



## **LAWS AND PROBLEMS OF THE DEVELOPMENT OF THE INFORMATION SOCIETY**

Xamidova Feruza Shamsiddinovna

Independent Researcher, Chirchik State Pedagogical University

### **Abstract**

This article examines the concept of the information society, the stages of its formation and development, and the main laws of its progress. It analyzes social, economic, and cultural changes driven by information and communication technologies. Particular attention is paid to the problems arising in the development of the information society, such as information inequality, cybersecurity, and personal data protection. The article is based on modern scientific sources and presents conclusions on the prospects of the information society.

**Keywords:** Information society, information technologies, development laws, cybersecurity, information inequality.

### **Introduction**

#### **AXBOROTLASHGAN JAMIYAT TARAQQIYOTINING QONUNIYATLARI VA MUAMMOLARI**

Xamidova Feruza Shamsiddinovna

Chirchiq davlat pedagogika universiteti tadqiqotchisi

### **Annotatsiya**

Ushbu maqolada axborotlashgan jamiyat tushunchasi, uning shakllanishi va rivojlanish bosqichlari, taraqqiyotining asosiy qonuniyatlari tahlil qilinadi. Axborot-kommunikatsiya texnologiyalari ta'sirida yuzaga kelayotgan ijtimoiy, iqtisodiy va madaniy o'zgarishlar yoritiladi. Shuningdek, axborotlashgan jamiyat rivojida vujudga kelayotgan muammolar, xususan, axborot notengligi, kiberxavfsizlik va shaxsiy ma'lumotlarni himoya qilish masalalari chuqur tahlil etiladi. Maqola zamonaviy ilmiy manbalar asosida tayyorlangan bo'lib, axborotlashgan jamiyat istiqbollari bo'yicha xulosalar berilgan.



**Kalit soʻzlar:** axborotlashgan jamiyat, axborot texnologiyalari, taraqqiyot qonuniyatlari, kiberxavfsizlik, axborot notengligi.

**Аннотация:**

В данной статье рассматриваются понятие информационного общества, этапы его формирования и развития, основные закономерности прогресса. Анализируются социальные, экономические и культурные изменения под воздействием информационно-коммуникационных технологий. Особое внимание уделено проблемам, возникающим в процессе развития информационного общества, таким как информационное неравенство, кибербезопасность и защита персональных данных. Статья подготовлена на основе современных научных источников и содержит выводы о перспективах информационного общества.

**Ключевый слова:** информационное общество, информационные технологии, закономерности развития, кибербезопасность, информационное неравенство.

**Introduction**

Since the beginning of the 21st century, the role of information and knowledge in all spheres of social development has increased dramatically. As a result of globalization processes and the rapid development of digital technologies, the term "information society" has become a central concept representing a new stage of socio-economic and cultural development. Today, information resources are considered the main factor determining the strategic wealth and competitiveness of each country.

An information society is a stage in which the production, processing, distribution and consumption of knowledge and information have become the main areas of economic and social activity of society. The scientific theoretical foundations of the formation of this society were first developed by modern Western scientists such as D. Bell, E. Toffler, M. Castells, who assessed information and knowledge as the main production resources. D. Bell in his work "The Future of Postindustrial Society" indicated information and knowledge as the supporting factor of postindustrial society, while E. Toffler in his theory of the "Third Wave" deeply



analyzed the socio-economic changes resulting from technological revolutions [1,2].

The main features of the development of an information society include the digitization of production processes, the mass introduction of information and communication technologies, the expansion of the digital services sector, the increasing role of social networks in social life, and the dominance of the knowledge-based economy. At the same time, these processes also create a number of problems, such as new social differences, information inequality, weak protection of personal data, and security in cyberspace.

This article analyzes the laws of formation and development of an information society, the social, economic, and cultural factors that make up its structure, as well as current problems arising in the information age and their solutions. The article is based on modern scientific-theoretical approaches and best practices and is aimed at drawing scientifically based conclusions about the prospects of an information society.

The concept of an information society is one of the theoretical constructs that is of great importance in the development of modern civilization. This concept refers to the stage of development in which information and knowledge have become the main economic, social and cultural resources of society. The term "information society" was first introduced into science in the second half of the 20th century by the Japanese scientist Yoneji Masuda.

In the formation of the theory of the information society, D. Bell's concept of "Postindustrial Society" occupies a special place. According to him, in the postindustrial stage of development, the production process, which is the main basis of the economy, relies on knowledge and information rather than material resources. Bell emphasizes that in a postindustrial society, the service sector prevails, and scientific and technical knowledge becomes the main criterion of economic activity [1]. In this way, he justifies the strategic importance of information and knowledge.

E. Toffler, in his work "The Third Wave", dividing the history of human development into successive stages, presents the information society as a new stage. According to his interpretation, unlike agrarian and industrial societies, in the information society, the processes of knowledge production and its distribution occupy a central place. This process is closely related to the rapid development of



technological revolutions - computers, network communication tools and digital technologies [2].

One of the scientists who further deepened the concept of the information society is M. Castells. He describes the information society on the basis of the model of the "network society", highlighting the interconnected social and economic networks formed worldwide through digital technologies as the main feature. According to Castells, this new social structure has such features as the speed of information flows, flexibility and globality, which will lead to a fundamental change in traditional social systems [3].

Looking at historical processes, it can be seen that the formation of an information society includes several successive stages. At the initial stage, that is, in the middle of the 20th century, the role of information in the life of society increased sharply as a result of scientific and technological progress. During this period, the service sector developed rapidly, scientific research and technological innovations became the main indicators of the development of society. In particular, the transition from an industrial economy to a knowledge-based economy was an important feature of this period [1].

At the next stage, starting from the 1980s, qualitatively new changes occurred in the life of society with the development of information and communication technologies. The popularization of personal computers, the emergence of the Internet and the development of mobile communications have fundamentally changed the processes of information production and distribution. Information flows have become fast, widespread and free, and many areas of economic activity have moved to the digital environment [2]. The modern stage is marked by the era of digital transformation and the networked society. Since the beginning of the 21st century, new forms of the information society have begun to emerge as a result of the widespread use of digital platforms, artificial intelligence, big data technologies and social networks. Social, political and cultural processes are increasingly taking place in the digital space, and new issues such as information security, digital divide and information sovereignty are also becoming relevant [4].

The general conclusion of the formation of an information society is that information and knowledge are becoming a central factor not only in economic growth, but also in social change, cultural integration and personal development.



This requires each country and society to effectively manage information resources, develop digital literacy and actively apply innovative approaches.

The historical roots of the formation of an information society are associated with the increasing availability of information and knowledge in the process of human development. Although the concept of "information society" entered scientific circulation in the 20th century, its first elements can be seen much earlier, in the early stages of the formation of culture and civilization.

The invention of writing made it possible to accumulate, store and transmit information from generation to generation. The first writing systems that appeared in Mesopotamia and Egypt in the 4th millennium BC determined the initial forms of information transmission and management activities [1.] Thus, information began to take shape as a resource that acquired independent importance in social life.

In the Middle Ages, monastic libraries and scientific centers played an important role in the preservation and dissemination of knowledge. However, the widespread dissemination of information underwent a fundamental change with the invention of the printing press by Johannes Gutenberg in the 15th century. The mass publication of books paved the way for an increase in literacy levels and the spread of knowledge to a wide range of social strata [2]. This process went down in history as one of the important factors of the cultural and scientific awakening.

In the 18th–19th centuries, the pace of technological progress increased sharply as a result of the industrial revolution. The creation and popularization of communication tools such as the press, telegraph, and telephone accelerated information flows and somewhat eliminated geographical boundaries (Castells, 2000). It was during this period that the production and distribution of information became a separate branch of industry, the press and publishing system developed, and the formation of information-based social structures began.

The emergence of mass media (radio, television) in the late 19th and early 20th centuries expanded the scope and intensity of information dissemination to an unprecedented extent. These tools became a means of not only transmitting information, but also of forming social consciousness, and controlling public opinion (Webster, 2014). At the same time, with the development of industrial society, information-based economic activity sectors, such as advertising,



journalism, and telecommunications, were formed as independent economic sectors.

On this basis, it can be said that the first elements of the information society gradually found their expression in several stages - through the creation of writing, the development of printing technologies, the industrial revolution, and the formation of mass media. However, only from the second half of the 20th century did the production of information and knowledge enter a stage of independent development, becoming the center of the main economic and social life of society. Thus, the emergence of the first elements of the information society is considered in the history of mankind as a process in which information and knowledge increasingly become a force influencing economic, political, and cultural life. This process served as the foundation for the modern digital society.

The information and communication technology (ICT) revolution has revolutionized the formation and development of modern society. Since the end of the 20th century, the rapid development of digital technologies has dramatically expanded the possibilities for producing, storing, transmitting and distributing information. This process has accelerated the transition from an industrial society to an information society and created new opportunities in the economic, social and cultural spheres (Castells, 2000).

Initially, the popularization of personal computers, followed by the development of Internet technology, democratized access to information. As a means of disseminating information, the Internet has become a unique platform not only in scientific and commercial activities, but also in everyday life. Millions of people began to communicate with each other quickly and effectively through e-mail, websites and search engines[4].

By the end of the 1990s, the popularity of mobile communication devices further accelerated the ICT revolution. While mobile phones initially served as a means of personal communication, with the advent of smartphones, their functionality has become an integral part of information consumption and production activities. As a result, each person has become an active consumer and creator of information.

At the beginning of the 21st century, the development of digital technologies has formed new conceptual concepts. Trends such as "Cloud technologies", "Big Data", "Artificial intelligence", "Internet of Things (IoT)" have penetrated all aspects of society. The volume and speed of information flows have increased, and the



economy has been enriched with networks operating on a digital basis ("digital economy") (Bell, 2004).

At the same time, revolutionary changes in information and communication technologies are also seen as an important strategic task at the national level. The strategic program "Digital Uzbekistan - 2030", developed at the initiative of the President of the Republic of Uzbekistan and adopted in 2020, has identified important directions in this area. The program aims to develop digital infrastructure in the country, increase the digital literacy of the population, convert public services into electronic form, and widely introduce digital technologies in all sectors of the economy.

According to the "Digital Uzbekistan - 2030" program, by 2030 it is planned to digitize at least 95 percent of public services, increase the level of digital literacy of the population to 100 percent, as well as create new jobs based on digital technologies in all sectors of the economy. Also, the strategic goals include training highly qualified personnel in the ICT sector, developing a startup ecosystem, and ensuring digital security (Digital Uzbekistan - 2030, 2020).

This strategy is aimed at deeply integrating information and communication technologies into all spheres of social life, developing the digital economy, and ensuring Uzbekistan's worthy place in the process of global digital transformation. At the same time, these changes are also an important factor in improving the well-being of the population, modernizing the education and healthcare systems, and increasing the efficiency of enterprises and public administration.

Thus, the modern society being formed as a result of the ICT revolution has become a socio-economic and cultural space that is unimaginable without digital technologies. As the example of Uzbekistan shows, digital transformation includes not only technological modernization, but also large-scale social and economic reforms.

The information society is entering a new stage of its development today. The pace of development of information and communication technologies (ICT) and the expansion of their use indicate that in the future there will be fundamental changes in all spheres of society. Studies show that in the near and medium term, almost all aspects of human life will be closely related to digital technologies[3].

First of all, the share of the digital economy in the economy is increasing. Trends such as artificial intelligence, automated manufacturing, network platforms (for



example, Amazon, Alibaba), financial technologies (FinTech) and e-commerce are fundamentally changing the global economy. In the future, an economic model based on knowledge and innovation will be of paramount importance [6].

In the social sphere, the development of digital citizenship and e-government systems is expected. Based on the concept of "digital government", public services will be provided to the population in a more efficient, transparent and convenient way. At the same time, the digital divide - that is, inequality in access to technologies - remains one of the pressing problems. To overcome this, measures are being taken to increase digital literacy and expand technological infrastructure at the global and national levels.

In the context of the information society, the education sector will also undergo significant changes. Unlike the traditional education system, in the future, digital education, distance learning, and individual learning paths based on artificial intelligence will become widely popular. The principle of "lifelong learning" will become a necessary life strategy for every person. At the same time, new professions and competencies will emerge, and the composition of the labor market will radically change.

Information security and personal data protection are also one of the main tasks in the future. The expansion of information flows and the growth of artificial intelligence capabilities increase the likelihood of invasion of privacy. Therefore, legal and technical measures are being taken globally to develop digital ethics and ensure information security[6].

Uzbekistan is not left out of these global trends. In accordance with the "Digital Uzbekistan - 2030" program, the country is taking consistent measures to develop digital infrastructure, widely introduce innovative technologies, and increase the share of the digital economy. In particular, such areas as the development and application of artificial intelligence technologies, improving e-government services, and increasing the level of digital literacy are identified as priorities[7].

In the future, Uzbekistan aims to become one of the centers of digital technologies in the region, increase the export of digital services and innovations, and introduce advanced practices in the field of ensuring information security. This will directly affect the socio-economic development of the country and the well-being of citizens.



In short, the prospects for an information society are characterized by the deep penetration of modern technologies into the life of society, the transition of economic, social, and cultural systems to a new qualitative stage. This process, along with significant opportunities, also creates a number of new challenges and risks. Therefore, it is of urgent importance to study and manage the prospects of an information society on a scientific basis.

### **REFERENCES:**

1. Bell D. The Coming of Post-Industrial Society: An Experience of Social Forecasting. - Moscow: Academy, 2004. - 780 p.
2. Toffler E. The Third Wave. - Moscow: AST, 2007. - 800 p.
3. Castells M. The Information Age: Economy, Society, and Culture. Vol. 1: The Network of Society. - Moscow: HSE, 2000. - 608 p.
4. Webster F. Theories of the Information Society. - 4th ed. -Schwab K. The Fourth Industrial Revolution. - World Economic Forum, 2016. - 184 p.
5. Floridi L. The Ethics of Information. Oxford University Press, 2014. - 400 p.
6. “Raqqamli O‘zbekiston - 2030” strategik dasturi. - Toshkent: 2020.