

30-Sentyabr, 2026-yil

**THE IMPLEMENTATION OF ARTIFICIAL INTELLIGENCE IN
UZBEKISTAN’S ECONOMY**

**O‘ZBEKISTON IQTISODIYOTIDA SUN’IY INTELLEKTDAN
FOYDALANISH**

**ИСПОЛЬЗОВАНИЕ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА В
ЭКОНОМИКЕ УЗБЕКИСТАНА**

Ахмедова Санабархан Хафизовна

к. э. н., доцент кафедры «Экономика и Логистика»

СБУМИПТК

Annotatsiya *Mazkur maqola O‘zbekiston iqtisodiyotida sun’iy intellektning roli va uning turli sohalarga ta’sirini yoritadi. Sun’iy intellekt texnologiyalarining qishloq xo‘jaligi, sog‘liqni saqlash, telekommunikatsiya va IT sohalariga joriy qilinishi tahlil qilingan. Shuningdek, raqamli iqtisodiyotda sun’iy intellektning tahliliy vosita sifatida ahamiyati va texnologik transformatsiya jarayonlari o‘rganilgan.*

Kalit so‘zlar: *sun’iy intellekt, raqamli iqtisodiyot, texnologik transformatsiya.*

Аннотация. *Данная статья освещает роль искусственного интеллекта в экономике Узбекистана и его влияние на различные отрасли. Анализируется внедрение технологий искусственного интеллекта в сельское хозяйство, здравоохранение, телекоммуникации и ИТ-сектор. Кроме того, рассматривается значение искусственного интеллекта как аналитического инструмента в цифровой экономике и его роль в процессах технологической трансформации.*

Ключевые слова: *искусственный интеллект, цифровая экономика, технологическая трансформация.*

Abstract. *This article highlights the role of artificial intelligence in the economy of Uzbekistan and its impact on various fields. The implementation of artificial intelligence technologies in agriculture, healthcare, telecommunications and IT sectors is analyzed. Also, the importance of artificial intelligence as an analytical tool and the processes of technological transformation in the digital economy were studied.*

Keywords: *artificial intelligence, digital economy, technological transformation*

In recent years, artificial intelligence (AI) technologies have been actively introduced in various sectors of Uzbekistan's economy. In October 2024, a strategy for the development of artificial intelligence technologies until 2030 was approved, aiming to increase the volume of AI-based software products and services to 1.5 billion US dollars. Additionally, it

is planned to raise the share of services provided using artificial intelligence on the Unified Interactive Public Services Portal to 10%.

UZDAILY.COM The practical application of artificial intelligence is already being implemented in various fields.

For example, starting from January 2024, the company 'Uzbekinvest' became the first in the country's insurance market to fully transition 15 types of insurance policies to an electronic format and launched an innovative pre-insurance inspection system using AI technologies in real-time. This has increased the transparency and efficiency of services, allowing the company to process data from 87% of policies within its overall customer base.

AI is also planned to be implemented in sectors such as finance, transportation, healthcare, agriculture, and energy.

In the financial sector, AI is used to combat fraud and predict market trends; in transportation, to optimize logistics; in healthcare, to accelerate diagnosis and treatment selection; in agriculture, to forecast crop yields and monitor resource usage.

Thus, the integration of artificial intelligence into Uzbekistan's economy helps increase the efficiency and competitiveness of various sectors, making it an important step toward the country's digital transformation.

We can observe several directions for integrating artificial intelligence technologies into Uzbekistan's digital economy. First and foremost, the strategies and programs developed by the government are of significant importance.

For example, in 2020, the President of the Republic of Uzbekistan approved the “Digital Uzbekistan 2030” strategy. This strategy aims to enhance the efficiency of public services through the use of artificial intelligence, digitize the economy, and achieve breakthroughs in the field of science.

The agriculture sector in Uzbekistan holds great potential for the application of artificial intelligence. For example, AI can be used to increase productivity and manage water resources more effectively. According to statistical data, agriculture accounts for more than 25% of Uzbekistan's gross domestic product. Optimization processes introduced with AI technologies could significantly increase crop yields.

Literature Review: The article provides detailed information about the impact of artificial intelligence technologies on the digital economy in Uzbekistan. Based on the 'Digital Uzbekistan 2030' strategy, it shows examples of how artificial intelligence is being implemented in agriculture, healthcare, and education. [1] European Union. (2023). Funds allocated for artificial intelligence research. The globalization of artificial intelligence worldwide is discussed. [2]

Ministry of IT Development. (2022). IT export indicators in Uzbekistan. Projects on utilizing the experience of fellow citizens abroad for the development of IT education in Uzbekistan. [3] China Economic Research Center. (2022). Robotics and economic efficiency. From the perspective of robotics and commercial applications, some companies in China are emerging in the field of complete robotic systems and key components. [4]

The significance of artificial intelligence as an analytical tool in the digital economy and information related to global technological trends are also presented. Additionally, Uzbekistan's international collaborations, the development of tech parks, and the economic efficiency of technological transformation are analyzed.

The healthcare sector can also benefit from artificial intelligence technologies. In medicine, AI can help improve diagnostic processes and enhance patient monitoring systems. In recent years, digitization of the healthcare sector has been actively carried out in Uzbekistan, and artificial intelligence has the potential to accelerate this process. In Uzbekistan, the number of internet users in 2021 was 27 million.

The IT sector in Uzbekistan is also rapidly developing. According to data reported by the Ministry for the Development of Information and Communication Technologies (ICT), the volume of IT service exports has nearly tripled in the last five years. This highlights the need to explore the export opportunities for products and services created based on artificial intelligence.

To better understand the possibilities of artificial intelligence in the decision-making process, it is necessary to encourage the scientific research and projects of the country's students. The annual IT Olympiad and conferences held in Uzbekistan are among the platforms that gather those interested in the field of AI.

According to the data from the State Statistics Committee of the Republic of Uzbekistan, the economy of Uzbekistan grew by 1.6% in 2020, with the main factors being state investments and growth in the services sector. In the future, artificial intelligence technologies may play a key role in accelerating this economic growth. Artificial intelligence (AI) in the digital economy is a rapidly developing analytical tool of great significance. The development of AI technologies and their application in the digital economy is enabling the optimization of economic processes, efficient resource management, and the creation of new business models.

Artificial intelligence technologies are used in the digital economy for data analysis, forecasting, making firm decisions, and creating automated processes. According to the World Economic Forum, AI systems are expected to add approximately 14 trillion dollars in value to the global gross domestic product (GDP) by 2025. This figure reflects the scale of new opportunities being created based on AI in the digital economy.

By today, the most widespread forms of artificial intelligence technologies are as follows:

1. Data analysis: AI, Big Data, i.e., the analysis of large volumes of data, creates great opportunities for businesses and organizations. This is carried out using artificial intelligence algorithms, allowing companies to effectively utilize data.

2. Machine Learning: Machine learning algorithms are a versatile analytical tool in the digital economy and are applied in business processes. Research conducted by UNESCO shows that by improving the effectiveness of machine learning algorithms, production processes can be increased by 20%.

3. Forecasting: AI, as an analytical tool, is used to predict future trends, forecast sales, and analyze risks in various industrial sectors. For example, in the banking system of Uzbekistan, the identification of credit risks with the help of artificial intelligence increased by 30% in 2023.

4. Automation: The role of artificial intelligence in automation is significant. In the digital economy, AI technologies are helping businesses and organizations automate their processing and production processes. According to data from an analytics company in the United States, as a result of automation, the delivery of digital services has accelerated by 50%.

5. Robotics: Robots equipped with AI can optimize production processes and solve problems that could burden human workers.

According to data published by the China Economic Development Research Center, by 2022, labor productivity had increased by 30% due to the use of robots.

As the volume of analytical tasks for artificial intelligence in the digital economy increases, it is contributing to the emergence of new technological tools. Many countries around the world are investing significant funds into AI research to develop the digital economy. For example, in 2023, the European Union allocated over 10 billion euros for artificial intelligence research. Overall, in the digital economy, artificial intelligence is providing a solid foundation for deeper analysis, better decision-making processes, and innovative developments.

By applying these technologies, businesses and organizations will have the opportunity to not only drive current economic growth but also implement long-term digital transformation.

In Uzbekistan, artificial intelligence and technological transformation are among the rapidly developing fields in recent years. Changes in these sectors are having a significant impact on the country's economic and social development. Below, we will provide information about the important changes and figures being implemented in this area.

The government of Uzbekistan, in the “Concept for the Development of the Digital Economy of the Republic of Uzbekistan for 2020-2030” presented in 2019, is placing significant emphasis on artificial intelligence and technological transformation. This plan aims to improve the country's digital infrastructure, expand the e-government system, and apply artificial intelligence technologies across various sectors of the economy.

In 2020, several events specializing in artificial intelligence data were held in Uzbekistan with government support. For example, at the beginning of 2020, the first Artificial Intelligence Summit was organized in Tashkent. Agreements were signed to enhance the qualifications of personnel in the field of artificial intelligence.

In recent years, artificial intelligence (AI) technologies have been actively developing in Uzbekistan, and there is a strong push to integrate them into various sectors of the economy. In October 2024, the 'Strategy for the Development of Artificial Intelligence Technologies until 2030,' which includes the following key objectives, was approved:

“ZAMONAVIY DUNYODA SUN’IY IDROKNING RIVOJLANISHI: YANGI DAVR MUAMMOLARI VA YANGI YECHIMLAR JURNALI”

30-Sentyabr, 2026-yil

The volume of software products and services created based on AI is 1.5 billion.

- Increase the share of services provided using artificial intelligence on the Unified Interactive State Services Portal (my.gov.uz) by 10%.

- Establish 10 scientific laboratories engaged in AI research and development.

- The country's inclusion in the top 50 in the government's AI readiness index.

To achieve these goals, it is planned to create a 'big data' database by September 2025 and launch computing power for data processing by May 2026.

In August 2024, the establishment of an Artificial Intelligence Technologies Center was announced to support the development of AI in sectors such as healthcare, agriculture, banking, taxation, and customs. Special attention is being given to training specialists in the AI field: currently, training is being conducted at four universities in the country, but the demand for qualified professionals continues to grow.

Thus, significant steps are being taken to integrate artificial intelligence into Uzbekistan's economy, opening up prospects for increasing efficiency across various sectors and improving the quality of services provided.

In addition, several technoparks and information technology clusters have been established in Uzbekistan. For example, the IT Park in Tashkent covers an area of 100 hectares and is home to more than a thousand innovative companies. These clusters are working on the development and implementation of artificial intelligence and technological solutions. In 2022, the total revenue of IT parks exceeded 50 million USD, indicating positive growth in the sector.

The rapid development of artificial intelligence technologies in Uzbekistan is significantly contributing to the advancement of the digital economy. These technologies are being widely utilized across various sectors, from agriculture and healthcare to telecommunications and IT.

Technological transformation processes are being successfully implemented through collaboration between the public and private sectors. In the future, artificial intelligence is expected to play an even more significant role in the digital economy.

LIST OF REFERENCES:

1. President of the Republic of Uzbekistan. (2020). 'Digital Uzbekistan – 2030' Strategy.
2. "State Statistics Committee of the Republic of Uzbekistan. (2020). Data on Economic Indicators."
3. "World Economic Forum. (2023). Analysis of the Global Economy of Artificial Intelligence."
4. Ministry of IT Development. (2022). IT Export Indicators in Uzbekistan.
5. UNESCO. (2023). Machine Learning and the Effectiveness of Analytical Tools.
6. China Economic Research Center. (2022). Robotics and Economic Efficiency.
7. European Union. (2023). Funds Allocated for Artificial Intelligence Research.
8. CB Insights. (2023). Development of Fintech and Digital Services.