

Trends and Perspectives of the Digitalization in the Eurasian Economic Union

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Abstract—In recent decades, the world economy is characterized by the processes of informatization and digitalization, which cause significant changes in all spheres of life. Over the past five years, many countries have been developing and implementing programs for the development of the digital economy. In this regard, the article analyzes the trends and perspectives of the digitalization in the Eurasian Economic Union (EAEU). Attention is paid to the challenges connected with the digitalization. It is argued that when developing a regulatory framework for the development of the digital economy in the EAEU countries, it is advisable to use a conceptual framework of their integration cooperation that includes the following components: system methodology, reproduction theory, ideology, and pragmatism.

Keywords—Eurasian Economic Union; digital economy; digital technologies; digitalization; information security; conceptual framework; challenges

I. INTRODUCTION

For the first time in the scientific literature, the term “digital economy” was used by the American computer scientist N. Negroponte in 1995 [11]. Numerous works [1, 2, 5–7] are devoted to this problem in the Russian scientific literature.

In scientific research, this issue is considered from different perspectives. Politics, legal norms, traditions and culture, the level of development of the economy, education, science and technology, as well as many other factors determine significant differences both in the level of development of the digital economy and in theoretical approaches to this problem in different countries of the world. As the experience of many countries indicates, the process of the transition to the digital economy is associated with many challenges, which should be analyzed and mitigated. This paper considers these challenges and their mitigation.

II. TRENDS AND PERSPECTIVES OF THE DIGITALIZATION IN THE EAEU COUNTRIES

One of the strategic goals of economic development of the EAEU member states (hereinafter referred to as the Union) is currently the transition to a digital economy. Within the framework of the EAEU, this goal was set in Decision of the Supreme Eurasian Economic Council dated 11 of October 2017 №12 “On the main directions for the implementation of the digital agenda of the Eurasian Economic Union until 2025” (hereinafter referred to as the “Main Directions”), which is a strategic planning document that sets goals, principles, tasks, directions and mechanisms of cooperation

among member states on the implementation of the EAEU digital agenda for the long term [8].

Adequate and correct solution of theoretical and practical issues related to digitalization implies the existence of a unified interpretation of such concepts as “informatization”, “digitalization” and “digital economy”.

In our opinion, informatization can be defined as the organizational socio-economic and scientific-technical process of creating optimal conditions for satisfying information needs and realizing the rights of citizens, government bodies, organizations based on the formation and use of information resources.

Digitalization is a modern stage in the development of informatization, characterized by the prevailing use of digital technologies for the generation, processing, transmission, storage and visualization of information, which is due to the emergence and dissemination (including increased economic and physical availability) of new hardware and software solutions [8].

The digital economy is a part of the economy in which the processes of production, distribution, exchange and consumption have undergone digital transformations using information and communication technologies [8].

In accordance with the Main Directions, it is proposed: to carry out digital transformation of economic sectors and cross-industry transformation, digital transformation of markets for goods, services, capital and labor, integration process management processes, as well as to ensure the development of digital infrastructure and digital process security [8].

As a result of the introduction of digital technologies, new opportunities are opening up for ensuring sustainable socio-economic development of countries. For example, digital technologies provide industrial production with a number of advantages, including:

- increased production flexibility due to its rapid reconfiguration, dynamic changes in the characteristics of the production process. This efficiency in production management creates a competitive advantage and, potentially, leads to increased profits;
- provides informational integration of the stages of the life cycle of products from its development to disposal, which allows us to efficiently and comprehensively solve problems not only of optimizing production itself, but also of quality, environmental safety, creating new business opportunities, etc. [6].

According to the Guidelines, the potential economic effect of the implementation of the digital agenda will increase the aggregate GDP of member states by 11 percent of the total expected growth of the aggregate GDP of member states by 2025. The indicated potential effect is almost 2 times higher than the possible size of the increase in the aggregate GDP of member states as a result of digital development without implementing a joint digital agenda [8].

The most significant sources of growth in the aggregate GDP of member states due to the implementation of the joint digital agenda may be factors such as the removal of obstacles and the development of the data industry, each of which will provide an annual GDP growth of 0.3 percent and 0.2 percent, respectively. At the same time, it is expected that the implementation of the digital agenda can provide employment growth in the ICT industry in the digital space of the Union by 66.4 percent by 2025, which is almost 50 percent more than in the case of the digital development of Member States without the implementation of a joint digital agenda. Three stages of the implementation of the digital agenda have been identified: the first stage (until 2019) – modeling of digital transformation processes, elaboration of the first initiatives and launching of priority projects taking into account priorities for developing initiatives according to the application; the second stage (until 2022) – the formation of digital economy institutions and digital assets, as well as the development of digital ecosystems; third stage (until 2025) – implementation of digital ecosystem projects and digital collaboration cooperation at the global, regional, national and industry levels [8].

The implementation of the digital agenda is based on the use of information and communication technologies (ICT), which is provided for by Art. 23 of the Treaty on the EAEU and the Protocol on Information and Communication Technologies and Information Interaction within the Eurasian Union (Appendix 3 to the Treaty on the EAEU). This Protocol is designed to determine the fundamental principles of information interaction and coordinate its implementation within the Union, as well as determine the procedure for creating and developing an integrated information system. It provides for the creation, as well as ensuring the functioning and development of the EAEU integrated information system, which will provide information support in such important areas as customs and tariff and non-tariff regulation, technical regulation, application of sanitary, veterinary and sanitary and quarantine phytosanitary measures; crediting and distribution of import customs duties; crediting and distribution of anti-dumping and countervailing duties; competition policy; energy policy; monetary policy; intellectual property; financial markets (banking, insurance, foreign exchange market, securities market); industrial and agricultural policy; circulation of medicines and medical devices and others.

The main priorities for the implementation of the digital agenda of the Eurasian Economic Union until 2025 include: 1) digital traceability of the movement of products, goods, services and digital assets; 2) digital commerce; 3) digital transport corridors; 4) digital industrial cooperation; 5) Agreement on the circulation of data (including the protection of personal data); 6) the system of regulatory "sandboxes" [8].

In the Decree of the President of the Russian Federation dated 5 of May 2018 №204 "On National Goals and Strategic

Tasks of the Development of the Russian Federation for the Period until 2024", ensuring the accelerated implementation of digital technologies in the economy and social sphere is identified as one of the main national development goals of the state and society for the period up to 2024 [10].

In accordance with this Decree, the Government of the Russian Federation, together with the state authorities of the constituent entities of the Russian Federation, is assigned a number of strategic tasks to achieve this goal, including the introduction of digital technologies and the creation of platform infrastructures in the areas of public administration and the provision of public services, including in the interests of the population and small and medium-sized enterprises, including individual entrepreneurs; the transformation of priority sectors of the economy and the social sphere, including healthcare, education, industry, agriculture, transport and energy infrastructure, financial services, through the introduction of digital technologies and platform infrastructures; ensuring information security based on domestic developments in the transfer, processing and storage of data that guarantees the protection of the interests of individuals, businesses and the state [10].

In order to develop the digital economy in the Russian Federation, Decree №203 of the President of the Russian Federation dated 9 of May 2017 approved the Strategy for the Development of the Information Society in the Russian Federation for 2017–2030. The purpose of this Strategy is to create conditions for the formation of a knowledge society in the Russian Federation, by which the document refers to a society in which the receipt, preservation, production and dissemination of reliable information taking into account the strategic national priorities of the Russian Federation is of paramount importance for the development of a citizen, economy and state [9].

The Strategy is designed to help ensure the following national interests: a) human development; b) ensuring the safety of citizens and the state; c) increasing the role of Russia in the global humanitarian and cultural space; d) the development of free, stable and safe interaction of citizens and organizations, state authorities of the Russian Federation, local authorities; e) increasing the efficiency of public administration, developing the economy and the social sphere; e) the formation of a digital economy [9].

Thus, to digitalize the economy of Russia and the EAEU countries, a system of strategic planning documents has been formed. However, much work remains to be done to formulate and improve the relevant regulatory framework. As Professor N.V. Makareyko asserts, "defects of law, imperfection of legal regulation lead and will lead to significant costs." In this regard, in his opinion, there is a need to resolve a number of problems: determining the optimal ratio of law and other social regulators in streamlining relations in the digital economy; the problem of combining economic and informational relations; the problem of determining the optimal balance of legal regulation and self-regulated and self-regulation and a number of others. It is important to involve the expert community in the formation of relevant legislation [5].

III. CHALLENGES OF THE DIGITALIZATION

In shaping the digital economy, it is important to consider the numerous global, regional and national challenges associated with it. According to A.A. Volkova, V.A. Plotnikov and M.V. Rukinov, these challenges include:

- the rise of cybercrime. For example, according to Microsoft, in the first quarter of 2017, 14.8% of computers in Russia were exposed to malicious software (in the whole world this indicator was 9%);
- technological vulnerability of the created digital infrastructure. An example is the blackout in Venezuela in March 2019, or typical (unfortunately) in Russian cities situations of mass evacuation of cars due to an idle service for paying for parking lots, a return to the “live” queue in case of problems in the electronic queue system in state institutions, etc.;
- rapid obsolescence of equipment and, as a consequence, the presence of a problem of its disposal. If the problem of nuclear waste disposal is in the focus of public attention and rather serious legislative regulation, the problem of handling “electronic waste” is rarely raised. Meanwhile, according to the UN, each year the world produces up to 100 million tons of “electronic waste”, not more than 20% of this volume is processed in accordance with environmental requirements. With the development of the digital economy, its effects harmful to the environment will increase;
- an increase in technological dependence on foreign suppliers and, as a consequence, weakening of technological and economic security both at the level of the country as a whole and of individual industries and enterprises [2].

IV. CONCLUSION

It should be noted that with the further digitalization of the world economy, the list of these challenges may increase and become more complicated. In this regard, it is advisable, when developing an appropriate regulatory framework, to use the conceptual framework for enhancing the integration interaction of the EAEU member states, developed by Professor L.N. Krasavina and including the following components: systemic methodology, reproductive theory, ideology and practicality [3,4]. Due to its extreme relevance and importance, the problems of the development of the digital economy seem to require careful study in terms of the indicated conceptual framework in the interests of ensuring sustainable socio-economic development of the EAEU countries.

V. REFERENCES

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