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MUNDARIJA:

PROSPECTS OF IMPLEMENTATION OF "ARTIFICIAL INTELLECT" IN UZBEKISTAN

Boboqulov Abror Abdug'ani o'g'li,
PhD student at the Department of Social Humanities

Аннотация

This article describes the prospects for the introduction of «artificial intelligence» in the Republic of Uzbekistan and its importance.

Калит сўзлар

Artificial intelligence, digital technologies, virtual reception, online consultant, local network.

In the last 20 years, science has developed rapidly and rapidly among the countries of the world, and high technical and technological «armament» based on artificial intelligence is increasing. Research and analytical data show that information technology and artificial intelligence will be the main «fuel» of global economic growth and the main part of the world's gross domestic product in the coming years. Humanity will find positive solutions to the global problems of the 21st century, opening up new opportunities in science with the help of artificial intelligence, as well as the possibility of providing quality services in medicine, education, energy, agriculture, urban planning and in all other areas of life[1].

Today, the whole community is studying ways to implement artificial intelligence. Because technologies based on artificial intelligence systems have become an integral part of life and have entered all aspects of human activity. These technologies are opening up new opportunities for both ordinary users and countries. Application of artificial intelligence systems based on an optimal and autonomous management system in industry reduces the demand for labor force and creates a new work activity and a new profession.

Artificial intelligence (AI) is the core of the new generation of digital technologies and the basis of digital transformation in almost all sectors of the economy. Solutions based on artificial intelligence allow you to automate routine tasks, develop new work formats, introduce innovative business models and explore new market areas.[2].

In addition, AI opens up new opportunities that did not exist before. Of course, now artificial intelligence is one of the most popular fields, because the modern world and the modern economy are increasingly based on data, the amount of which is constantly growing every day. It is data that is the basis, the «feeder» for AI. Today, our world has entered the process of digital transformation, and it has affected absolutely all sectors of the economy, many large companies are currently carrying out large-scale digitization and transformation of their production. [3].

The impact of artificial intelligence (AI) in government administration and all sectors of government is vast and significant. AI technologies affect state organizations, management, and public organizations, as well as private sectors, increasing their efficiency, as well as providing transparency in the field of activity, increasing objectivity in terms of safety and responsibility, and reducing the factor of human intervention. The government is considered a tool that provides state management, determines common interests in domestic and foreign policy, and regulates and ensures general activities and relations in the state and society.

As we know, according to the field of activity, sectors have their own interests and interests. As the public sector and the private sector interact, they influence each other and develop. Sometimes the state lags behind society in terms of management and strategy, or society may not be ready for new optimal changes. At these points, sometimes there may be a conflict of interests. In order to prevent such conflicts of interests, governments always try to compromise and harmonize the interests of the society and the state, to generalize and stabilize the interests of the public and private sectors.

The urgent importance of applying artificial intelligence to the social life of our country, as well as the active use of artificial intelligence technologies in all fields, can be seen in the decision of the President of the Republic of Uzbekistan No. PQ-4996 dated 02.17.2021. This decision is considered significant as it covers all sectors and is implemented in various branches of the sector. In accordance with the Strategy «Digital Uzbekistan - 2030» and the rapid introduction of artificial intelligence technologies and their widespread use in our country, providing access to digital data and their high quality, favorable conditions for training qualified personnel in this field. In order

to create conditions, a system covering several fields has been formed [4].

Also, the introduction of artificial intelligence into today's promising fields is set as the main task, for example: in agriculture, banking, finance, taxation, energy, healthcare, pharmaceuticals, e-government and others.

In recent years, thanks to artificial intelligence and information technologies, state services in taking into account the interests of citizens and studying them, as well as in the development of sectors, have improved and are still developing today. The only «President's Virtual Reception» as well as «The only interactive public services portal» are examples of this. Within the framework of this program, there was an opportunity to consider the problems of the population, as well as the problems of sectors that need to be reformed or are not put into good systematic operation.

Also, within the framework of the software system of the President's virtual reseption, the «Online consultant» module was launched in test mode. This module works in harmony with the «Frequently Asked Questions» section of the portal.

Experts note that electronic government services are actively developing and state bodies strive for transparency. One of the main innovations of the President is the launch of a virtual lobby, where all citizens of our country can address their problems and suggestions. The establishment of such an institute in Uzbekistan was a real revolution and achievement. Virtual receptions allow direct communication with residents, quick response and on-the-spot troubleshooting. From 2017 to 2020, more than 10 million calls were made through them [5].

Applicants can visit the website of the President's virtual reception - pm.gov.uz and contact specialists of the required field and industry through the «Online consultant» module and get answers to their questions. In this case, the questions received through the «Online consultant» module of the pm.gov.uz site will be directed to the consultants of the relevant organizations and offices. Working groups may be formed in state and economic management bodies, taking into account the size of the consulting service provided and the demand (workload) of those applying for it. One of the members of the working group is appointed as a consultant-coordinator. The working group may not consist only of consultants. At the moment, highly qualified, professional specialists from state and economic management bodies, local governments - a total of 94 organizations and agencies are being brought together in this module.[6]

These and similar software systems and platforms serve as the basis for the formation of digital government, digital society and digital citizenship.

The use of artificial intelligence structures within the government includes the introduction of information technologies and digital systems in all areas of state management. The use of artificial intelligence and virtual platforms in public administration, together with traditional management methods, has a high efficiency in studying and introducing solutions to problems, controlling appeals.

In studying the problems of the population, the structures of artificial intelligence are considered as total evaluators. That is, the classification of problems, the continental-territorial division of problems, the optimal solution of problems allow the analysis of procedures. Also, creating a general diagram of society's indicators on the common platform of artificial intelligence can serve as a general assessment of the activities carried out in each area.

For example, the indicator of local management, education, healthcare, culture, sports, ecology, judicial system, transport and logistics organizations in the diagram shows the development or backwardness of these areas. Also, the platform may have the possibility of systematic analysis of common, similar and different indicators in the regions.

We can say that today's organized and developing e-government in our country unites the state and society, allows for cooperation and interaction. These means of communication organized by the government open up great opportunities for the development of private entrepreneurship and the improvement of the quality of public services to the population of our country, as well as for ensuring more open cooperation between the government and citizens. These systems reduce the subjective factors in the relationship between the state and the citizen, and reduce the existing obstacles for citizens to participate and participate in political processes. Electronic government is considered a means of involving citizens in political processes and renouncing some bureaucratic principles.

The introduction of artificial intelligence to the virtual reception or other social networks that study the problems of the population can raise political and social reform to a higher and optimal level. Because when the human factor is reduced and objectivity is ensured, it becomes possible to evaluate the situation and solve it objectively. It is also possible to build a coherent chain of

continental problems, determine the percentage of problems in this chain and see their influence on each other.

Informatization of political and social processes does not necessarily rely on autonomous, constative systems. Because here, the software system based on artificial intelligence initially functions as a means of determining social opinion. As we know, social opinions and interests are reflected in the continental network. Using the calculation algorithm of artificial intelligence, it is possible to determine the interests and problems of the population, give them a quality in the percentage indicator and propose the actual calculations for the government. Also, in the process of continuous monitoring, it is possible to analyze the growth of interests and problems and determine the impact of decisions made by the government through optimal functions. Monitoring is carried out by combining general results, i.e. digital indicators of problems in the applications received on the government portal and data from the networks that make up the majority of the population of users, analytical digital indicators of problems are combined and common and urgent problems are determined and sent to the government for analysis and resolution of the problem. This portal, which relies on artificial intelligence and explores current issues through optimal functions, acts as a bridge between the government and the population. This «portal» is such a «bridge» that it has more power than a single citizen, that is, relying on artificial intelligence, this portal with optimal functionality has more power than a single citizen's appeal, that is, an appeal to the government with a total problem. and the importance of the inevitability of the discussion and resolution of this problem differs from the rest. The effectiveness of artificial intelligence in solving problems in the government itself is high, but the human factor should not be denied either. Because problems that are not included in the algorithm in advance are determined only by the human factor, and in decision-making and improvement, a person has high results with the process of self-organization in the brain. The advantage of artificial intelligence in decision-making is that its algorithm is built on logic, so it does not make illogical decisions. The decision made by the right artificial intelligence may be inefficient or useless, but in the least and most likely they will not be irrational. Also, artificial intelligence, which has higher speed and memory compared to humans, has some advantages over humans in terms of the number of probabilities it takes into account when solving problems, and it is considered free of subjective thinking and subjective factors in decision-making. This is important due to the factors of neutrality, lack of localism, not taking into account the interests of one group.

The creation of a single artificial intelligence platform at the country level will serve as the first step in the comprehensive formation of this field. The organization of this platform based on the following criteria can affect the rapid development of artificial intelligence at the national level:

Initially, the creation of a national base of artificial intelligence development serves as the main foundation. This can be done by creating a common base of results obtained from competitions, Olympiads, software aimed at solving a specific problem, and scientific works.

Development of a mechanism for introduction of artificial intelligence systems to all fields; This can be done by learning the principles of autonomous operation of various fields of activity and programming these principles. Also, in order to effectively master the processes of studying, experimenting and researching the fields, organizing a virtual laboratory in production, industry, various branches of science, developing a virtual prototype of the object of study, as well as forming an algorithmic model for the mechanism of introducing artificial intelligence into the fields. and effective for implementation.

Using international experiences to develop the national base of artificial intelligence; This can be done not by direct transfer, but by first studying its working mechanism and organizing it in order to optimize it in the future.

To study ethical, social and philosophical aspects in the introduction of artificial intelligence systems; This criterion covers the issues of compatibility of artificial intelligence systems introduced in a field with ethical principles, its service for the well-being of society, and the fact that it does not cause dangerous factors.

Ensuring the openness and security of the artificial intelligence development base, as well as the information of the artificial intelligence systems introduced in the republic;

Organization of digital technologies and automatic control classes in schools and universities in order to teach the society about new technologies, as well as study the effects and possibilities of artificial intelligence technologies; unlike computer science, this field covers and forms the categories of digital management, digital culture and digital citizenship.

All this is the initial stage of the development of artificial intelligence, and at the next stage, its development will be carried out in cooperation between the state and citizens.

At the same time, it should be noted that there are many obstacles to the development of the local artificial intelligence market. These are primarily lack of financial resources, high cost of AI solutions, insufficient digital maturity of current processes, low level of automation, lack of AI competencies and low digital literacy of employees. In our opinion, eliminating these obstacles is the most important task of state bodies, and it is necessary to conduct a systematic state policy to stimulate the demand for artificial intelligence technologies in all sectors of the economy. At the same time, it is important to create the necessary incentives, provide significant financial support and create a regulatory environment for the development and implementation of AI solutions[7].

The introduction of artificial intelligence systems to management, various fields of activity and development should not be understood as the automation of all processes or their transfer to an electronic autonomous management system. Let's see this in the following examples:

Algorithmic procedures programmed in devices serve as optimal decision-making in management, objective control system, transparent statistics, convenient virtual communication;

In production, it performs the function of effective use of resources, total control of workers, organization of a convenient and optimal logistics system, modeling of the process that changes and expands as production processes develop;

During the training and education process, he performs the tasks of carrying out various practices, organizing an effective educational system, conducting experiments in simulations of real processes. Also, the effective use of artificial intelligence technologies in higher education allows choosing the most optimal educational strategy adapted to the individual abilities and needs of students and the needs of the labor market. [8]

Today, artificial intelligence technologies are the main development area of the country's economy, and they are also considered as the manager of development.

In October 2021, an international conference on «Uzbekistan: rapid reforms in five years» was held in Tashkent. The results of the implementation of the «Strategy of Actions» were presented to the public of our country and foreign participants. Members of the government, heads of ministries and departments gave reports on them, experts gave their recommendations on developing measures for further reform of our country. This forum actually summarized the results of the first five years of Shavkat Mirziyoyev's presidency. Having led Uzbekistan in 2016, he resolutely implemented changes in all aspects of society, from the reorganization of the economy and the state to the social sphere. Today, we can confidently say that the ongoing reforms have brought the country to a new stage. As mentioned above, the activity in all fields has reached a new level. Along with the government, the people's activity has increased in political and social processes. Through the presidential portal and virtual receptions, along with the state, the population of our country is entering the process of digital transformation. It is on the digital platform of the information flow that the interaction of the people and the government and the integrative activities of the legislation are becoming integrated. This means that it is not a one-sided, but a cooperative and multidisciplinary approach to problems.

There is no doubt that artificial intelligence has a promising future, but it should not be forgotten that technology and progress do not stand at the same time, and in order to keep up with the times, it is necessary to acquire new professions and expand the scope of knowledge. A good base is needed for artificial intelligence to develop both from the point of view of technology and from the point of view of the human factor: from the state support for start-up programs that stimulate development, from universities: the most in-demand specialties and knowledge are needed. To achieve maximum effect, it is necessary to do double work.[9]

Taking into account the inevitability of the introduction of artificial intelligence structures into human activity and becoming the main direction, and the fact that today they are acting as an economic and social driver in the whole world, we encourage today's society, especially young people, to work with artificial intelligence technologies, as well as to produce these technologies. Organization of artificial intelligence centers in the regions and regions of our country for promotion and development of a road map for the development of artificial intelligence will serve as a key factor for the development of this field. This road map is designed for the existing industry in each region, covers the prospective directions of the regional economy, and is drawn up based on the existing needs and requirements. Centers of artificial intelligence study the types of industry and production in the region, and also perform the task of determining optimization processes in this field. This allows to learn the optimal possibilities in terms of production quality, accuracy and, most importantly, speed and time. In this center, important aspects of automation and the human factor in the production industry are studied in order to achieve high efficiency. In addition,

in order to create highly qualified personnel in the processes related to the human factor and activity, to combine theory and practice, as well as to increase the experience of specialists who have just entered the field, virtual simulators that simulate the production process will be organized in the center. This is considered an effective tool for testing new employees, as well as for personnel studying this type of industry at a higher educational institution.

It can be seen that the impact of artificial intelligence systems on the human activity process does not reduce the human factor in industry, production or other fields and causes unemployment, but rather imposes the work process that is difficult for humans on robots with autonomous control systems, and for humans allows to organize new professions and new types of activity. A new type of activity may be related to the improvement of human activity, thinking about the task specific to a person and applying it to life.

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РАҚАМЛИ ТЕХНОЛОГИЯЛАР ВА САНОАТЛАШТИРИШ – МИНТАҚА САНОАТ ИШЛАБ ЧИҚАРИШИНИ РИВОЖЛАНТИРИШ МЕХАНИЗМИ СИФАТИДА

Абдуллаев Ҳабибулло Асадулла ўғли,

Тошкент давлат иқтисодиёт университети таянч докторанти

Аннотация

Ушбу мақолада саноатда рақамли технологиялар ҳам саноатлаштириш жараёнининг натижаси, ҳам унинг асосий ҳаракатлантирувчи кучларидан бири экани таҳлил қилинган. Хусусан, саноатда технологик тараққиётнинг жадал суръатларини ҳисобга олган ҳолда нафақат янги бошланаётган технологик ютуқларни аниқлаш, балки саноатлаштириш жараёнига қисқа ва узоқ муддатли оқибатларини таҳлил қилиш кўрсатилган.

Калит сўзлар

Минтақада саноатлашув, саноатда рақамли технологиялар, янги технологияларни жорий етиш, қўшимча қиймат яратиш, ишлаб чикариш саноати, саноат корхоналари, ишлаб чиқаришни технологик янгилаш.

Кириш. Саноат технологиялари ҳам саноатлаштириш жараёнининг натижаси, ҳам унинг асосий ҳаракатлантирувчи кучларидан биридир. Янги технологияларни жорий

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Muharrir:
Yaxshiyev H.T.
Musahhih:
Matxoʻjayev A.O.
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Kamilova D.D.

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RAQAMLI IQTISODIYOT VA AXBOROT TEXNOLOGIYALARI KAFEDRASI
RIAT

+998 71 239-28-94 http://dgeconomy.tsue.uz/
dgeconomy_tdiu@mail.ru, dgeconomy@tsue.uz
100066, Toshkent shahri, Islom Karimov ko'chasi, 49-uy.