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Artificial Intelligence as a Strategy for the Development of Uzbekistan's Economy

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Abstract: The article examines artificial intelligence technology, which is increasingly influencing the economy, education, and governance system of Uzbekistan. New legislative acts are being adopted, while existing regulations are being amended, leading to state regulation of AI implementation in economic processes.

Keywords: AI, laws, transformation, technologies, mechanisms, survival, sustainability.

1. Introduction

By 2025, artificial intelligence has ceased to be merely an experimental field and has become a fundamental strategy for the survival and growth of the economy. In recent years, there has been a growing research interest not only in the digital economy, but also in one of its key technologies — artificial intelligence.[1]

A set of mechanisms has been identified through which AI technologies can contribute not only to reducing risks, but also to increasing the sustainability of the economic system. These mechanisms include neural network-based forecasting, monitoring and optimization of business processes, rationalization of risk management systems, and modeling the dynamics of complex socio-economic systems.[2]

China is expected to gain the greatest economic benefit from AI, with GDP growth projected to increase by 26% by 2030, while North America is expected to achieve growth of 14.5%. In developing regions such as Latin America and Africa, the pace of AI adoption is expected to remain more modest (less than 6%) due to the lower overall penetration of information technologies. Experts predict that artificial intelligence could accelerate the growth of global economic productivity by approximately 0.68 percentage points annually, contributing to a 37% increase in global trade volumes and a 13% rise in global GDP by 2040. Of particular importance is the fact that the information services sector — including cloud technologies, software, and AI services — could increase trade volumes by more than 40%. This indicates that digital economies and service-based growth models are gaining a significant competitive advantage.[3][4][5]

Three industries recorded the highest levels of AI spending in 2024: banking services, retail trade, and healthcare. In the banking sector, AI technologies are primarily focused on fraud detection and analysis. In retail, investments are aimed at improving customer service through the use of chatbots.[6]

However, the leaders in terms of attracted investment are healthcare companies: technology firms specializing in the development of new medicines using AI solutions, including treatments for oncological diseases, as well as companies conducting research in the field of molecular medicine.[7]

Uzbekistan has also entered a new era – the era of digitalization, whose technical and technological capabilities are radically transforming the existing socio-economic model of the world, while artificial intelligence technologies play a crucial role in these processes. [8]

Our country has also begun actively developing artificial intelligence technologies. Taking into account the experience gained during the pandemic, digitalization in the healthcare sector has been expanding since 2021. Systems such as the “electronic polyclinic” and “telemedicine” have already been introduced in the regions. The digital transformation of the banking sector is also continuing, including the implementation of automated management systems and financial technologies.[9]

More than \$600 million has been attracted for the digitalization of agriculture through the introduction of modern agricultural technologies and innovative solutions.

Uzbekistan has already taken important steps to strengthen its position:

- adopted the National Artificial Intelligence Strategy, which includes a concrete implementation plan, financing mechanisms, and monitoring tools, allowing the strategy to evolve alongside technological progress;
- developed state-level digital infrastructure to create favorable conditions for the implementation of AI solutions. A significant role is played by IT Park Uzbekistan, which serves as an ecosystem that creates favorable conditions for attracting foreign investment and supporting the growth of local companies;
- invested in the creation of GPU clusters and data centers, with the total volume of investments amounting to approximately \$6.5 billion;
- launched programs aimed at improving AI literacy and workforce training, such as AI Study, One Million Promoters, and educational courses for civil servants.[10][11]

2. Materials and Methods

Considering these developments, on February 17, 2021, the President of the Republic of Uzbekistan adopted the Resolution “On Measures to Create Conditions for the Accelerated Introduction of Artificial Intelligence Technologies.” This document established the legal foundation for the further development of AI technologies and defined the key directions for their advancement.[12]

The Resolution provides for the development of an Artificial Intelligence Development Strategy, primarily aimed at defining the fundamental directions and principles for the application of artificial intelligence, as well as creating conditions for the comprehensive formation of this sector in both the short-term and long-term perspective.[13]

Secondly, the Resolution envisages the development of a regulatory and legal framework establishing unified requirements, responsibility, security, and transparency in the use of artificial intelligence technologies in economic sectors, the social sphere, public administration, and in improving the quality of public services provided to the population.

In accordance with the priorities of the “Digital Uzbekistan–2030” Strategy, and with the aim of creating favorable conditions for the accelerated implementation and widespread use of artificial intelligence technologies in the country, efforts are being made to ensure the availability and high quality of digital data, as well as to train qualified specialists in this field.

Based on the above-mentioned legislative documents, Uzbekistan has identified priority areas for the implementation of artificial intelligence technologies. In particular, these include the following sectors of the economy: agriculture, banking, finance, the tax system, transport, energy, healthcare, pharmaceuticals, and e-government.

However, several factors continue to hinder the implementation of AI technologies in the country. First of all, AI development is expensive, and Uzbek companies currently

do not possess sufficient economic and financial resources to allocate the necessary funds for the development and deployment of their own intelligent systems. Therefore, these processes require active state participation and financing from the national budget.[14]

Secondly, state funding implies that priority will be given to intelligent systems capable of solving the most important nationwide problems and generating the highest economic returns, particularly for large-scale production in leading industries. It remains unclear whether the government will be able to allocate sufficient financial resources separately for the development of independent intelligent systems for small and medium-sized businesses.

On October 22, 2025, Shavkat Mirziyoyev signed a decree on measures for the development of artificial intelligence technologies in Uzbekistan, as reported by the legal information channel of the Ministry of Justice.

According to the decree, by the end of 2026, at least 100 new AI-related initiatives are planned to be launched in public administration, the social sphere, and the economy. In addition, 15 AI laboratories are to be established in the country's universities. By 2030, the government of Uzbekistan aims to attract more than \$1 billion in foreign investment for the creation of modern AI infrastructure.

3. Results

To promote artificial intelligence, the President instructed that a governmental AI portal — ai.gov.uz — be launched by the end of 2026. The portal will provide information about AI projects and programs, new startups, and free online educational courses.

The implementation of AI technologies will also be taken into account when assessing the digital transformation of government bodies and state-owned enterprises. Starting from March 2026, ministries and agencies will participate twice a year in competitions for the best AI projects.[15]

The President of the Republic of Uzbekistan, Shavkat Mirziyoyev, held a meeting on October 21, 2025, dedicated to the development of artificial intelligence technologies and announced plans to launch satellite internet in Uzbekistan starting from 2026. Beginning this year, Uzbekistan will also hold an annual presidential competition for the best AI startups entitled "President AI Award." The prize fund for the competition has been set at \$1 million.

The President also assigned the task of creating a "Uzbek language corpus" for the development of a national AI model, as well as transferring all databases of government agencies into a unified data center. This initiative is driven by the need to train AI systems to operate effectively in the Uzbek language. A significant portion of scientific and literary works, reports, and other information in the state language has not yet been digitized, while existing digital data are stored in a fragmented and unstructured manner.

The President emphasized the launch of a unified digital government platform and the creation of opportunities for integrating solutions developed by startups into this platform. However, the further development of the platform and the implementation of AI technologies are hindered by the fragmentation of information across separate servers of various government agencies and by problems related to data format compatibility.

By the end of 2026, it is planned to create a "digital lake" (data lake) platform for information in the Uzbek state language. The platform will provide opportunities to collect, process, analyze, and use data in AI-compatible formats.

On January 21, 2026, the Law "On Amendments and Additions to Certain Legislative Acts of the Republic of Uzbekistan in Connection with the Regulation of Relations Arising from the Use of Artificial Intelligence" entered into force. This law also amends several other legislative acts of the Republic of Uzbekistan, including the Law "On Informatization," with the aim of establishing general principles for the use of artificial

intelligence technologies and clarifying the powers of the competent state authority in this sphere.

4. Discussion

Based on the adopted Law “On the Regulation of the Use of Artificial Intelligence Technologies,” approved by the Senate in November 2025, as well as recent presidential decrees, the functions of the specially authorized body in the field of AI in Uzbekistan have been assigned to the Ministry of Digital Technologies of the Republic of Uzbekistan.

The main responsibilities of this institution include:

- creating favorable conditions for attracting investments into the sector;
- establishing technical infrastructure for processing government data using artificial intelligence technologies;
- organizing education, advanced training, and professional retraining in the field of artificial intelligence;
- developing, within the legal framework, general rules for the use of AI in the creation of information resources and ensuring the functioning of information systems.

According to this law, information resources created using artificial intelligence technologies and AI-based information systems must not harm human life, health, freedom, honor, or dignity, including through the unlawful processing of personal data by means of artificial intelligence and its dissemination through mass media or the Internet.

The adopted law contributes to:

- the development of artificial intelligence technologies;
- the establishment of general rules for their application;
- the protection of citizens’ rights in this sphere.

5. Conclusion

In conclusion, it can be emphasized that the use of artificial intelligence technologies largely determines the competitiveness of Uzbekistan and the level of security of Uzbek society in the near future. The impact of AI technologies on economic and other processes is expected to become more significant than that of other digital technologies. However, it should also be noted that the integration of AI with other technologies is becoming increasingly widespread. At the same time, the positive effects of AI implementation will not appear immediately, and the benefits from initial investments in AI may remain unnoticeable in the short term. In this regard, the Government of Uzbekistan has adopted a long-term strategic approach and defined a policy for the implementation of artificial intelligence technologies across various sectors of the economy in order to overcome the negative consequences of the digital transformation of production processes.

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