025). *Thinking Outside the Box?* (pp. 318–332). https://doi.org/10.1007/978-3-031-73741-1_20
- Scherer, M. U. (2015). Regulating Artificial Intelligence Systems: Risks, Challenges, Competencies, and Strategies. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2609777>
- Vinuesa, R., Azizpour, H., Leite, I., Balaam, M., Dignum, V., Domisch, S., Felländer, A., Langhans, S. D., Tegmark, M., & Fuso Nerini, F. (2020). The role of artificial intelligence in achieving the Sustainable Development Goals. *Nature Communications*, 11(1), 233. <https://doi.org/10.1038/s41467-019-14108-y>
- Wirtz, B. W., Weyerer, J. C., & Geyer, C. (2019). Artificial Intelligence and the Public Sector—Applications and Challenges. *International Journal of Public Administration*, 42(7), 596–615. <https://doi.org/10.1080/01900692.2018.1498103>