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INFORMATIZATION AND SOCIETY: POSSIBLE DIFFICULTIES AND FUTURE PROSPECTS

The development of the information society determines the increasing importance of information in human transformative activity, the approximation of its production directly to production activity, the improvement of the social structure of society, based on the current conditions of its existence and the development of intensive forms of information exchanges in society. All these significant changes in the information sphere have caused the growing pace of new information production, the increase in the amount of information circulating in social information networks, and therefore the ever-increasing information load on human consciousness that has never been seen before. These realities are based on the need to implement the fundamental principles of this society: improving productivity in the information field, improving the efficiency of use of information resources.

In this context, it should be pointed out that the problems faced by modern civilization require to increase efficiency of cognitive activity of society, of the creative activity of an increasing number of its representatives. Accordingly, the cognitive process requires an ever-increasing resource for the information needed to increase the efficiency of using publicly available information.

Keywords: informatization, information society, library institutions, electronic information resources, information production, personality of the information society.

Presenting main material. The development of social informatization takes place under the influence of changes in the environment in which modern civilization develops, and the social problems that arise in the process of evolution of human society. Global informatization in its essence is an instrument of social response to the negative challenges of our time, an instrument of mobilizing the creative activity of people, that is, the most productive response to the realities of our time by *homo sapiens*. It is possible that the logic of the development

of previous modern civilizations, even at high rates of their development, had been interrupted precisely because of the low level of information provision in the civilization dimension, the lack of democracy in access to knowledge and the low level of creativity.

Information support for the viability of our civilization is stimulated by three major civilizational problems:

- first, environmental changes appropriately to natural regularities of planetary development;
- second, the negative influences of civilization on the environment;
- third, the systematic increasing of social problems associated with the evolution of modern society.

In recent decades, the leading countries of the world and international organizations have undertaken to systematically study the first block of problems, the existing threats, the hierarchy of threat levels, and take the first steps towards their possible neutralization. Among such threats, the researchers define the meteorite threat of impact of major meteorites with the planet, the new glacial period, the impact of harmful cosmic rays on the earth, the eruption of gigantic volcanoes, the traces of past catastrophes and their impact on the biological world of the Earth already studied by modern science, the possibility of introduction from space or reintroduction of already available pathogenic bacteria in areas of permafrost due to global warming, against which humanity does not have immunity and medication, and other various problems. Today those problems attract attention of researchers, methods of neutralizing non-negative influences are being developed. For example, the National Aeronautics and Space Administration (NASA) has already established a Planetary Coordination Unit the program to detect and track asteroids and other celestial bodies that are a potential danger to the Earth. The relevant EU structures and an expert group on space threats under the RAS Council on Space has shown willingness to cooperate with the United States on identifying the cosmic hazards. It is now possible to speak about the constant enhancing of international cooperation of medical organizations of different countries against probable pandemics, the spread of diseases under the influence of global development of the transport structure and the intensification of migration processes.

The second set of problems is related to negative effects on the environment of the Earth's man-made human activity. To this set of problems belong the threat of a nuclear war; the deliberate use or uncontrolled spread of chemical and bacteriological weapons; the unpredictable negative impact on the human body of GMO products; the increasing level of carbon dioxide in the earth's atmosphere due to the use of energy and transport organic fuel, etc. This set

of threats is recognised in more and more countries of the world, intensive research in this direction is being conducted, mechanisms of global influence on the current situation. So, in 2015 the United Nations Climate Change Conference in Paris has outlined substantial steps in ensuring that the average temperature on the planet does not rise higher than two degrees Celsius annually. The negotiators came to the conclusion that the world without fossil fuels is an absolutely realistic goal by 2050 with appropriate transformations, although only 8 of the 192 conference participants have set this to be their goal. Among them are Sweden, Austria, France. This goal is supported, financially as well, by large international companies, for example Microsoft, Google, Facebook, Apple, Amazon. Costa Rica, Vietnam, Bangladesh, Sudan, etc., a total of 43 countries are already threatened with extensive floods because of global warming, and call to the world to reach the threshold of warming of 1,5 degrees annually as soon as possible, which would give these countries a chance to survive [1].

Another type of problem: social problems are caused by the rapid growth of the population on the Earth and the development of social sphere lagging behind. By 2025, the population is expected to reach 8,5–10 billion people. At the same time, in relation to 1950, the already existing population has doubled since, and the increasing over past 20 years has amounted to 1,7 billion people, of which 1,5 billion people are in developing countries. The population of these countries constitutes three quarters of the world's population, while consuming only a third of global produce and the gap in consumption continues to grow [2].

Because of the aforementioned, the chairman of the World Commission on Environment and Development, Norwegian Prime Minister Gro Harlem Brundtland has emphasized that «human history has reached a crossroad, whereby the change in policy is inevitable. More than a billion people who cannot afford their basic needs today, our own children and grandchildren, and the planet Earth itself, demand a revolution. It will come. We know that we have the means to prevent danger, chaos and conflicts that are otherwise inevitable» [2]. This statement fully outlines the situation, the level of challenges faced by modern civilization.

In addition, according to UN data, severe threat to the world pose the effects of climate change. It is anticipated that by 2050 crop yields may decrease by 25%, while the population of the Earth will increase up to 9 billion people. Due to temperature changes in the water surface, many species of fish will migrate to the northern waters and the catch will decrease by 50% in the tropics and Antarctica. Negative weather influences will cause floods,

droughts, shortages of drinking water, and fires in large areas, which combined together will lead to increasing mortality rates due to heat. All of this will lead to forced migration and possible conflicts between states, as well as to significant changes in the distribution of water and food resources.

Mostly poor countries will suffer from climate change, but the effects of these processes in the modern globalized world will be felt more and more in developed countries [3]. The analysis of these prospects at the end of the last century found its reflection in the activities of the representatives The Club of Rome. Thus, in the report «Growth limits», the authors concluded that «if the current trends in population increasing, pollution of the environment, food production and resource depletion continue as they are, then during the next century the world will approach the limits of growth, there will be an unexpected and uncontrolled recession the population and produce output will sharply reduce» [4].

The somewhat mystical veil of such prospects covers the rapid growth of social problems related not only to climate change, the decreasing of space suitable for human living but also the uncontrolled increasing of the human population (even China has recently announced the elimination of the one-child policy), which results in various types of migration processes, and even to the military solution of problems including.

The problem of rapid increasing of population and the fact that socio-cultural processes are lagging behind also create a number of other difficult processes in the society life.

The important, although far from all, problems that our civilization will face in the near future have been outlined above. And for the solution of such a complex of vital problems will require the production and use of incomparably larger volumes of information resources than those that it operates with today. We have to prepare for this prospect today already.

It should be added that, in addition to the existing factors of aggravation of social problems the exacerbation of social problems related to transformation of civilization in the information stage of its development should also be included:

1. Increasing contradictions between the features of the modern information society functioning and the development of the industrial societies in the majority of countries lagging behind in the development of the industrial society. In this case, the arguments of the countries that have already adopted digital information technologies in all spheres of social activity are largely leveled by the overwhelming majority of countries at the industrial, and even at the pre-industrial stages of development, by far the larger number of people is not yet

ready today for post-industrial forms of development, with the appropriate level of social consciousness, moral traditions. Such features do not allow to demonstrate quickly the benefits of innovative development to the world. In addition, it is beneficial for a certain part of the players of the global economic space, to suspend the economic development of countries, usually those with valuable natural resources, to receive superprofits in those areas, where, as a result of the lagging economy, there's possible to pay low wages, low taxes and to have the opportunity not to spend profits on the environment production.

2. G. Cardozo notes on the problems related to the updating of the social structure of society at the information stage of its development: «We see the presence of a new concept of space, where physical and virtual influences one another, laying the foundation for the emergence of new forms of socialization, new ways of life and new forms of social orientation» [5]. It should be noted that even in countries where computerization is successfully being carried out, there are still problems, primarily, with the division of labor and the corresponding social adjustments in the society structure. In this case, «the science and theoretical knowledge are the technological basis of post-industrial transformation, which receives a completely new role in developed industrial countries in the postwar period» [6].

Today the increasing pace of social transformations requires the even closer collaboration between science, innovative technologies and production, its progress is entirely due to successes in the field of knowledge, and social production requires more and more a «class of professionals of four classes: scientific, technological, administrative and cultural» [6, p. 501]. Projecting such a thesis on the idea of biological evolution, it is important to remember the famous statement that only an effective social organization gives a chance to a given biological species, humanity included, to remain a dominant species on the planet.

In general, according to D. Bell, the central role of information in a post-industrial society generates fundamentally new problems. However, with the development of technologies in information society, they gradually find their solution. The researcher refers to such problems:

1. Huge amounts of information that a human needs to process as a result of the expansion of various spheres (economic, political, social), requiring attention and energy. «But a larger amount of information does not mean it is more complete: on the contrary, increased amount of data makes information less and less complete» [6, p. 632–633]. It should be noted, however, that certain confusion resulting in this conclusion, is due to the loss of the scales at different stages of cognitive activity.

2. Information is becoming more specific .[and] difficult for perception. From the experience we know that to weaken the barrier of the perception of digital information the improvement of the structuring of existing digital resources is required, as well as the specialization of databases and the development of search engines.

3. There is an increasing need for comprehension of information. New information becomes effective only when it is used promptly for decision-making, for immediate, effective response to new emerging circumstances. The development of information-analytical and analytical activities both in specialized analytical structures and in library institutions that become the information centers of the post-industrial society is required.

4. Limited scope of information that a person can absorb.

5. Post-industrial society is a «game between people», but such a game requires an increased degree of coordination [6, p. 632–635]. This coordination is carried out on the basis of the appropriate structuring of the information basis of social activity.

F. Fukuyama in his book «Our posthuman future» [7], at the very beginning of this millennium, predicts that the non-convergent pace of biological and information evolutions will affect human relationships shortly. He makes his conclusions based on the results of fundamental research at the end of the last century. Those conclusions, in general, state that «intellectual abilities are largely imitated.

Murray and Hernstein argued in the language of statistics that from 60 to 70% of the dispersion of intelligence is caused by the genes, while the rest is related to external factors such as nutrition, education, family composition, and the likes» [8, p. 135–138].

The intensive development of scientific information exchanges and the increasing importance of the innovative technologies introduction into all spheres of human activity has caused the growing significance of social structures that provide scientific and technological progress. At the same time, «the development of the information sphere depends on scholars in applied sciences, while communicative research – from scholars in social sciences» [8, p. 283].

Today we observe a certain lag in the development of social sciences and the process of introducing the results of research of this field into public practice. The researches already pay close attention to this fact [9, p. 187]. It is possible to predict that the necessity for humanitarian research as a guideline for improving further socialization will increase as their development is an effective way to organise the very structure of the information society and the knowledge system it is based on.

Which is why «today there is a qualitatively new inequality – between gifted people and those who aren't capable of creative work. Due to the qualitative increasing of creative work, a biological barrier has started forming, which, unlike the social barrier, is almost impossible to overcome» [10, p. 7]. We can find evidence of such a barrier formation analyzing the resources of the modern information space. The regular in the social evolution of modern information is in a poorly prepared field in our country. Therefore, the self-expression of the citizens of our country has a very low socially significant level in the national information space. The scientific information produced in Ukraine gets lost in information resources produced in society, which reflects the process of expression of citizens, characteristic to the initial stage of the development of democratic processes. Certain societal differences raise between producers of scientific information and producers of information of a lower level of significance, primarily everyday information. From the status peculiarities (and more and more noticeable difference in the salaries of information workers comparing with other categories of producers), the new information developers have increasingly more «inner joy to creativity. It brings closer the world of art and psychological excitement, so called «drive» from the process of creation» [10, p. 45]. One can predict that this feature in the process of its development will become an important stimulus to the transformation of the social structure of the post-industrial society in conditions of improving network technologies in information exchanges.

At the same time, «the production of scientific knowledge brings happiness only to a small segment of humankind... holding interest in science can only be achieved through an additional effort, and it the authorities who are are capable to bring it. People do not want to venture to those areas where they get paid less and have to work more. In Soviet times, a lot of popular science magazines and, incidentally, films and TV shows that could uphold such interest and demonstrate the population various options for a life, except for the singular model «money equals success»» [11, p. 117].

Various types of motivations contribute to deepening of inconsistency of public interests and this is a worrying tendency. Such contradictions are most acute in our society and even are a characteristic feature. Today, the general low level of public demand for Ukrainian produced information resources is acutely felt in Ukrainian science development. And this is the reason why the significance of resources in the national information space has not become yet a significant unifying factor. The lack of strategic developments that take into account not only the specifics of the present, but also provide the necessary adaptation resource for the future is acutely felt. «Inter-

national experience dictates that in global coordinates the most effective are the long-term national strategies, those highly adaptable to global instability and dynamic changes, ensuring maximum harmony between national and corporate interests. Those strategies are implemented by a group leaders of the most developed states, forming the configuration of the core of the international economic system, making management decisions on the world stage and defining the key trends of global economic development» [12, p. 5]. The implementation of the imitative strategy in implementing the scenarios for development, written by the state leaders gradually leads to the fact that in Ukraine the production of new scientific information that is controlled by society is decreasing. It should be noted that the short-term policy of state leaders in this segment of public activity may be the reason for the implementation of a long predicted by professor H. Pocheptsov situation in which «if we do not produce our own information or virtual product, then we will never be the winners. We are readers and not writers of the free world. And the matter is not in the size of the country or number of people, but in the size of the brain» [11, p. 121]. However, with the development of the information society, this lack of insight increasingly affects the brain centers of leading states, because in a new society they should be concerned about the crop of innovative solutions on a global scale, to understand the need for a pragmatic approach to utilization of creative potential of the present civilization. However, today the manifestations of such a pragmatism are being developed only in certain favorable regions of the world, particularly in the western world, and focus, primarily, on the economic sphere. And gradually, under the influence of the development pace of social consciousness of the new situation, the process of innovative information production starts meeting the needs of other spheres of society, developing in the direction of social use, and reflecting a tendency associated with the public interest in the individual self-expression.

Researchers of this process argue that «the spread of the Internet in society depends not only on entrepreneurial activity. Its success is also a product of the university and research community, where criteria for excellence, professional judgment and open communication during research work had been developed» [13, p. 35–36].

The effectiveness of the functioning of modern society is directly related to the effectiveness of the use of information, which, in turn, depends on the quality of the resources used and the level of access to them. «If labor is a source of productivity, then the creative power of labor and the effectiveness of business organization ultimately depends on innovation. Innovation

is derived from a highly skilled workforce and the existence of organizations that produce knowledge» [13, p. 99].

Thus, the creation of new high-quality information is inextricably related to the formation of qualitatively new social structures. At the same time, along with the intensification of the information space, which manifests itself in the development of public structures specializing on information producing, in the branching of social communications, the acceleration of information circulation, the quality of the use of information in an increasing degree depends on the involvement in the active public use of that part of the basic information resources that is needed today for the implementation of social development plans. The importance of enriching this basic resource process with the new relevant information is constantly increasing in the dynamics of modern information processes.

The practice of modern society transformation attests that the provision of information adequacy of the modern person to the information challenges of the modern day is related to the obligatory constant update of the basic informational resources. Mostly, it is the funds of library institution. According to O. Voskoboinikova-Huzieva «the formation of an organic information space has become the purpose of the modern library activity, and hence the strategic result, which includes:

- integration of information resources that exist in different environments;
- providing quick and easy access to available physical and remote information resources;
- high-quality navigation throughout the spectrum of integrated information resources;
- ambivalence of architectural and design spatial solutions (presence of both private and public), etc.» [14, p. 264].

According to V. Horovyi, a characteristic feature of all social developments and its information stage is, to a certain extent, constant information production and its preservation in libraries and other socially significant bases in the most optimal for use form.

It is the basis of all types of social activities in the information society. At the stage of formation of this society, the characteristic features of the organization of information production significantly differs from all previous stages [15]. They should become guidelines for library workers. First of all, it should be taken into account that special attention in recent decades has been given to the development of scientific applied research, the results of which can quickly be introduced into production or (in the field of public relations) in the process of social transformation.

At the same time, it is necessary to take into account the increasingly noticeable lag of fundamental research from the scientific and applied research. So, say, the rocket building and space industry, the nuclear power industry, and others that have been the flagships of scientific and technological progress in the last century and have been leading the main branches of technological development, are still based largely on the fundamental achievements of the 60 s and 70 s of the previous century, and a lengthy period of time without replenishment of fundamental sciences with new discoveries gradually reduces the pace of scientific and technological progress in important areas for social progress. Therefore, when completing library establishments attention should be paid, primarily, to the results of the fundamental academic science. The resources of the global information space should be studied as well in order to identify this kind of information.

As scientific effectiveness information, the highest level of influence on human development, largely depends on the pace of its implementation in public practice, library institutions and other information centers have to worry about the introduction of scientific information through their own websites, digital newspapers [16], remote forms of service, etc., to help convince the authorities of the necessity of utilization the domestic scientific product, to facilitate its implementation into practice.

The growing complexity of the challenges posed before our civilization by the twenty-first century does not enable even the most advanced countries with solutions to complex problems of social development independently, without the participation of partner countries, and without partnering links between leading librarians institutions in the area of international exchange of information. Such a situation attracts particular attention, especially taking into account the current cost of scientific problematics for countries with low economic potential. And these countries are forced to focus on the development of their own scientific work, the relevant information production for the most important areas of research and the capability of their own budget. Some areas of research often are not conducted at all, and at the same time there are sometimes quite significant lacunae in the absence of new knowledge, which makes social development uneven, and may create negative intra-social contradictions, increases the risk of making ineffective decisions not only in the scientific environment, but also on management level, creates barely solvable problems for the development of the state or nation.

It is a well-known fact that library institutions are, in essence, storage for the written heritage, that reflects the life of society on all stages of its life. In their funds information resources that reflect all socially significant sources

of public information are kept. Which is why, the problem of completing the growing volumes of new information, which appeared recently in the national information space, influenced by the success of informatization, became a rather pressing matter for librarians. In essence, the informatization is undoubtedly a positive phenomenon, however, without the guidelines from the state, it develops amorphously and is, to a certain extent, managed only through companies that control the production of necessary for informatization equipment. This state of affairs is due to the fact that for a long time, informatization was seen as a technical experiment of narrow exchanges between scientists and was not perceived as a new and effective social integration mechanism. This process has played mostly entertaining and informative role as its first achievement, was barely used by state authorities, public organizations, educational institutions as a new high-quality instrument of civic self-expression, educational, educational work. However, voluntary increasing of activity in this segment of information production has led to Internet being filled with low-quality volumes of information, the usage of which is even more complicated because of low level of user training, lack of internal readiness for a new level of communication between people. Those are serious obstacles at the acquisitions of library funds, for example, materials of social networks. V. Bondarenko rightly sees that «today, with the help of blogs, chats, social networks, forums, photo and video services, tags, etc., a new world of global partnership is being created, where everyone is a creator. For the library blogs, forums, social networks are a kind of feedback tool for users and employees. For users, a platform for the development of new knowledge that they need. Also, with the help of such innovative library services, the user is able to influence the development of library services in the direction they needs and in a way that is interesting for them» [17, c. 173].

Amassing library collections, librarian workers should take into account the fact that today the development of technologies designed for special negative informational interventions in the functioning of national information communications and for use of sovereign information resources that have reached the scale of information war. Conducting these wars, the establishment of certain social interests with the help of specially organized informational influences, requires the appropriate response from the staff of library institutions as well. The funds of libraries should not collect low-quality, insignificant for the interests of national development, and, especially, hostile information resources.

Thus, the high-quality acquisition of new, primarily, digital, often requested resources, even with the significant increasing in the future, will enable the

information society members to rely on an ever-updated knowledge base in their work.

As the growth of the proportion of creative work in the total volume of work is expected in the future, it is creative work that needs both significant resource of new information and a mandatory referral to existing social experience. Therefore, the library work on the spreading of available information resources amongst the society will become increasingly important. One of the most effective areas of such work is the digitization of information in paper media and other traditional media. As O. Onyshchenko observes, «the digital era, with its powerful equipment, technological, socio-cultural potential, has opened unprecedented opportunities to the libraries, such as:

- for the first time to integrate into a single unit all kinds of documents basing on the universal language of numbers;
- for the first time to act on a planetary scale – to obtain information from any corner of the world and send it to any corner of the earth;
- for the first time to operate the unlimited volumes of information;
- for the first time to cooperate interactively with an unlimited number of readers/users;
- for the first time to create international library networks» [18].

Of course, the issue of digitization of library resources in the context of Ukraine's time is very complicated, due to material constraints (digitization is a rather costly business, and its costs abroad are measured by tens of millions of dollars), and due to the lack of relevant specialists as well as due to insufficiently developed methods for basic national resources use as important guidelines for new work, for the production of new information. However, despite everything, the search for innovative solutions is caused by the necessity of high-quality information provision for social development. And such decisions are actively included in the practice of information activity: «Modern libraries in Ukraine are implementing various promising directions of Internet-based service, such as the use of mobile services for services provision through mobile phones, Skype, social media» [17, p. 52].

One more important direction of information activity of libraries as attested by the experience of special information structures of VNLU (Service information and analytical support of public authorities, National law library and the Presidential of Ukraine foundation), and the majority of leading librarian institutions of Ukraine being related to the further development of informational-analytical, analytical activity in them. Actualization of this activity is related to the rapid increasing of information volumes necessary for social

development and the necessity for special analysis of them for targeting different categories of customers.

The system of periodical digital editions of libraries becomes important because of the necessary:

- comprehension of the process of formation of funds of the All-Ukrainian electron library;

- acquainting all categories of users with the information content that will be stored in the funds, but with the content and not just abstracts, but the ideas presented in the materials, prognosis, hypotheses, proposals necessary for the operational use of information products;

- coordinating the use of the national digital resource in the interests of national development and for international information exchanges in the global information space.

Under globalization the development of domestic information space depends on a number of internal and external factors, that are connected with all other characteristic features of the society life. Development of a system of periodical digital publications those circumstances should be taken into account by librarians.

As a single organism, they should influence the quality of formation and processing of the main goals and objectives of social development by all categories of users. The nature of such influence in the publications of library institutions differs from the influence of other types of mass media, as the library media conducts its influence, basing it on specific information base, funds in which the positive experience and experience of many generations of the Ukrainian people is stored.

Consequently, today's library periodical digital publications should be focused on the issues of social development related to the progress of Ukrainian society democratization, improvement of management, coverage of technical and technological, educational development, organization of social incentives for effective use of existing and creation of new public resources, promotion of the process of ensuring the system of library institutions of Ukraine enter international information exchanges, Ukrainian library system inclusion into international library associations and other associations on equal footing, amassing resources of information society.

It should be noted that the hybrid war, launched against Ukraine, introduces significant adjustments into the logical process of developing the information sphere of the post-industrial society. At the same time, in Ukraine, there is an urgent necessity to give a powerful impetus to the development of the latest forms of cooperation between scientific libraries and information centers,

research institutes, universities, scientific societies and associations, effective cooperation of their efforts in implementing large-scale science and information projects, including those related to the situation of the information war Ukraine is now in. To succeed, libraries need to urgently solve tasks of coordination, cooperation and integration in their own librarian information environment, simultaneously leaving the established directions of activity and assuming functions of a much broader nature. It is important to move towards a new understanding and implementation of the role of library institutions in a much broader range of educational, scientific, informational, managerial institutions, non-state information centers and public initiatives.

If we approach this from the standpoint of our own library and information work, then we are talking about a substantial expansion of its subject and functional range. In the new conditions, preserving and strengthening the role of the leading centers of social communication, the library are able to only cover a wide range of diverse information about scientific and educational activities. Having integrated this information into its library-information orientation, it would integrate itself into the scientific and educational process more firmly.

Conclusions. Today it is obvious that the future of Ukrainian state should be based on the social awareness that information is a resource of power struggle in the modern world, and significance of information grows on traditional ideas about military power and economic potential. Negative information influences become an obligatory component, or even become the means in inter-state confrontations. Therefore, Ukraine, as a sovereign state that is developing at the stage of the formation of an information society, must create an effective, constantly improving security organization for the national information space. This nationwide structure should continuously monitor information threats, effectively predict the development trends, coordinate the use of national resources during the period of information aggression to ensure a reliable neutralization of information threats on the domestic information space, to withstand informational aggression in the global information space.

References

1. See: UN Conference on climate change in Paris. *greenpeace.org*. Retrieved from *greenpeace.org*. (2015, 9.12) [in English].
2. Koptiug, V. A. (1992). UN conference on environment and development – preparing processes and surmising (Rio de Janeiro, June 1992). (pp. 5–23). Novosibirsk: SO RAS [in English].

3. UN: serious climate changes threaten the world. *ippnou.ru*. Retrieved from <http://www.ippnou.ru/lenta.php?idarticle=013274> [in English].
4. Meadows, D. H., Meadows, D. L., Randers, J., Behrens, W. (1991). *The limits of growth. Report on the project of The Club of Rome «Hard situation for humanity»*. (p. 189). Moscow: Publishing house of Moscow university [in English].
5. Cardoso, C. (1998). *Para unasociologia dociberspaco: comunidades virtuais em portugues*. Oeiras, Portugal: Celta Editio. Ra [em Portuguks].
6. Bell, D. (2004). *Gryadushcheye postindustrialnoye obschestvo. The coming of post-industrial society: A venture of social forecasting*. Moscow: Academia [in English].
7. Fukuyama Frances. (2004). *Nashe postchelovecheskoye buduscheye: Posledstviia biotehnologicheskoi revolyutsii* [Our posthuman future: Consequences of the Biotechnology Revolution]. (M. B. Levin, Trans). Moscow: PLC «Izdatelstvo AST» OAO «LUKS» [in Russian].
8. Farmer, A., Owen, J. Michael. (1996). On genomics application studying the intellect see. «*Genomics: The Next Psychiatric Revolution?*»: *British Journal of Psychiatry*, 169 [in English]; Fears, R., Roberts, D. et al. Rational or Rationed Medicine? The Promise [in English]. <https://doi.org/10.1192/bjp.169.2.135>
9. Wallerstein, I. (2003). *Konets znakomogo mira: Sotsiologiya XXI* [The End of the World As We Know It: Social Science for the Twenty-first Century]. V. L. Inozemtsev (Ed.). Moscow: Logos [in Russian].
10. Hodorkovski, M. B. (2007). *Postchelovechestvo* [Posthumanity]. Moscow: Algorhythm [in Russian].
11. Pocheptsov, H. (2012). *Vid Facebooku I hlamuru do Wikileaks: Media-komunikatsii* [From Facebook and Glam to Wikileaks: Mediacommunicatios]. Kyiv: Spadschyna [in Ukrainian].
12. Poruchnyk, A. M., Stoliarchuk, Y. M., Kolot, A. M. et al. (2016). *Stratehii konkurentnoho rozvytku u hlobalniy ekonomitsi* [Strategies of rival development in global economy]. Kyiv: KNEU [in Ukrainian].
13. Castells, M. (2007). *Halaktyka Internet* [Galaxy Internet]. Kyiv: Vakler [in Ukrainian].
14. Voskoboinikova-Huzieva, O. V. (2014). *Stratehii rozvytku biblio-techno-informatsiynoi sfery Ukrainy: genezys, konstseptsii, modernizatsiia: monohrafiia* [Strategies of library-informational sphere of Ukraine development: genesis, concepts, modernising]. NAS of Ukraine, V. I. Vernadsky National Library of Ukraine. Kyiv: Akademperiodyka [in Ukrainian].
15. Horovyi, V. M. (2015). *Natsionalni infromatsiyni protsesy v umovakh*

hlobalizatsii [National informational processes under globalization]. (pp. 178–181). O. S. Onyschenko (Ed.). NAS of Ukraine, V. I. Vernadsky National Library of Ukraine. Kyiv [in Ukrainian].

16. Horova, S. V. (2013). Internet-ZMI yak ob'ekt bibliotechnoi informatsiynoi diialnosti [Internet media as the subject of librarian informational activity]. NAS of Ukraine, V. I. Vernadsky National Library of Ukraine. Kyiv [in Ukrainian].

17. Bondarenko, V. Bibliotechno internet-obsluhovuvannia: stan ta perspektyvy [Library internet servicing: state and prospects]. T. Hranchak (Ed.). NAS of Ukraine, V. I. Vernadsky National Library of Ukraine. Kyiv [in Ukrainian].

18. Onyschenko, O. S. (2015). Problemy adaptatsii bibliotek do umov tsyfrovoi kultury [Problems of library adaptation to digital culture]. *Bibliotechnyi visnyk – Library Bulletin*, no. 6 (230), pp. 3–7. Kyiv [in Ukrainian].

Стаття надійшла до редакції 05.01.2020.

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Інформація та суспільство: можливі ускладнення та майбутні перспективи

Розвиток інформаційного суспільства обумовлює зростаюче значення інформації в перетворювальній діяльності людини, наближення її виробництва безпосередньо до виробничої діяльності, удосконалення соціальної структури суспільства, виходячи із сучасних умов його існування, і розвиток інтенсивних форм інформаційних обмінів у суспільстві. Усі ці істотні зміни в інформаційній сфері обумовили зростаючі темпи нового інформаційного виробництва, зростання обсягів інформації, що циркулює в соціальних інформаційних мережах, отже, небачене раніше зростаюче інформаційне навантаження на свідомість людини. Ці реалії базуються на необхідності реалізації основоположних принципів цього суспільства: підвищення продуктивності праці в інформаційній сфері, удосконалення ефективності використання інформаційних ресурсів.

У цьому контексті треба вказати на те, що проблеми, які постають перед сучасною цивілізацією, потребують зростаючої ефективності пізнавальної діяльності суспільства, творчої діяльності дедалі більшої кількості її представників. Відповідно, пізнавальний процес потребує дедалі більш зростаючого ресурсу

необхідної для цього інформації, підвищення ефективності використання суспільно корисної інформації. Треба зазначити, що зростаючі обсяги інформації, з якою у звичайному, непрофесійному, повсякденному режимі стикається людина, які вона має використовувати для повноцінного життя в суспільстві, також обумовлюють необхідність зменшення навантаження на людську розумову діяльність інформаційних масивів шляхом знову ж таки відбору із загальних обсягів найбільш суспільно значущої активної її частини. У системі інформаційного обігу друкованих ЗМІ протягом століть уже відпрацьовано системи структурування й пошуку інформації, бібліотечні установи стали визнаними центрами збереження та організації використання цих ресурсів. Водночас електронні інформаційні ресурси у зв'язку із швидкими змінами в процесі їх продукування, обігу, оновлення інтересабельності, пов'язаної з темпами оновлення знань у цілому, піддається управлінню зі зростаючими складностями.

При цьому розв'язання проблем відбору якісної інформації, створення умов для її ефективного використання (що забезпечує високу ефективність сучасної суспільної діяльності) через активізацію відповідної діяльності бібліотечних установ знижує навантаження на розумову діяльність людини, затрачувану на трудомісткі оцінювання її повноти й релевантності, набуває особливої гостроти.

Широкє включення електронної інформації в практичну діяльність має сформувати суспільну потребу до оновлення бібліотечних установ як суспільно значущих сучасних інформаційних центрів і змусить суспільство подбати про оновлення, сучасне оснащення бібліотечних установ, належне їх матеріальне забезпечення. Відповідно, користувач матиме змогу повернутися до бібліотечного обслуговування на якісно новому рівні, зможе забезпечити собі можливість ефективного доступу до найновішої інформації, здобутків передової суспільної думки, продуктивно використовувати ці надбання в інтересах активної діяльності. І цим зробить істотний крок до власної трансформації як ефективного члена нового інформаційного суспільства.

Ключові слова: інформатизація, інформаційне суспільство, бібліотечні установи, електронні інформаційні ресурси, інформаційне виробництво, особа інформаційного суспільства.