

## METHODS FOR SOLVING ECONOMIC PROBLEMS USING ARTIFICIAL INTELLIGENCE

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ABSTRACT	KEYWORDS
<p>This article analyzes methods for solving economic problems using artificial intelligence technologies. In particular, important areas such as economic forecasting, reducing production costs, risk management in the banking and financial system, determining market demand, and analyzing the labor market are highlighted. The article describes in a scientific manner the role of artificial intelligence in the modern economy, its practical significance, and its role in increasing economic efficiency.</p>	<p>Artificial intelligence, economics, economic forecasting, market analysis, banking system, digital economy, labor market.</p>

### Introduction

**Annotatsiya.** Ushbu maqolada sun'iy intellekt texnologiyalaridan foydalanib iqtisodiy masalalarni hal etish usullari tahlil qilingan. Iqtisodiy prognozlash, ishlab chiqarish xarajatlarini kamaytirish, bank va moliya tizimida risklarni boshqarish, bozor talabini aniqlash hamda mehnat bozorini tahlil qilish kabi muhim yo'nalishlar yoritib berilgan. Maqolada sun'iy intellektning zamonaviy iqtisodiyotdagi o'rni, uning amaliy ahamiyati hamda iqtisodiy samaradorlikni oshirishdagi roli ilmiy uslubda bayon etilgan.

**Kalit so'zlar.** sun'iy intellekt, iqtisodiyot, iqtisodiy prognozlash, bozor tahlili, bank tizimi, raqamli iqtisodiyot, mehnat bozori.

## Аннотация

В данной статье анализируются методы решения экономических задач с использованием технологий искусственного интеллекта. В частности, освещаются такие важные области, как экономическое прогнозирование, снижение производственных издержек, управление рисками в банковской и финансовой системе, определение рыночного спроса и анализ рынка труда. В статье в научной форме описывается роль искусственного интеллекта в современной экономике, его практическое значение и роль в повышении экономической эффективности.

**Ключевые слова.** искусственный интеллект, экономика, экономическое прогнозирование, анализ рынка, банковская система, цифровая экономика, рынок труда.

Artificial intelligence is the ability of computer systems to think, learn, and solve problems like humans. With the help of artificial intelligence, computers quickly analyze large amounts of data and produce the most accurate results. In the field of economics, there is a lot of data. For example, it is necessary to constantly analyze a lot of data, such as prices, market conditions, product sales, bank transactions, profit and loss indicators. If a person does this manually, it will take a lot of time. But artificial intelligence does this work very quickly and accurately.

Currently, artificial intelligence (AI) technologies are widely used in almost all areas of the economy. It allows you to quickly and accurately analyze large amounts of data, make forecasts, and make effective decisions. Below are the most important methods for solving economic problems using artificial intelligence.

1. Data analysis and economic forecasting The main cause of economic problems is often incorrect forecasts or insufficiently analyzed data. Artificial intelligence can process millions of pieces of data in a matter of seconds. For example, AI can: predict inflation rates, determine price changes, and estimate economic growth rates in advance. As a result, governments or companies act according to a clear plan and economic losses are reduced.
2. Reducing costs and increasing efficiency Artificial intelligence is very useful in identifying excess costs in enterprises. It analyzes the production process and shows where resources are being used inefficiently. For example, it identifies problems such as excessive consumption of electricity, unnecessary production stages, and improper use of labor. As a result, production becomes cheaper and profits increase.
3. Risk management in the banking and financial sector A large part of economic problems are related to financial errors. Artificial intelligence helps banks and financial institutions reduce risk when granting loans. AI analyzes the following: the client's income, payment history, and the likelihood of repaying the loan. This allows banks to select reliable customers and reduce economic losses.
4. Determining market demand Many companies produce products, but cannot correctly determine market demand. As a result, there is an excess of products or a shortage of products. Artificial intelligence: analyzes customer behavior, Internet searches, sales statistics, and clearly shows which products are in greater demand. This ensures economic stability.
5. Job planning and labor market analysis Artificial intelligence also helps solve problems in the labor market. It determines in which areas there is a shortage of labor or which professions are in increasing demand. For example, AI can: predict which professions will develop in the future, which professions

will decrease in demand, and where new jobs will appear. This has a positive impact on economic development.

6. Improving state economic policy Artificial intelligence also helps the government make economic decisions. It analyzes taxes, budget expenditures, and social assistance programs and recommends the most effective option. As a result: budget funds are distributed more efficiently, the risk of economic crises is reduced, and the standard of living of the population is improved.

Economic inequality: Along with the contribution of artificial intelligence to economic growth, it can also increase economic inequality. In developed countries, artificial intelligence is being adopted faster, which helps to increase income. Developing countries may benefit less from artificial intelligence due to a lack of technological infrastructure and a skilled workforce.

As a result, the gap between developed and developing countries in the use of artificial intelligence may widen further. Along with the contribution of artificial intelligence to economic growth, it can also increase economic inequality. In developed countries, artificial intelligence is being adopted faster, which helps to increase income. Developing countries may benefit less from artificial intelligence due to a lack of technological infrastructure and a skilled workforce.

As a result, the gap between developed and developing countries in the use of AI could widen. Especially in high-wage sectors, the development of AI technologies could further increase opportunities for highly skilled workers, while increasing the risk of job loss for low-wage workers. This could exacerbate internal economic inequality, as the incomes of workers with AI skills grow faster and leave others behind.

Investments in AI and future trends In recent years, investments in AI technologies have not only continued, but also intensified. In particular, interest in AI solutions has increased in the financial services, retail, manufacturing and healthcare sectors. These technologies are used to automate processes, reduce costs and increase overall revenues. However, the implementation of AI requires sufficient technological infrastructure, a skilled workforce and government-supported policies.

Artificial intelligence is a very powerful tool for solving economic problems. It quickly analyzes data, provides accurate forecasts, reduces costs and helps make effective decisions. In the future, artificial intelligence may become the most important part of the economy. In short, artificial intelligence technologies are becoming one of the most important components of the modern economy.

It allows you to quickly and accurately analyze large amounts of data and serves as an effective tool for solving economic problems. In particular, the use of artificial intelligence in economic forecasting, cost reduction, production efficiency improvement, risk management in the banking and financial system, and market demand identification is yielding significant results.

Artificial intelligence is also of great importance not only in the activities of enterprises, but also in improving state economic policy. The use of artificial intelligence technologies in the correct allocation of budget funds, planning economic growth, creating new jobs, and anticipating changes in the labor market will ensure economic stability. In the future, as a result of the further development of artificial intelligence technologies, automation processes will increase in all sectors of the economy, economic decisions will be made more accurately and quickly, and economic efficiency will increase. Therefore, the effective use of artificial intelligence is one of the important directions of the modern economy.

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