



THE ROLE OF TECHNOLOGY AND TECHNOLOGIES IN HUMAN LIFE

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Abstract. The article discusses the history of technological development, its role in human life, how it has developed today, and what conveniences it has brought to people.

Keywords: Stone Age, Mesolithic period, technology, internal combustion engine, nanotechnologies, computer elements, robots.

There is constant work and progress in the field of technology. Because it brings great benefits. These benefits have a significant impact on our daily lives and the activities of many sectors, such as healthcare, automotive, communications, manufacturing, and business.

Technology has become an integral part of our daily lives. Everything we do correctly from the beginning to the end of our day involves some form of technology. One of the reasons why technology is at the center of attention for scientists and other specialists and stakeholders, regardless of the field, is that it adds convenience to our daily activities, while also saving time and improving the quality of life.

Looking back at history, it took many years for it to reach such an improved version, regardless of whether it was an item or thing we use in our daily lives today. These periods, in turn, are divided into the following groups.

Donolithic technique.

This period is called the Stone Age, since the most ancient technology was made of stone.

During the Mesolithic period, spears and bows appeared, allowing for the killing of birds and animals from a distance of 100-150 meters.

The emergence of civilizations was facilitated by agriculture, which arose during the Neolithic period. During this period, the invention of the wheel was of great importance.

In medieval technology, an iron plowshare for agriculture became widespread. Rice alloy has been mastered, window glass has been produced, and glass has been invented. Later, in turn, water mills and windmills began to be used.

Industrial Age Technology Period in the 18th Century Johann Beckmann (1939-1811)

Introduced the term "technology" into scientific use. It refers to the scientific discipline taught at the University of Germany from 1772.

The creation of an internal combustion engine at the end of the 19th century made it possible to significantly improve the technical characteristics of maritime railway transport. It led to the emergence of a car with a gasoline-powered engine.

At the beginning of the 20th century, the fields of radio engineering and radio electronics began to develop. At the end of the 20th century, research in the field of bio and nanotechnology began.

Nanotechnologies: Nanotechnologies are used to produce materials and devices based on nanodata and provide them with new functions. These technologies are widely used in various fields, from the automotive industry to medicine, from the energy industry to electronics.

Currently, robots are used to develop every industry. Examples of such robots include the following.

These include: robots in industry, robots in construction, robots in agriculture, robots in transport, robots in households, robots in the military, robots in security, robots in research, robots in medicine, and others. Such robots are widely used not only to ease human burdens but also to perform processes dangerous to humans.

At the beginning of the 20th and 21st centuries, dozens of new technologies based on the latest achievements of science appeared in the world. Based on these technical innovations, engineers are developing household and production systems that can be used to meet the growing needs of humanity. Modern and unusual technologies are already penetrating all spheres of life.

In today's era of globalization and digitalization, technology has deeply penetrated all spheres of human life. They not only improved production processes, but also have a strong influence on the socio-economic, cultural, and spiritual development of society. Modern society cannot be imagined without technology and techniques, since they are an important factor in meeting human needs, improving the quality of life, and accelerating progress.

Technology is a complex of tools, machines, and mechanisms created by man, used in production and service processes. Technology refers to the system of methods, knowledge, and practical actions used in the process of creating a particular product or service.

These two concepts are closely interconnected: technology is the material basis of technology, and technology is the effective operating mechanism of technology.

Modern technology has radically changed the social life of society. Information and communication technologies (ICT) have accelerated communication between people and reduced distances. Opportunities for exchanging information through the Internet, mobile communications, and social networks have expanded. As a result, openness, transparency, and efficiency have increased in society.

Significance in economic development - Technology is one of the main driving forces of economic growth. Automated production, artificial intelligence, robotics, and the digital economy have increased labor productivity and reduced product costs. At the same time, new professions and new forms of the labor market emerged. This process plays an important role in ensuring the competitiveness of the economy.

Role in education and science - Technologies have introduced innovative approaches to the education system. Distance learning, electronic textbooks, and online platforms have expanded educational opportunities. In the field of science, modern technology increases the accuracy and effectiveness of scientific research, allowing for the modeling and analysis of complex processes.

Significance in medicine and healthcare - In the field of medicine, techniques and technologies play an important role in prolonging human life and strengthening health. Modern diagnostic equipment, robotic surgery, telemedicine, and biotechnologies allow for the early detection and effective treatment of diseases.

Spiritual and Moral Aspects Along with the development of technology, spiritual and moral issues are becoming increasingly relevant. The rational use of technologies, information security, and the protection of personal data have become important tasks. Therefore, along with technological progress, the issue of preserving human values also requires special attention.

In Uzbekistan, the development of technology and engineering is defined as one of the priority areas of state policy. In recent years, a number of laws, Presidential decrees, and Government resolutions have been adopted aimed at the legal consolidation of this sphere.

In particular, the "Digital Uzbekistan - 2030" Strategy is an important program document aimed at the accelerated development of the digital economy, e-government, artificial intelligence, and information technologies in the country. Within the framework of this strategy, the introduction of modern technologies in public administration, education, healthcare, industry, and agriculture is envisaged.

A number of Presidential decrees were also adopted on the development of information and communication technologies, the expansion of electronic government services, and the support of startups and IT entrepreneurship. These documents became the basis for considering technology not only as a means of economic development, but also as an important factor that facilitates the daily life of citizens.

In the field of education, decisions are being made aimed at the development of digital education, legal regulation of the distance learning system, equipping educational institutions with modern technical means, which serve to increase the technological literacy of young people.

By adopting regulatory legal acts on the introduction of telemedicine, digital medical records, and modern diagnostic technologies in the field of medicine, the quality of medical services provided to the population has been significantly improved.

In addition, new legal mechanisms dedicated to the issues of artificial intelligence, cybersecurity, information security, and the protection of personal data have been developed, and measures aimed at preventing the negative consequences of technological progress have been defined.

Conclusion

Thus, the role of technology in human life is determined not only by scientific and technological progress, but also by a solid legal basis created by the state. The adopted laws and resolutions are aimed at making technologies serve the interests of society, making human life easier, and ensuring sustainable development. Therefore, along with technological progress, increasing legal awareness and responsibility is also of great importance.

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