

Culture of economy in the digital society

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Abstract— The article deals with the problem of using digital technologies in the modern economy, and the impact of these technologies on the content and nature of the culture of the economy. Identified specific ways to improve the digital economy in the context of a culture of the economy and overcome the contradiction between its traditional and innovative values. The characteristic of modern concepts of culture of the economy is given. The authors revealed a fundamental contradiction between the traditional (absolute) values of culture and the values of the "digital society". The ways of overcoming this contradiction based on the symbiosis of different value systems are shown. It has been proposed that the culture of the economy as a value system should be the dominant in the transition to a "digital society" and a "digital economy". The main prerequisites for such a transition are, firstly, the growing importance of intellectual assets (capital) of firms and, secondly, the development of the creative potential of the individual (employee).

Keywords— business culture, digital society, digital economy, digital technologies.

I. INTRODUCTION

The concept of "digital society" still does not have a clear and monosemantic definition. There are various definitions of it, from ideas about it as "a new slave-owning society with people-controlling machines", to its definition as an "electronic society" where a person masters the forces of advanced technologies and successfully uses artificial intelligence.

The creation of an "information society" is going on at different rates. The United States plans to complete its creation by 2020. Japan and the developed countries of the European Union - by 2030, Russia and the CIS countries - by 2050. At the same time, different countries are facing with various negative effects of the digital revolution and various problems that need to be addressed while building digital society. In this connection, a peculiar situation arises named «practopie» [1].

In the conditions of the new modernization in Russia, the formation of a new type of economy culture, influenced by the specific digital paradigm, becomes an urgent problem. It can be stated the intellectual capital value of the highly experienced experts is increasing and that is associated with the acceleration of the innovation process and its phases: periods of generation, conceptualization, optimization and execution [2]. As a result, the creative potential of the individual and its successful implementation become a

general feature of the modern culture as well as in the economy in "information society".

II. OVERVIEW OF SOURCES

The problem of studying culture of the economy has its own history. Among the early works on this issue are the writings of F. Bastia, F. Bacon, M. Weber, C. Helvetius, T. Dézamy, W. Sombart, E. Cabet, T. Campanella, J. Locke, J. Mill, T. Moore, R. Owen, P.J. Proudhon, J.-J. Rousseau, C. Saint-Simon, A. Smith, S. Fourier, D. Hume, A. Ure.

In the twentieth century, E. Agazzi, P. Buchanan, T. Veblen, F. Guattari, G. Deleuze, J. Derrida, A. Camus, T. Kuhn, P. Kurtz, I. Lakatos, D. Markovich, H. Marcuse, L. von Mises, E. Mounier, M. Novak, T. Parsons, A. Peccci, H. Plessner, W. Reich, A. Rich, A. Toffler, E. Fromm, M. Foucault, F. Fukuyama, J. Habermas, M. Heidegger, F. von Hayek, R. Holmes, M. Scheler, T. de Chardin, L. von Stein, K. Jaspers were involved in research on the culture of the economy.

The works of G. Becker, H. Baudouin, P. Brook, P. Drucker, M. Clark, A. B. Carroll, R. Mitchell became certain milestones in the history of the research in that field. Concrete theories appeared: corporate culture, work culture, business ethics, consumer culture, environmental culture, etc.

Among the authors who consider the culture of the economy in the context of the formation of the digital economy, one can mention B.M. Garifullin, Yu.V. Gnezdov, V.V. Zyabrikov, V.V. Morozov and others. Among foreign works, we mention publications by A. Brooking, R. Winer, W. Gates, T. Kuhn, P. Krugman, S. Lem, J. Naisbitt, C. Perez, A. Toffler, R. Waterman, F. Fukuyama, etc.

V.S. Rusova (health), V.Yu. Lapenkov (consulting), Bezuevskaya V.A., Pronina Z.Yu., Tagirov V.Zh. (education), S.A. Lebedeva, D.V. Shershunov (tourism), etc., have devoted their work to specific aspects of the culture of the economy in the format of the digital economy.

III. METHODS

The article uses the dialectical approach, structural-functional, program-targeted, historical-retrospective and hermeneutic research methods. The subject of the research is the development of the digital economy and its relationship with the modern culture of the economy. The object of the research is the culture of the economy as a system of values, norms and rules of human economic activity.

IV. RESULTS

All modern concepts of the culture of the economy contain its one-sided interpretation. The culture of the economy is identified with social engineering and reduced to enrichment (of individual subjects and social groups). In recent decades, various theories of cultural management have emerged: concepts of corporate culture, organizational culture, ecological culture, stakeholder theory (E. Freeman), theory of contact audiences behavior, etc. In varying degrees, they lie in the development of behavioral economics. However, within these theories, cultural values acquired a rather peculiar hierarchy. Mercantilist values, ideas of rationalism, hedonism, pragmatism come out on top. Currently, there are a number of "new" modalities in the culture of the economy: the concepts of corporate sustainability (J. Elkington), corporate altruism (The Committee for Economic Development, USA), corporate egoism (M. Friedman), sensible egoism (Enlightened Self-interest), "Network" culture (D. Godpaster), etc.

But in each of these concepts, the motive of profit maximization remains unshakable, and the moral aspects are poorly expressed.

This circumstance is explained by the fact that modern economics is viewed by many researchers as having no relation to culture, "value-neutral" (V. Avtonomov, V. Tambovtsev, L. von Mises, etc.).

Against this background, a modern digital economy is being formed, which is also defined in different ways [3; 4; 5; 6]. Its prerequisites are:

- exponential growth of information (by 2020, this volume is expected to be 44 trillion gigabytes);
- expansion and cheapening of computing and data storage capacities;
- advances in machine learning technology and analyzing of computer data.
- The main features of the modern digital economy are:
- automation of a growing number of processes;
- accumulation of a large amount of data from specific users;
- increase in user access to data arrays in external sources;
- new methods and algorithms for processing large amounts of data.

«2017–2030 Strategy for the Development of an Information Society in the Russian Federation» was approved by the Decree of the President V. Putin in May 2017. The state program Digital Economy of the Russian Federation was approved in June 2017.

Among the variety of approaches to define what is «digital economy», the analysis of its relationship with the culture of the economy is traditionally beyond the scope of researchers. Ignoring or even simply weakening this connection leads to a conflict between the traditional values of the culture of the economy (principles of social justice, social responsibility, social security, social partnership, etc.)

and the values of the information society (rationalism, pragmatism, hedonism, selfishness, dehumanization of social and economic relationships, etc.). The result of this process is a crisis of personality [7; 8] with a negative impact on all aspects of human life. At the same time, the fact that "mathematical tools have their own development logic and is often implemented without any meaningful behavioral interpretation" is often forgotten [9].

New formats of up-to-date digital economy (crowdsourcing, crowdfunding, blockchain, etc.) and new technologies (3-D, GPS or DIY-biology, etc.) leave the moral values of culture and direct interpersonal communication. Virtual communication via Skype, GLONASS, etc. cannot be considered definitely as a kind of interpersonal communication. It is the same as the difference between cash payments and non-cash transfers through the Swift, Visa, MasterCard, American Express systems. In other words, completely non-identical formats of activity.

As for cultural values, they are gradually devalued under the influence of the negative projections of the digital economy, including management dehumanization, personality splitting (schizis), disincarnation of economic activity, limitations of artificial intelligence and the limitations of digital technologies. [10].

In the conditions of the modern industrial revolution and the transition to a new technological order, it is necessary to search for and develop adapting mechanisms for new technologies of the digital economy and the traditional cultural values of the economy. This is also due to the fact that different rational behavior models, developed by economists, not only contributed to the mathematization of economics and emasculated the cultural context from it, but also gave rise to a serious problem. The essence of this problem lies in the fact that mathematical models (scenarios) of development (behavior) are sometimes divorced from life, and economics itself turns into an abstract intellectual game that has no any relevancy to everyday life. There is a fundamental contradiction between the new quality of scientific knowledge in a digital economy and the objective reality surrounding a person.

The dialectical contradiction, as is well known, can be "removed" only in two ways: either by synthesizing the old and the new, or destroying the old or rejecting the new. Obviously, only the first method corresponds to the national interests of our country.

Removing the considered contradiction between the newest digital technologies and the traditional principles of economic culture is possible while synchronizing the introduction of new technologies in the practice of management and organization of production. It is known, for example, that significant depreciation of fixed assets on Russian industrial enterprises or the infrastructure of so-called «depressed» territories does not allow for the effective use of digital technologies, since these technologies do not take into account the degree and nature of such depreciation. Therefore, when implementing digital technologies, it is necessary, first, a detailed inventory of fixed assets and working capital of these enterprises – all of which need to be applied to such digital technologies. This is consistent with

the principles of emergence and polysemy, which come to the fore in the formation and development of the digital economy.

It is obvious that at the present time there is a change in the whole architectonics of the principles of the economic culture. And such a tectonic change cannot occur spontaneously, in the framework of autopoiesis (N. Luhmann), on the basis of random "pizoma" (G. Deleuze) or "plateaus" (F. Guattari). It would be rational to create certain theoretical and methodological matrices combining new principles, rules and technologies of the digital economy with the already functioning components of the economic culture. This would allow to form a new creative type of economic consciousness more successfully and provide the least painful transition to a new technological order without significant social and economic losses.

When developing new approaches to the culture of the economy (theoretical and methodological matrices, cross-cultural communications, etc.), it should be taken into account that the ratio of the values of traditional culture and the innovative values of the digital economy is constantly moving. The turbulence of their correlation should be taken into account when developing various scenarios for the sociocultural development of society. In particular, it is necessary to take into account that in modern culture and education there are a variety of approaches to explaining the emerging new reality (conservatism, liberalism, behaviorism, etc.).

In the digital era, new, active methods of education play a significant role in the development of the problematic field of economic culture. The role of the teacher is changing dramatically with the use of modern, especially interactive, educational methods. It ceases to be central, it only regulates the process and deals with its overall organization, prepares the necessary tasks in advance and formulates questions or topics for discussion in groups, gives consultations, controls the time and order of the implementation of the plan. Is it good or bad – this question is quite debatable. The education system in Russia has always been built on the decisive role of the teacher in the educational process, on teacher's «live» contact with students. This role was not limited to informing, but also included the mentoring and education of students. Modern information and educational technologies change the situation. In the modern information society, the educational process is increasingly becoming virtual, the "portrait" of education and science is changing significantly.

At the same time, the use of interactive forms and teaching methods in the learning process allows students not only to master the content of their future profession, but also to connect active forms and types of professional activity with practice. And that means faster adapting to the demands of the digital economy.

Interactive methods of teaching history allow future specialists to develop the skills of searching and processing information in «independent mode», the basics of the culture of communication and discussion of the results, norms and rules of joint activity, etc.

The peculiarities of the digital economy in Russia is explicit focus on manufacturability (with detriment of the

traditional values of culture) as well as its multidirectional nature. It is manifested in the territorial and sectoral aspects. For example, the economic landscape of the country is no to be a single space, being divided, on the one hand, into the so-called subsidized and depressed regions, and, on the other hand, of the «territory of social and economic advancement» (in Russian «TOP» - «Территория опережающего развития»). The procedure for the formation of such territories is regulated by Federal Law No. 473 "On the creation of advanced development territories" dated December 29, 2015 and determines their legal status and terms.

The obvious lag in the use of digital technologies in the industrial sector and in the agrarian economy, practice of application in the provinces (periphery) and in the urban space (megalopolises, urbanization, etc.) is an example of sectoral multidirectional development in Russian digital economy [11].

In this regard, in modern conditions, fundamentally new tasks arise.

First, a more consistent combination of digital technologies with the priorities of the state socio-cultural development, specially the need to "preserve and develop culture and traditional Russian spiritual and moral values" [12].

Secondly, a more active use of digital technologies in remote areas of the country (the Far North, Siberia and the Far East) and the development of sufficient information communications there.

Thirdly, the more active distribution of digital technologies in agricultural areas, the creation of a denser network of its digital coverage.

Fourthly, more active implementation of digital technologies in agricultural production, considering its specificity.

Fifthly, overcoming the lag in the information support of the social sphere of rural areas, which is a vital condition to cover the existing social, economic and demographic imbalances between town and country.

Sixth, the early development of more reliable, long-term and independent (independent of exogenous factors) models and systems of the digital economy (following the example of the Mir payment system, etc.), considering geopolitical, socio-demographic and climatic changes on the planet.

Seventh, further «greening» of digital technologies, warning of the growing risks, instability and uncertainty in various segments of the modern global economy.

V. DISCUSSION

The development of the digital economy is an important vector of modern neo-modernization and is aimed to accelerate socio-economic development. The nature of modern society largely depends on the quality of the digital economy. In general, the prospects of such development are assessed quite positively [13].

The most important factor in the successful transition to a new stage of building the “information society” is the development of education as Massive Open Online Courses (MOOCs) [14] that allow to solve the problem of preserving the national culture values and, at the same time, master the latest achievements of knowledge-based economy.

The transition from the initial to the next phase of the digital economy is also associated with the formation of artificial intelligence and the partial replacement of human in the production processes. It is assumed that the transition will allow a man to adapt to the challenges of time successfully. This means that «renewing companies will treat information as their main strategic resource, and adaptability – main strategic weapon» [15].

VI. CONCLUSION

The revealed contradiction between the traditional (absolute) values of spiritual culture and the new (functional) values of the “digital society” has its causes, specificity, dynamics and consequences. One of the most important reasons for this contradiction is the economic dynamics itself, which illustrates the different development rates of different areas in the modern economy. In particular, the economy of education and the economy of the real sector. It turns out that in some areas, education and culture are ahead of the economy of the real sector. In fact, the result is advanced digital technologies that are “ahead of their time”. In other cases, the economy of the real sector is ahead of education and culture, which is illustrated by the unreadiness of society to switch to new technologies, for example, when it comes to ousting an employee from the production sector and there is a threat of rising unemployment.

Maintaining a balance between culture and education, on the one hand, and the real economy, on the other, is a new manifestation of the fundamental scientific problem of macroeconomic balance. The only difference is that if previously various models of such a balance (A. Marshall, V. Pareto, N. Kaldor and others) were built on the evolutionary cyclical dynamics of socio-economic processes, then the modern economy demonstrates the explosive, revolutionary nature of such dynamics. One can argue about the acceleration of economic development and, at the same time, the bifurcation of social and economic processes.

New industrial revolution and the transition of society to a new technological order is the basis of such changes in the field of economic dynamics, which turns out to be not only turbulent, but also objectively leads society to a point of singularity (non-return), after which the whole world will fundamentally change. Scenarios of such a change (the uprising of machines, the spread of cyborgs and the displacement of man himself from the sphere of economic activity by artificial intelligence) have long been registered not only in Hollywood films or in fiction books, but also in scientific publications.

Accordingly, the economic culture should accelerate in its development, acquire a synchronous algorithm in order to keep up with the baseline.

However, any acceleration in the development of a phenomenon (economy, culture, education) creates conditions for growing uncertainty, instability and risks. And here axiology is the most important condition for progressive development. Further study of this problem suggests four fundamental conditions for a successful symbiosis of the experience of the cultural development of society (ethnic group) and its future existence. These conditions are reduced to the need to update the following principles: the principle of social security (human and society), the principle of social justice, the principle of social responsibility (responsibility of government and business to society) and the principle of social partnership (rejection of forced-violent scenarios for building social relations). These culture of economy principles form a certain theoretical and methodological matrix that has a multidimensional character.

This “square” of cultural determinants in the economy correlates with different levels of social ontology. That correlation makes it possible to solve tactical and strategic tasks to develop the “digital society” without devaluing culture and significant social costs. It must be emphasized that the training of new personnel for the digital economy in current neo-modernization should not be the subject to erosion.

REFERENCES

- [1] E. Toffler, “The third wave”, AST, Moscow, p. 784, 1999.
- [2] E. Brooking, “Intellectual capital. The key to success in the new millennium,” SPb.: Peter, p.288, 2001.
- [3] Yu.V. Gnezdova, “The development of the digital economy of Russia as a factor in improving global competitiveness,” Management in Russia and abroad, No. 2, pp. 54-61, 2017.
- [4] “Strategy for the development of the information society in the Russian Federation for 2017–2030 (project),” <http://static.kremlin.ru/media/acts/files/0001201705100002.pdf> (request date 12.02.2019).
- [5] “Economics API” <http://www.ibm.com/middleware/integration/ruru/api-economy.html> (appeal date 12/02/2019).
- [6] “Gartner Symposium,” ITExpo, 1–5 October 2017 Orlando FL. <https://www.gartner.com/en/conferences/na/symposium-us>
- [7] H. Skolimovski, “Philosophy of technology as a philosophy of man,” New technocratic wave in the West. Moscow: Progress, pp. 240–250, 1986.
- [8] V.V Slyusarev, T.M. Khusyainov, “The digital revolution and the existential crisis of the personality,” Age of globalization. Studies of modern global processes, No. 4 (28), pp. 145-151, 2018.
- [9] V. Avtonomova, O. Ananina, N. Makasheva, “History of economic studies,” Moscow: INFRA-M, pp. 784, 2004.
- [10] G.B. Kleiner, “System bases of digital economy,” Philosophy of economy, No. 1, pp. 131-142, 2018.
- [11] K.N Nevostruev, “Symbolic space of the city: a review of ideas and approaches,” Bulletin of the Perm National Research Polytechnic University. Series “Social and Economic Sciences”, No. 2, pp. 113-121, 2016.
- [12] «The National Security Strategy of the Russian Federation» (Approved by the Decree of the President of the Russian Federation of 12/31/15 No. 683): <http://static.kremlin.ru/media/acts/files/0001201512310038.pdf>
- [13] G.I. Idrisov, V.N Kniagin., A.L Kudrin., E.S. Rozhkova, “New technological revolution: challenges and opportunities for Russia,” Questions of economy, No. 4, pp. 5-25, 2018.
- [14] Sh. Young, “From “blasting” to innovations: about the future of the MOOK,” Education issues, No. 4 , pp. 21-43, 2018.
- [15] R. Waterman, “How best companies remain competitive,” Moscow: Progress, pp. 368, 1988.