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**INFORMATION SOCIETY VS KNOWLEDE SOCIETY: A
STATEMENT THE PROBLEM**

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Abstract

The article defines the features of the information society and knowledge society’ theories, which underlie modern development tendencies of social-humanitarian knowledge.

The intention of the article is to prove the necessity of more detailed heritage’ studies based on comparative analysis of these theories representatives, primarily American scientists who are developing the basics of postindustrial society. Taking into consideration the postulates of information society’ theory, the following conclusion is drawn: post-industrial (information) society is based on the principles of minority, semi-direct democracy and shared responsibility in decision-making.

Much attention is given to the negative consequences of Russia blind following the western doctrine of information society construction. As opposed to the information theory, the knowledge theory starts to develop, which is about providing opportunities to check the validity of the information, comparing it with other information types, grading and comprehending it, while using general scientific methodology, with the aim of new system building and reproducing it based on received information by any party concerned. The method proposed is about using hermeneutics, ways of interpreting legal and political texts and formal logic, scientific works of researched representatives’ theories systematic analysis.

The following conclusions are drawn: it is necessary to build "knowledge society" in Russia based on the achievements of information society, as also on the development of fundamental sciences opposed to the current priority of applied knowledge with the purpose of further social and legal state strengthening.

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1. Introduction

The problems of modern society development represent the serious subject matter in international organizations. We are of the opinion that the World Report "On knowledge societies" is of particular importance (*World Report of UNESCO*, 2005), which defines the conception of human social and humanitarian development. From our point of view, the end of the first 21th century' will be the transition from "information society" to "knowledge societies".

2. Problem Statement

What is information society? When does humanity join it, why the transition to the totally different society type, and consequently, to economical and socio-legal development is necessary?

More generally, post-industrial society – specific stage of state civilization development, which has changes almost in all areas of life, and most importantly, in technical and economic spheres. Alvin Toffler describes three stages or waves in human society development: 1) agricultural wave, which began with agricultural revolution, and resulted with physical substance as a main product and production resource; 2) industrial wave, which lasted about 300 years and was connected with production and energy consumption; 3) super industrial wave, which began in the second half of the 20th century, and was connected with the development of information technologies, which can be improved by the knowledge system (information). Manuel Castells takes the same position, he thinks that "societies are organized around the processes of human activity, which is structured and historically determined in relations of production, experience and power" (Castells, 2000). Therefore, depending on the interaction of the three main concepts (production, experience and power), three stages of the development of society are formed.

Information in super industrial (information) society becomes almost one reality-structuring element, while changing almost all material resources. This information society development will result in almost complete destruction of representative democracy and in emergence, according to Alvin Toffler, of a mosaic democracy oriented not on the masses, but on a particular individual. In this regard, the number of political decision makers will include not only government and municipal employees, but also researchers and information technology specialists. Thus, the basis of the post-industrial society functioning is the following: a) the minority principle (an industrial society, which is based on majority over a minority, is replaced by configuration society to take into account the interests of various minorities with high social mobility); b) the principle of semi-direct democracy (each individual, using information technology, has the ability to make political decisions not only at any level of government in a particular state); c) the principle of shared responsibility in decision making.

Alvin Toffler noted that in the era of post-industrial society "money are going through a very rapid and profound revolution for many centuries, a revolution, which will create an entirely new forms, new ways of payouts and payments and business opportunities without money" (Toffler & Toffler, 2007). Therefore, "prosumption" becomes the main thing for the individual, the subject of which are those creating products, services and sharing experience for their own enjoyment or pleasure, and not for sale or exchange, i.e. those who simultaneously produce and consume. This is what, in the opinion of the thinker, changes society structure and wealth attitudes. Manuel Castells says that post-industrial society has following main features:

1. "The source of the productivity and growth of a new social development phase is the knowledge disseminated in all areas of economic activity through information processing. So economic activity is shifted from the production of goods to the production of services. The service sector stands out as the new largest economic activity of human impact, rather than nature".

2. In the post-industrial era "there is an increase in the upper and lower layers of the professional structure with a shrinking middle. In the depths of the emerging social structure "information work launched a more fundamental process: the disaggregation of labor, proclaiming the emergence of a network society" (Orlov, 2005).

3. Unlike (Bell, 2001), who considered not the use of information, but the emergence of various information processing technologies to be fundamental for the information age, Manuel Castells believes that information "does not predetermine the development of society", but also "society does not prescribe the course of technological changes» (Castells, 2000).

3. The particular feature of the technological paradigm that arises in the information society is the usage of "information impact technologies", in which information means raw materials and the product itself. Later on, a network system arises, which is based on the dynamic connection of economic systems with the integration of fine technologies (microelectronics, telecommunications, optical electronics, computers, Internet and biotechnology).

4. The state should play a leading role in the development of scientific and technological progress; otherwise, the inability to develop a new state policy may lead to the collapse of statehood, as happened with the Soviet Union.

5. The information society is characterized by the fact that "an economy with a potential of operating as a single system in real time on a planet-wide scale" (Castells, 2000) brings to the forefront the most developed countries in terms of information technologies (the so-called "Group of Seven"), which excludes from the global economic system most countries, entire regions or certain categories of the world population.

6. According to the West European neoliberal The Doctrine of Free Trade, the economy becomes vulnerable from the point of view of technological dependence, since "shock therapy follows consumer euphoria" (Castells 2000, 102).

The theory of post-industrial society was widely spread in the late 20th – early 21st centuries. The terminology of its essence designation and interpretation was incorporated in international documents, which resulted in most countries, including Russia, creating and strengthening *the information economy* and creating *an information society* on its basis. (Sapozhkov, 2017)

However, the realization of this goal is increasingly alarming and is a matter of concern for many experts. Indeed, only recently such information and knowledge producing spheres as education and science were included in the traditional understanding of "soft power". Meanwhile, they possess such specific nature that contributes to both wide coverage and deep penetration of "soft power" into the cognitive domain. More and more scientists suggest thinking critically about the question: What is necessary and important for the further development of mankind nowadays – information or knowledge? How to distinguish between these categories? What is the fundamental difference between the information and the knowledge society?

3. Research Questions

Let us look at the theory of knowledge society in more detail, which was first mentioned in the works of P. F. Drucker, F. Machlup, R. Lane and others in 1960s. Peter Drucker was the author of such terms as "knowledge society" and "knowledge economy" (Drucker, 2007). In his work "Post Capitalist Society", he defines knowledge as a force capable of creating a new society: "Now we can only talk about creating an economic system based on knowledge" (Drucker, 2007). This term is crucial for building a new system of society.

In general, knowledge society is defined as "new stage of socio-economic development, almost achieved by advanced countries and is expected to be achieved by those who are behind in the global technological race" (Shamardin, 2015). The main feature of knowledge society is a special system of the effective production and reproduction functioning, as well as the transfer of knowledge firstly, not information (*World Report of UNESCO*, 2005).

The international consulting company Boston Consulting Group (hereinafter BCG) together with Sberbank of Russia, charitable foundation of Sberbank The first Gift of Life, WorldSkills Russia and Global Education Futures (an international cooperation platform uniting global education leaders), prepared the report "Russia 2025: from personnel to talents" (*The Boston Consulting Group*, 2017), proposing two options for the transition of Russia to knowledge society. Using the classification of Jens Rasmussen, the authors divide all those engaged in production into three classes (groups or strata). Firstly, the elite is "Knowledge", which includes people, who are mainly engaged in analytics, creative work, and can work in the conditions of excessive uncertainty, which is possible only having a good education. Secondly, the middle class "Skills", which includes people doing almost exclusively physical work and who make decisions within the framework of rules established by others. Thirdly, the lower class in hierarchy – "Rule" includes individuals with specific narrow knowledge, special training, therefore capable of engaging in routine technical work, repeating standard tasks.

If the share of the "Knowledge" group in economically developed countries is more than 25% today, then in modern Russia it is no more than 17% (the percentage indicates the presence of a transitional stage from a commodity economy to a knowledge economy). The reason why this lag appeared is in the development of the commodity economy, which does not require an increase in the number of educated people with fundamental knowledge. As a result of the ongoing reforms in the field of education, higher education "has lost quality, but has become universal". The number of jobs with a certain level of wages requiring specific qualifications (doctor, teacher, engineer, etc.) decreases every year, which leads to "labor poverty" when "any work in the country is paid about the same" (the difference between driver and doctor remuneration in Russia is 20%, in the USA it is 261%). Coherently, the motivation of people to choose qualified professions naturally reduces (Stepanova, 2017). In the current state, the higher education system is aimed at training employees of the "Rule" category, rather than "Knowledge", and does not build an additional education system as a fundamental element of the reproducing adult knowledge system as a guarantee of transition from one graduation group to another.

BCG, based on the analysis of the current situation, suggests two scenarios for the development of human capital in the Russian Federation by 2025. The first catch-up scenario is based on the current

employer's plans: in conditions of releasing the "Skill" and "Rule" categories without the "Knowledge" category. The second scenario is forward-looking, meaning a return to the system of state regulation, an increase in the share and an active role of the public sector in the economy. For this, according to BCG, it is necessary to create a demand for 4.5 million new employees of "Knowledge" by private employers and 4.7 million for companies until 2025 with state participation and government agencies. These measures will require a serious administrative reform at all management spheres – this is "the most difficult task, requiring a clear plan and changing the context in which both companies, employees and the state live", because such measures will initially cause an increase in unemployment among the "Skill" and "Rule" (*The Boston Consulting Group*, 2017).

4. Purpose of the Study

The greatest research interest is the application of the knowledge society concept to modern Russia. What features of its construction do domestic researchers mark? There are eight main steps in the development of human capital in Russia that can contribute to the creation of a knowledge society. Among them: a) creating competitive offers by employers with state participation for working conditions of the category "Knowledge"; b) reducing inefficient "social employment" with the redistribution of total payroll in favor of the "Knowledge" employees; c) introducing a system of personnel retraining from other categories; creating favorable business conditions in Russia, including stimulation of the innovative small enterprises development; d) restructuring the educational system should so that it prepares employees of the category "Knowledge" at priority rates; e) changing of the educational programs content is necessary by increasing the importance of personal and double subject competences as opposed to the development of subject knowledge and memorization of information; e) improving measures to stimulate the flow of talent in the field of education; g) orientating all to the need of permanent education throughout the life of the individual; i) implementing the professional growth stimulation system and obtaining new knowledge (Stepanova, 2017).

One can agree with almost all steps, except for one – an increase of the personal and double subject competencies share and a decrease of the knowledge and memorization of information share. Indeed, back in 2005, was published the UNESCO report "Towards Knowledge Societies", which identified the characteristics of a knowledge-based society: a) free access to knowledge; b) the development of an open society and participatory democracy; c) knowledge-based economy; d) network of knowledge and culture of innovation formation; e) free access to education and lifelong learning; e) scientific results are used in all spheres of social life; g) preservation of linguistic and cultural diversity (*World Report of UNESCO*, 2005).

Unlike the information society, which based on the achievements of information technologies, the knowledge society implies broader social, political, and ethical parameters. As N. P. Lukina and N. N. Samokhin noted, "Within the framework of the knowledge society concept, the following priorities were made: a more equitable assessment of existing knowledge to combat digital, cognitive and linguistic split that has developed in the information society; greater participation of stakeholders in addressing the issue

of equal access to knowledge; more successful integration of political actions in the field of knowledge" (Lukina & Samokhina 2013, p. 22).

5. Research Methods

The methodology of the present scientific research consists in the use of hermeneutics, methods of legal and political texts interpretation and formal-logical tools, scientific works system analysis of studied theories representatives. The study showed that in modern scientific political science, sociological and legal literature, considerable attention is paid to the analysis of the relationship between individuals in the field of information economy, Internet, as well as the need to change the education system to implement the powers in a post-industrial society. At the same time, the analysis of information as such, its differences with knowledge, methods of determining the reliability and direct influence on the formation of a person in the information society, are not always in the spotlight. It draws attention that the problems of economic society development take priority sometimes, while overestimating the role and importance of information as opposed to knowledge can lead to irreversible consequences. Therefore, it is necessary to remember the moral and ethical aspect of the educational process and differences between the information society and the knowledge society, as well as the significance of the latter for the further development of the entire world community.

6. Findings

Thus, the thesis about the development of creativity in individuals for the concept of the knowledge society, which has to be protected and encouraged, becomes especially significant. In this context, the attention of the high school expert community should be drawn to the unfairly forgotten ideas of Russian thinkers. The ideas of V.I. Vernadsky about the noosphere are not commonly discussed anymore. However, it can be considered truly a breakthrough, taking into consideration the importance of technological progress, science and technology in general; the great Russian scientist raised the question of the unity of man, nature and science. The study of the noosphere synthesizes the connection between the natural sciences and the social sciences, and reveals the relationship between the deep natural processes of the biosphere and the laws of the historical process. This teaching builds a new world picture, in which humans harmoniously coexist with science, nature and technology, and all social development is subordinated to the creation of fair and favorable conditions for the comprehensive personality development (Vernadsky, 2002).

It can be stated that such a development vector of the entire education will contribute to the emergence of not technocrats – managers engaged in profit making and searching for compliance with efficiency indexes, but in the forming of socially responsible personnel for the entire system of state administration. The task of public administration is to create conditions for increased individual opportunities, which can be realized only in the "space of integration, solidarity and participation". Only in a knowledge society is it possible to achieve a dialogue between the cultures of various nations and countries, which will lead to the creation of new forms of democratic cooperation that will contribute to the achievement of true semantic understanding (Vernadsky, 2002).

Therefore, the task of the human community in modern conditions is not only to organize the free transfer of information and to guarantee the right to access information to each individual, but to provide an opportunity to check this information for accuracy, compare it with other types of information, evaluate and interpret it using the general scientific methodology in order to create and reproduce a system of new knowledge by anyone. At the present stage of globalization, information and knowledge very much differ. Therefore, there is a unique way for the further development of mankind – creation of a knowledge society as “a synthesis of the achievements of the information society, an economy based on knowledge, a learning society, always learning throughout life” (Lukina & Samokhina 2013, p. 25). Thus, the noosphere education is on the agenda of domestic universities.

In a knowledge society, priority should be given to teachers and researchers in the field of social sciences and humanities. Only they will be able to take “responsibility” for the revival of a critical and humanistic traditions, called to question the validity of political decisions in the field of scientific research, the development of new technologies, risk management, crisis management, environmental protection, education, health (*World Report of UNESCO*, 2005).

Meanwhile, different mechanisms and tools began to be widely introduced in the educational sphere. This fact lead Russian society from a knowledge society to an information society. Many modern educational and scientific practices began to spread widely in Russian education system just after Russia's accession to the Bologna Process, such as general scientometrical indicators (cited in foreign databases) or absolutization of remote education instead of classroom education, rating approaches and testing as the main mechanism for controlling knowledge. Without denying some of the positive characteristics of this process, namely, the possibility of scientific and pedagogical exchange, it seems that the main task of the Bologna process now is forced inclusion of the Russian education system into the global one in order to abandon the traditional system. Traditionalism in this case is a philosophy of education that meets the concept of “knowledge”, and this concept, unlike the category of “information”, has a moral and ethical component consisting in the ratio of freedom and responsibility.

7. Conclusion

What will happen to Russia in the 21st century: should we “catch up” with the United States and Western European countries in their information society or re-create our lost knowledge society? The answer to this question is given in the book about the information age, written by Manuel Castells: “Russian people will have to go through the “restoration of their collective identity in the world”, where the flows of power and money are trying to disintegrate emerging economic and social institutions even before they are completely formed, in order to absorb these institutions in their global networks”. At the same time, anticipating the proposals of BCG, the thinker warns that “social segmentation and social “exclusion”, which go hand in hand with the global economy, can develop in Russia even further, without meeting resistance” (Castells, 2000). Overall, our results demonstrate that to avoid such a situation, it is enough: 1) to “give” students “knowledge”, which, unlike the category of “information”, has a moral and ethical component, which consists in the ratio of freedom and responsibility – basic sciences, instead of information; 2) form analytical competencies instead of personal and double subject competences in

students, which provide an opportunity not only to perceive information, but also to critically analyze it and to apply it.

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