CONTENT AND CONCEPTUAL BASIS OF ARTIFICIAL INTELLIGENCE TECHNOLOGIES

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Abstract: This article examines the essence and conceptual foundations of artificial intelligence technologies, general concepts of the technologies created on the basis of them, their working principles and social significance.

Keywords: intelligence, artificial intelligence, weak artificial intelligence, strong artificial intelligence, superintelligence, social content.

INTRODUCTION

Today, artificial intelligence and technologies based on it are widely used. These technologies can be used in several fields, including medicine, education, tourism, law, commerce, and others. This article provides a general understanding of artificial intelligence and the technologies based on it, the principles of their operation, and the recognition of them in the future.

According to research, "intellect is derived from the Latin word "intellestus", which usually means "intelligence", "understanding", "comprehension", "comprehension" [3]. This quality is determined by the high manifestation of this quality in a person, intelligence, understanding, consciousness. According to another meaning, "the word that distinguishes man from other creatures and defines his obligation is called ``intelligence''[4]. So, intellectuality and creativity are the level that shows a person's intellectual ability, a simple way of thinking, and a worldview.

MATERIALS AND METODS

In the National Encyclopedia of Uzbekistan, the word "intellect (lat. intellects - knowledge, understanding, perception) is the mental ability of a person, the ability to accurately reflect and change life and environment in the mind, to think, read and learn, to know the world and to accept social experience; it is noted that it means the ability to solve various issues, to come to a decision, to act rationally, to foresee events. Intellect includes perception, memory, thinking, concepts. The development of intelligence depends on social factors such as innate talent, brain capacity, active activity, and life experience. Manifestation of intelligence "is determined by the results of human activity, as well as psychological tests" [8]. The results of a person's intellectual ability are expressed by the term intellectual property. Therefore, intellectual-creativity can be called intellectual ability, knowledge, critical thinking, scientific knowledge of the world and the ability to accept social experience, individual solution of various issues, rational behavior, and a high level of ability to foresee events.

First of all, "Aql is an Arabic word that means having the ability to think at a high level" [9]. In Western literature, the word intelligence is used as an alternative to this concept. When the word "intellect" is translated into Uzbek, it means "intelligence, insight, intelligence; intellectual maturity",[10] - means. Intelligence is the activity of the human brain that controls

the reflection of the world and the individual's relationship to reality. "Mind allows to reflect the important legal relationships of objects and phenomena of the objective world and thus creatively change reality" [11]. Human thinking is a rare phenomenon of brain activity, which acquires socio-cultural importance as an important means of understanding the world and oneself.

RESULTS AND DISCUSSION

Intellect consists of a system of all cognitive (creative) abilities of an individual, such as intuition, perception, memory, imagination, thinking, imagination, and attention. The concept of intelligence, which represents general mental ability, summarizes the behavioral qualities associated with a person's adaptation to certain conditions. Thus, intelligence, on the one hand, is a general ability that provides knowledge and the effectiveness of any activity, and is the basis for others. On the other hand, it is an individual's system of cognition, which consists of intuition, perception, memory, imagination, thinking, imagination.

Intelligence is seen in all mental processes, primarily in thinking and creative imagination. It is more often seen in the independent solution of a new bright problem.

Due to the fact that intelligence is developed at different levels in different people, there are several qualities:

 intelligibility of the mind - simplicity and reliability of thoughts, the absence of some kind of thought. It is not only intellectual, but in some sense moral. For the intelligibility of the mind is usually to feel responsible not only for action, but also for thoughts;

 rationality of the mind is a strict continuity and systematicity in thinking;

 depth of mind or thoughtfulness - the ability to recognize uniqueness in objects and events;

 breadth of mind - the ability to think taking into account all aspects of the issue;

 softness and flexibility of the mind - lack of template, stereotyping, ability to change thinking;

 independence and originality. It is not a simple intellectual softness, but innovation is a creative feature of mental activity;

 the criticality of the mind is the absence of unexamined, simply received judgments, the existence of a deeply studied, analyzed, serious attitude to denials. All these individual characteristics of the human mind appear in the process of work, it is formed and developed[12].

Artificial intelligence is a set of programs designed to reproduce human skills. Artificial intelligence is an ability that helps in timely and complete tasks such as finding solutions to existing problems, planning, acquiring knowledge, working on oneself.

Broadly speaking, artificial intelligence is a branch of science that develops analytical systems capable of learning and solving complex problems. In a narrow sense, artificial intelligence is a computer training technology based on human thinking. In general, artificial intelligence is a collection of models and methods capable of drawing certain conclusions based on the received data.

The scientific research works of scientists of many foreign countries are devoted to the stages of development of artificial intelligence technologies and the problems of their implementation. Among them, Bostrom N., Luger D.F., Ross A. , Siegel E. , Schwab K.M. , Denning P.J. , Lewis T.J. , Nikolenko S. , Kadurin A. . and the work of other researchers can be included. In the researches of these authors, the development directions, strategies of

artificial intelligence technologies, ways and mechanisms of their future improvement are based. In Uzbekistan, problems of artificial intelligence, as well as models and methods of implementation of digital economy and information technologies have been implemented in a number of scientific works. Blockchain technologies and ways of using them were developed in the digital economy under the leadership of Academician of the Academy of Sciences of the Republic of Uzbekistan S.S. Gulomov.

Academicians of the Academy of Sciences of the Republic of Uzbekistan M.M.Komilov, T.F.Bekmurodov, Ph.D., prof. The researches of D.T. Mukhamedieva are based on promising technologies of artificial intelligence and models and algorithms of intellectualization of the management decision-making system, methods and directions of modeling of fuzzy information sets.

In the studies of Professor B.A. Begalov and I.E. Zhukovskaya, methods of using information and communication technologies in the effective organization of statistical activities were recommended.

Professor A. Abdugafarov's research covers the initial stages of digitalization of the economy and the specific features and implemented results in its current development directions.

The term "artificial intelligence" was first used by John McCarthy in 1956 at a seminar held at Dartmouth College, an American Ivy League university.

The first artificial intelligence program was developed in 1951 by British computer scientist Christopher Strachey. In 1952, this artificial intelligence program learned to play checkers with humans while predicting the moves of its partners. English mathematician and computer scientist Alan Turing even mentioned this system in an article on chess programming published at that time.

The next stage of development in the field of artificial intelligence corresponds to the mid-1990s. In particular, the IBM Deep Blue supercomputer, which managed to defeat the chess player Garry Kasparov in 1997, causes a lot of noise.

The introduction of artificial intelligence technologies into education dates back to the 1970s. Early attempts were made to automatically adjust learning for each student or to use artificial intelligence methods based on individualization rules. Since this period, the development of artificial intelligence technologies in education has continued in several directions in the form of student-oriented artificial intelligence, teacher-oriented artificial intelligence, and system-oriented artificial intelligence.

Scientists working in the field of artificial intelligence divide artificial intelligence technology into four main types:

1. Weak artificial intelligence - artificial intelligence that does not have the ability to accumulate experience and use the collected data. Weak artificial intelligence is designed to perform a specific task and cannot perform additional functions.

2. Artificial intelligence with limited memory is designed to remember pieces of information and analyze the current situation based on them. The accumulated experience is not stored in memory and is not integrated with other data.

3. Powerful artificial intelligence — powerful machines can understand the thinking and motivations of humans, communicate with humans, and even have social and emotional intelligence. Powerful artificial intelligence-like machines already exist. These include Apple's

Siri and Yandex's virtual assistant Alisa. These powerful artificial intelligence tools teach people how to communicate.

4. Superintelligence is the final stage in the development of artificial intelligence that surpasses humans in all aspects. The emergence of systems at such a level is possible when scientists fully study and model the working system of the human mind. Artificial intelligence technologies are associated with the global digitization of the economy, based on the automatic analysis of huge amounts of numerical data.

CONCLUSION

In conclusion, we note that artificial intelligence technologies successfully demonstrate themselves in conditions of better processing of quantitative data. At the same time, the analyzed information can be scattered and unclear. In this regard, artificial intelligence technology is currently being implemented everywhere. Farming is no exception. In this direction, the use of artificial intelligence technologies, as mentioned above, not only increases the volume and quality of farm products, but also allows agro-industrial complex enterprises to become leaders in their fields of activity. The results of the work are systematizing the existing knowledge of artificial intelligence technologies, which have proven to be successful methods of solving problems in the farm and agro-industry at different levels and will be actively spread in this direction in the next 5-7 years. Their development now allows the business entity to obtain priority competitive advantages and corresponding economic efficiency due to the innovation of the technologies considered in the research work.

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