

## **THE ROLE AND APPLICATION OF ARTIFICIAL INTELLIGENCE IN FINANCE**

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### **ABSTRACT**

*The article explores and discusses topical issues of the role of artificial intelligence in the financial sector and how artificial intelligence has contributed to several essential tasks in recent years. The development of market relations in the country has set a new task for the state - reforming information technology's general methodological and organizational foundations. Economic management improvement is inextricably linked with the increasing role of scientific-level artificial intelligence.*

**KEYWORDS:** *Information Technology, Reform, The Role Of Artificial Intelligence, Individual Solutions.*

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### **INTRODUCTION**

The 21st century is the century of information technology, and as we know, all information of national economic significance is ultimately processed and analyzed with the help of intelligence.

The development of market relations in the country has set a new task for the state - reforming information technology's general methodological and organizational foundations. Economic management improvement is inextricably linked with the increasing role of scientific-level artificial intelligence.

Artificial intelligence is the ability of a digital computer algorithm to perform specific tasks usually associated with intelligent beings' lives. In other words, artificial intelligence (AI) is an approximate representation of the work of neural connections in the human brain, identified with complexes of such technologies and processes as deep machine learning and the use of virtual reality algorithms.

High competition and declining profit margins force financial institutions to look for new ways to increase efficiency. One of the leading magic wands is artificial intelligence (AI), which gives some more than a two-fold acceleration in the average annual growth rate (CAGR) and others an additional profit center in the billions of dollars.

Artificial intelligence and its ability to cope with several vital tasks have become especially relevant in recent years. The impact on developing countries will be more modest due to the projected slow adoption of artificial intelligence technologies.

The three areas with the most significant potential for AI are:

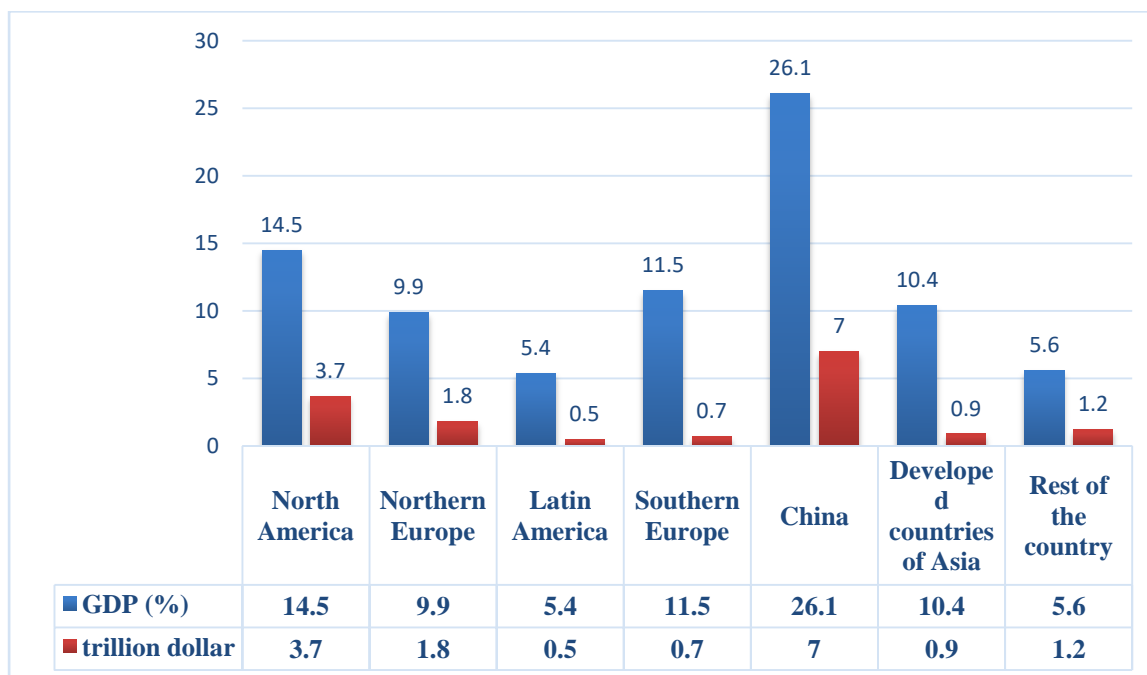
- Personal finance planning
- Fraud detection and anti-money laundering
- Automation of processes - not only back-office functions but also operations with clients.

Getting more personalized and holistic solutions that make consumers' money work harder (for example, turn savings into investments) and adapt to customer needs.

In this way, enterprises will be able to develop customized solutions without waiting for customers to choose the most suitable option from the available options.

**MATERIALS AND METHODS**

A typical example of AI is credit scoring, which reduces losses for the most significant US auto loan market players by 23-25% more accurately assessing the risk of a borrower. In turn, one of the largest banks in the world uses artificial intelligence to recruit staff, benefiting from a more accurate selection of the optimal candidate.



**Fig. 1. Countries that have benefited the most from artificial intelligence? (forecast until 2030)**

The leader in terms of dynamics will be the segment of solutions in knowledge management. We are talking about systematic processes for companies' creation, collection, accumulation, preservation, distribution, and application of knowledge. Such assets may include databases, documents, policies, procedures, and the learning and experience of individual employees that have not previously been recorded.

Modern China combines the culture and traditions of one of the most ancient civilizations on the planet and the latest technological developments in all areas of life.

Large Chinese companies such as Tencent and Alibaba are rapidly adding AI capabilities to their cloud offerings and selling their services to the rest of the world.

In total, about 1011 companies are working in artificial intelligence development in China, which is 20.53% of the global volume.

In our country, a Decree of the President of February 17, 2021, "On measures to create conditions for the accelerated introduction of artificial intelligence technologies," was adopted.

The document approved the Program of measures for the study and implementation of these technologies in 2021–2022, the main directions of which are:

- Development of the Strategy for the Development of Artificial Intelligence (from now on referred to as AI);
- Development of a legal framework;
- Widespread use of AI technologies;
- Creation of a domestic ecosystem of innovative developments in the field of AI;
- Creating conditions for software developers using AI technologies in access to digital data;
- Formation of investment attractiveness of scientific works and developments in the field of AI;
- Ensuring access of domestic enterprises and specialists to information resources and competencies in the field of AI;
- Development of international cooperation in AI and technologies for its application.

Starting from the 2021/2022 academic year, leading foreign experts and scientists will be attracted to each higher educational institution determined by the decree to participate in training in the field of AI and technologies for its application. Also, from 2021, an annual targeted allocation of a quota of 5 people is provided for training in basic doctoral studies and trainee researchers in this field. We believe that the above is a very good opportunity for students from the side of the head of state and will give a more effective result.

Uzbekistan is introducing a special regime for using artificial intelligence (AI) technologies in the framework of experimental and innovative research. This is stated in the decree of President Shavkat Mirziyoyev dated August 26. The document aims to "Create a favorable and optimal ecosystem for the development of innovative business models, products, and methods of providing services based on AI technologies, their implementation, and application in practice."

The special regime implies the creation of the necessary organizational and legal conditions for legal entities and scientific organizations that carry out activities within its framework related to the conduct of experimental work based on AI technologies, the development of software products, and the provision of services (pilot projects), the condition of privileges in legal relations, arising in the process of testing and implementing software products into practice.

The special regime will be a separate element of the Technological Park of Software Products and Information Technologies (IT-Park), the participants of which are residents of the IT-Park and operate on the principle of extraterritoriality.

Today, there is a shortage of highly qualified specialists in many industries. In addition, the implementation of AI programs requires a high level of digital skills in almost all employees of companies. One of the tools for staff development can be internships and exchange of experience with foreign companies that are already successfully implementing similar

programs.

In the long term, several macroeconomic and infrastructural factors stimulate or constrain the development of the information technology market, including:

- Weak diversification of the economy of Uzbekistan;
- Inefficiency of large state projects, weak interaction of authorities at various levels, resulting in an increase in the cost of IT projects, violation of the deadlines for their implementation;
- Growth of inflation rate and prices for imported products adversely affect the rate of development of the IT market.

Obviously, in such difficult economic and geopolitical conditions, the state is trying to develop and apply an adapted policy in the field of information technology market development.

## **CONCLUSION**

The professional community, both scientific and industrial, is beginning to raise questions related to the safety of the use of artificial intelligence, the ethics of its use, and the economic consequences associated with artificial intelligence. For example, what to do so that automation of work with the help of AI does not lead to job cuts? How to fix the fact that algorithm can be biased? Artificial intelligence must be objective and fair in making a decision controlled by a person. For example, when deciding on issuing a loan, AI should not rely on the characteristics of a person's gender, race, and nationality.

Based on the above factors that negatively affect the economic situation of the IT market, it is necessary to identify critical areas for the development of the industry, including:

- 1) Stimulation of scientific research in the field of IT;
- 2) Formation of a sufficient scientific base in the most promising technological areas on a global scale;
- 3) Support for small businesses in the field of IT;
- 4) Development of IT exports;
- 5) Expand the use of IT in the domestic economy.

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