

UDC 101

## Information Society: Problems of Formation and Development Prospects

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### Abstract

XX century, many philosophers call the “information age”. This is largely due to the computerization and informatization of society. The process of computerization and informatization is uneven in different countries and regions. Computerization of all spheres of human activity is now an imperative of social development. Without solving this task, humanistic transformations, economic development of society, capable of ensuring a decent life for all its citizens, are impossible. The process of computerization and mediatization is particularly intensively developing in the United States, Japan and Russia. In the transition to the information society, a number of philosophical problems arise that change the worldview of the modern person. The study of these changes in people’s minds was carried out by philosophers of the 20th century: M. Castells, E. Toffler, D. Bell, I.L. Inozemtsev, A.I. Rakitov.

**Key words:** information society, public consciousness, individual consciousness, worldview, virtualization, computerization, informatization, mediatization.

Introduction. The Information Society is a sociological and futurological concept, which considers the production and use of scientific, technical and other information to be the main factor of social development. The concept of the information society is a variety of the theory of post-industrial society, the basis of which was laid by Z. Brzezinski, D. Bell, O. Toffler.

The idea of the information society was formulated in the late 60s—early 70s of the XX century. The term “information society” was introduced by Y. Hayashi, a professor at the Tokyo Institute of Technology.

Researchers and developers of the theory of the information society are also: M. Castells, F. Webster, E. Giddens, J. Habermas, D. Martin, G. Molitor, E. Toffler, D. Bell, Z. Brzezinski, A. King, D. .Nesbit, A. Touraine, P. Drucker, M. McLuhan and others.

Considering social development as a “change of stages”, supporters of the theory of the information society associate its formation with the dominance of the “fourth”, information sector of the economy, following agriculture, industry and the economy of services. At the same time, it is argued that capital and labor as the basis of an industrial society give way to information and knowledge in the information society. The revolutionary action of information technology leads to the fact that in an information society, classes are replaced by socially undifferentiated “information communities” (J. Masud).

E. Toffler contrasts traditional bulky corporations with “small” economic forms—individual activities at home, “electronic cottage”. They are included in the general structure of the information society with its “info-”, “techno-” and other spheres of human existence. The project of “global electronic civilization” is being advanced on the basis of the synthesis of television, computer services and energy—“telecommuter energy” (J. Pelton).

The “computer revolution” gradually leads to the replacement of the traditional print with “e-books”, changes the ideology, turns unemployment into secured leisure (H. Evans).

Social and political changes are considered in the theory of the information society as a direct result of the “microelectronic revolution”. The prospect of democracy is associated with the spread of information technology.

E. Toffler and J. Martin assign a major role in this telecommunication “cable network”, which will ensure two-way communication of citizens with the government, will allow to take their opinion into account when drawing up political decisions.

D. Tapscott, a classic of the theory of digital civilization, writes about the formation of the information society, in which not only some external

manifestations are observed, but also facts of changes in social relations, that is, the coming digital era [16].

D. Tapscott, highlighting the characteristics of the information society, emphasizes that the information society is a knowledge society that produces intellectual products, moreover, using the digital form of representing objects. Due to the transformation of information into digital form, objects of a virtual nature are replaced by physical ones.

In the works of the natural scientist A. Clark and the English sociologist M. McLuhan, the idea of globalization takes the form of technological determinism.

M. McLuhan develops the theme of the leading role of mass media that is fundamental to understanding globalization. It connects the new stage in the change of social space-time with the advent of electronic networks—the Internet, which has incomparably increased the speed of information flows. Electronic media squeeze the world into one point and allow everyone to simultaneously see events that are distant from each other.

Such a world M. McLuhan called the “global village” [11]. The logic of the concept of a global village leads to one of the key aspects of the idea of globalization—the problem of global consciousness.

M. McLuhan drew an analogy between the electronic media system and the human central nervous system. He represents the idea of globalization as a single earthly person. M. McLuhan’s global village, denoting modern society, in which, thanks to the development of communication systems, people argue and act as if they were very close to live in the same village.

The problems of the development of the information society in Russia have been the subject of serious research, which are presented in the works of I.S. Melyukhin, D.V. Ivanov, S.E. Zuev, V.V. Emelin, P.G. Arefyeva, I.V. Alekseeva, R.I. Tsvyleva, etc.

For example, B.V. Markov [12] argues that the Internet significantly changes the conditions for the development of power: on the one hand, there are opportunities (technology) that threaten democracy (the spread of unauthorized information, virtual coordination of groups), on the other

hand, the development of telecommunication technologies gives new chances of democratization at the transnational level. Modern society is at the stage of active formation, which has a number of positive consequences associated with the rapid development of science, culture and economics, as well as a significant set of destructive consequences associated with the actualization of social contradictions [25].

Research is also being conducted in the field of non-computer virtualization. In the domestic literature, this field is represented by the works of the Center for Virtualistics of the Human Institute of the Russian Academy of Sciences, which dealt with such aspects as the psychology of virtual reality, the virtuality of creativity, etc. The Virtualist Manifesto, which proclaims it as one of the new ideological systems, is based on the thesis that the world is virtual. The manifesto also defines the main properties of virtual reality: generation, relevance, autonomy, interactivity.

V.Rudnev adheres to a similar point of view, considering that each reality is virtual, since the real (real) world is connected with the virtual realities of human consciousness [15].

Another characteristic of virtual reality is given in the article of S.S. Khoruzh, who asserts that virtual reality, virtual phenomena are always characterized by some kind of partial or not embodied existence [20].

One of the most comprehensive studies in the domestic literature on virtualization is the monograph by D.V. Ivanov “Virtualization of society” [4], in which the logic of virtual reality is represented as the replacement of real things and actions with images—simulations. The author identifies three main characteristics of virtual reality:

- the intangible effects (depicted produces effects characteristic of the real);
- conditionality of parameters (objects are artificial and changeable);
- ephemeral (freedom of entry / exit provides the possibility of interruption and renewal of existence).

To develop the concept of virtualization, the author offers the formulation and solution of the following problems.

First, in order to have a basis for using the “real / virtual” dichotomy, it is necessary to trace the genesis of social reality.

Therefore, the proposed concept of the virtualization of society opens with an analysis of the emergence of the phenomenon of social reality during the modernization of society and the paradoxical transformation of social reality in a sociocultural shift from modern to postmodern.

Secondly, in order to build a model of social change as a shift from “real” to “virtual”, a synthesis of various empirical tendencies is necessary.

The solution to this problem is found in the sociological core of the proposed concept, which is a series of descriptions of the processes observed in various institutional areas of society at the turn of the 20th and 21st centuries. and showing virtualization as a single principle—a model of social change.

Thirdly, in order to determine the theoretical status of the concept of virtualization, it is necessary to compare it with the social transformation models used in modern social knowledge.

The following socio-philosophical aspects of the electronic environment that modern researchers turn to can be distinguished:

- transformation of social institutions in the conditions of development of the information society;
- development of online communities, their interaction between themselves and traditional communities;
- the impact of the development of the Internet on changing the social communication system;
- the transformation of modern education, the development of distance education;
- the problem of preserving cultural identity;
- the formation of “e-economy”;
- the formation of “e-government”.

The concept of the information society provokes criticism from humanistic ally oriented philosophers and scientists who note the failure of technological determinism, pointing to the negative consequences of the

computerization of society.

In the modern information society, various ways of communication between people are possible, but this often leads to a decrease in personal contact and expansion of the virtual space [13].

The modern information society forms a new image of modern reality—consumer, entertainment reality (supermarkets, hypermarkets, entertainment centers, electronic services, etc.), that is, the opportunity for any person to receive any “service”.

Moreover, in modern society, almost any sphere of life activity of a modern person falls under the category of “service”. Modern man is represented in relation to the “consumer” when referring to any area of human activity: education, health, tourism industry, etc.

Methodological basis of the study. If in the XVII-XVIII centuries, both in Russia and in Western Europe, a person sought to “unravel the secrets of the world, the Universe”, he was interested in both natural science problems and humanitarian issues. Nowadays, it is much easier to access information and communication resources on the Internet and “just read”, practically without thinking about what they read.

The “spiritual values” of modern society have changed, one might say: friendship, love, mercy, compassion, empathy, etc. The modern world of consumer culture proclaims “material values” much more important than “spiritual values”, sometimes the cultural interconnection between generations is even lost.

A.I. Rakitov highlights the characteristics of the information society:

1. Availability of information (for any person and any organization, company any information should be available at any time);
2. The real provision of accessibility of information (modern information technologies should be produced in such quantities that information accessibility requirements are easily met);
3. Production of information (information is produced in the amounts necessary and sufficient for life support and the development of society);

4. Accelerated automation and robotization (in all areas of production and management);
5. Primary development of the sphere of information activities and services (so that at least 50% of the total population works in the information sphere).

According to A.I. Rakitova these signs indicate that we are dealing with a new type of society (“information society”) [14].

The processes of informatization and mediaization have become global. The study of these processes required the creation of research centers. The Japan Institute of the Information Society was established in Japan. The director of this institute, J. Masuda, proposed a scheme for transforming humanity in connection with the new conditions created by the emergence and development of computers and modern telecommunication systems. In 1985, J. Masuda published an article: “Hypotheses about the emergence of an intellectual person.” J. Masuda poses the question: “What factors determined the appearance of a reasonable person?” [23].

J. Masuda identifies three factors that influenced the emergence of “reasonable man”:

- development of the frontal lobes of the brain, due to which the possibility of human thinking was ensured;
- development of speech apparatus, due to which the possibility of sound communication was provided;
- development of the hand, so that the opportunity to carry out production activities was provided.

J. Masuda discusses what opportunities a modern person has:

1. The human ability to think with the help of the brain is greatly enhanced by the inclusion of computers in the thinking system;
2. Communication tools make a qualitative leap at the expense of modern telecommunication systems using computer equipment, satellite communications, fiber optics and other modern technologies;
3. Automation and robotization of modern production allows enormous quantitative and qualitative growth of material

production.

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J. Masuda believes that information technologies will entail cardinal changes in people's value orientations. Thanks to the informatization of all types of human activity and the emergence of a new intellectual person, modern society will turn into a polycentric global society [23].

Consider the main social problems of the modern information (consumer) society:

1. Areflexivity. We called this problem "areflexivnost", in contrast to "reflexivity", as a person's ability to conceptualize and draw conclusions, emphasizing the absence or, more often, the unwillingness of modern man to analyze social events occurring in the modern world. It is much more convenient to take a different social position.
2. Loss of ability to think independently. Modern man is "used" to the fact that he has helpers (technical means) almost at any moment. At present, scientists are conducting experiments, trying to understand the influence of the "information culture" on the consciousness of modern man. Among the negative consequences of this influence, scientists note the "destruction of logic" in modern man. For example, schoolchildren are not able to write off a simple sentence from the blackboard, read the text from a book, quite often in a letter even an adult person writes with gross spelling errors. The situation, as Luciano Floridi (Italian philosopher studying the problems of the modern information society) writes, is that people simply "copy" texts from the Internet, sometimes without thinking

about the correctness of writing phrases and sentences [24]. One of the brightest negative phenomena is the “unwillingness” of modern schoolchildren to “read books”. No “tricks” , exams (OGE, EGE) can fully “turn” the modern student to the book.

3. The change of the most informative question to being. If earlier the German philosopher I. Kant asked questions: “What can I know?”, “What can I do?”, “What can I hope for?”. At present, a modern person asks a single question: “Where to find?” Information about a phenomenon or event, often without even going into the essence of this information. The modern man, write the philosophers of the XX-th century has become a simple “compiler” of past ideas and events.
4. Virtualization of modern life. One of the complex social problems is the so-called “return” of a person from the “virtual world” to the “world of reality”. Too long stay in the “virtual world” causes, as scientists say, “addictive”, so when “returning” people experience psychosomatic disorders and even inappropriate human behavior. Some scientists are trying to prove that it is quite possible to talk about the “Internet addiction” of a modern person [13].

For example, E. Toffler in his works speculated that social institutions will change in the modern information society. In the modern family, according to E. Toffler, many people will live in “electronic cottages», and only information will be the main product of modern society. “Information” will be the main consumer product in the modern information society. That is, a person will be immersed in the information environment, where he will, on the one hand, consume already created “information”, on the other, create new “information”, and on the third, distribute, sell “information” to other people (consumers ) [18].

E. Toffler, speaking of the super-industrial society, in his works “Futurok” and “The Third Wave” paints the future of humanity in terms of the development of the same post-industrial society, in which, thanks to the universal automation of production, the level of consumption significantly

increases and the service sector expands many times, the ideology disappears and parties.

In the book “The Third Wave”, O. Toffler notes that the historical process of the development of civilization goes through a series of stages that, like waves, roll over and cover each other, giving rise to contradictions, conflicts, difficulties and problems of human adaptation to new conditions.

“The first wave” is a historical type of agrarian civilization, when cultivation was the basis of all life activity. The original meaning of the word “culture” meant “cultivating” the land and everything connected with it: the rules of processing, the use of land, the time of sowing and harvesting, the methods of storing food and cooking, the rituals, rites and customs, signs and symbols, myths and legends.

It was an agrarian civilization that laid the foundations of the whole modern culture of most nations. The exceptions are ethnic communities, for which fishing, hunting or cattle breeding have played a significant role.

Agrarian civilization was the longest in history, lasted until the 16-17 century. This stage is characterized by the primitiveness of tools and the slow pace of change in the social and personal life of a person. The peasants were the main class, their work continued “from dawn to dusk”, subjecting time to seasonal rhythms and weather conditions.

The transfer of cultural values and achievements was carried out directly from generation to generation and was reduced to traditional folk culture. The proximity to nature, the stability of kinship, concentration in rural areas contributed to the stability of human relations and culture.

The “second wave” is an industrial civilization. It begins with the emergence of the industrial revolution in Europe, gradually encompassing other regions and continues to this day, displacing the traditions and habits of the agrarian stage.

There is a concentration of industrial production in large enterprises, a massive growth of cities, an increase in the consumption of goods, the emergence of new social strata and the type of culture. The seasonal rhythm is replaced by the working day “by the whistle”, new problems of labor

remuneration, human rights, social protection, leisure activities appear.

The spread of urbanization leads to a new type of urban lifestyle, subsequently generating an ecological crisis, overproduction and standards of mass culture. Industrial civilization is based on the concentration and specialization of production, concentration in large cities and turning them into megalopolises.

The “Third Wave” is the era of informational, electronic civilization, combining the advantages of technological progress with the growing role of humanism of a real person and his needs.

Much of it contradicts the old traditional industrial civilization, notes E. Toffler. This is both a highly technically advanced and, at the same time, anti-industrial civilization.

The society of the “Third Wave” arises on the basis of the transformation, change of the “code of civilization” itself. This means that all 6 parameters of an industrial society change to the opposite:

- 1) standardization is replaced by a variety of styles and forms;
- 2) the centralization of power is replaced by multipolarity;
- 3) synchronization of industrial labor—a sliding schedule;
- 4) replication of mass samples—the uniqueness of individual models;
- 5) the concentration of production at the plants is replaced by the “minimization” of production, the emergence of “electronic cottages”;
- 6) instead of narrow specialization—wide integration, giving the opportunity to switch to a new type of activity.

These changes affect not only the sphere of economics and technology, as some suggest. They cover the technosphere: energy, production, distribution; sociosphere: social and political institutions, power structures; infosphere: value systems, social communication and information.

The new stage means a change in style and lifestyle. There is a new type of property—for information.

Control in the field of decision making is carried out by the one who owns the information. The struggle for information sources, technical

improvement of computers, determine the dramaturgy of social and cultural development.

At the heart of the futurological concept of E. Toffler is the problem of the relationship between the rate of change in social and cultural life and the degree of adaptation to them by a person. A balance is needed not only between the scale of changes and the speed of their spread, but also the ability of a person to adapt to them, to overcome the fear of meeting with the future.

M. Castells in his research will highlight the features of the modern information society:

1. Modern information systems create a single source of information throughout the world and in many respects influence the worldview of a modern person.
2. In the modern information society there is a social and cultural division of the participants of communication: the user—the viewer.
3. The ability to select the method (channel) of obtaining information. At present, there are a lot of ways to obtain information; each person chooses “information” in accordance with his goals and needs, the value and educational orientation of a person [7].

According to D. Bell and many other representatives of technocratic theories, the modern world is entering the era of post-industrial development, replacing the existing industrial society. This shows the development of Western Europe, Japan, the USA. The emerging post-industrial society is, according to D. Bell, the result of the third technological revolution, the essence of which lies in the widespread computerization and telecommunications of production and other spheres of public life.

The first technological revolution, writes D. Bell, was associated with the discovery of steam power, the second technological revolution with the introduction of electricity and chemistry into production. Both of these technological revolutions led to a manifold increase in the productivity of social labor, an increase in wealth and an increase in the well-being of people [2].

The decisive role in the development of the post-industrial society is played by the communications system, in which telecommunications come to the fore. D. Bell writes that with the advent of the computer era, a clear fixation of the place of work does not make any sense at all; in this case, it turns out that the modern market is no longer just a territory, but a kind of telecommunications network.

As a result of such an organization of modern society, the number of active participants in business increases dramatically, and the speed and frequency of business contacts increases.

According to D. Bell, the main issue of transition to a post-industrial society is to create “new social structures” that react to new conditions of production and change value orientations. Such new social structures are naturally formed, but not immediately and through the overcoming of many difficulties and contradictions [3].

D. Bell systematically examines the changes taking place in three main, relatively autonomous spheres of society: the social structure, the political system and the cultural sphere (with the social structure of D. Bell, the economy, technology and the employment system are somewhat unconventional).

The concept of post-industrial society, according to Bell, includes five main components:

- in the economic sector—the transition from the production of goods to the expansion of services;
- in the structure of employment—the dominance of professional and technical classes, the creation of a new “meritocracy”;
- the axial principle of society—the central place of theoretical knowledge;
- Future orientation—the special role of technology and technology assessments;
- decision making on the basis of a new “intellectual technology”.

The meaning of the concept of a post-industrial society can be easier understood by pointing to the following, according to D. Bell, initial specific

dimensions and components:

- Economy: the transition from the production of goods to the production of services;
- employment: the predominance of the class of professional specialists and technicians;
- the axial principle: the leading role of theoretical knowledge as a source of innovation and policy definition in society;
- upcoming orientation: control over technology and technological assessments of activities;
- decision-making process: the creation of a “new intellectual technology” [2].

D. Bell sensitively caught the important significant trends in the development of society in our era, mainly related to the process of turning science into a direct productive force: the increasing role of science, especially theoretical knowledge, in production, the transformation of scientific work into one of the leading spheres of human activity; qualitative changes in the sectoral and professional structures of society.

P. Drucker, a famous American economist, one of the founders of modern management theory, participated in the discussions of the 1970s. However, he contributed his contribution to the formation of the post-industrialism concept in 1995 by publishing the book *Post-Capitalist Society*, in which he outlined his views on the current state and development prospects of Western civilization [22].

Z. Brzezinski predicts the onset of a technotronic society, which must be established as a result of the information or computer revolution, which will lead to the domination of a new intellectual, political and scientific elite. This society, in his opinion, will be characterized not only by a qualitatively new level of production, but also by a new psychology and a new culture [21].

Research methods. In this article, we use the method of “philosophical comparative studies”, which allows, based on a comparison, to reveal the general and the particular in various sociocultural and philosophical systems. Thanks to the “philosophical comparative studies”, we can identify common

sociocultural and philosophical problems of the information society.

Conclusion. The modern philosophy of the 20th century (especially futurology) predicts in the near future the transformation of the entire social space into a “global computerized space”, where people’s activities will focus on processing and producing various “information”.

The formation of the information society requires a change in this mentality, which in turn is associated with a long period of time and targeted efforts to modify the current state.

Summarizing the results of the analysis of the approaches of the Western European and Russian researchers to the process of transition to the information model of social structure, we formulate the following conclusions:

- the effective development of the information society consists in the constructive interaction of three subjects of information transformation: the state, business and individuals, social groups;
- the main tasks during the transition to the information society are: the pursuit of social, political, informational economic and structural uniformity of the national information public space; expanding educational opportunities; the reorientation of the economy and society from raw materials to the innovative, knowledge-intensive nature of development;
- introduction and development of modern information technologies;
- elaboration and detailed analysis of the information policy of the state, revealing how to use existing information flows and resources from various institutions (for example, the state, organizations, individuals and social groups that may have their own ideas and interests when working with information), quantitative control over the flow information flow and control over the distribution of information flow.

The term “information society” reveals the objective process of a gradual awareness by the society of the importance of information as some independent fundamental entity (along with energy and matter) and its transformation into a real production force. Information technologies and

telecommunications make knowledge and information accessible to all, acting as the technological basis for the development of an information model of a social structure.

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