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UPDATING MECHANISMS FOR DIGITALIZATION OF COOPERATION IN THE ECONOMIC SPACE OF THE EURASIAN ECONOMIC UNION

Abstract

Introduction. Currently, the EEU countries have the task of conducting digital transformation, so that all sectors of the real economy are comparable to those of the world's giants. Digital transformation of industry – the transition of the industrial sector from one technological structure to another in order to increase productivity and profitability. The digital spaces of countries are heterogeneous, so each country creates its own digital space.

Results. The article contains materials on the digital space of the Eurasian Economic Union, which is being formed for the integration of the EEU countries. The article describes the parameters of digital transformation of industry, which is carried out using the Eurasian digital platform and the services of the integrated information system of the Union in cooperation with the Eurasian network: industrial cooperation, technology transfer and technology platforms.

Methods. The methodological basis of the research was the work of leading scientists on updating the mechanisms of digitalization of cooperation in the economic space of the EEU in order to study the parameters of industrial transformation taking into account the global challenges of digital transformation. The methodological basis of the study is formed by the general scientific principles of a systematic approach; analysis methods - logical, comparative, strategic, managerial and others.

Discussion. Therefore, focusing on the goals of digital transformation of industry, we recommend: creating a system for evaluating and rating organizations; identifying systemic problems; implementing best practices and digital industrial technologies; establishing cooperation with third countries; identifying financial instruments to encourage the introduction of

digital platforms in industry; stimulating interaction between business communities of member States; creating a system for cataloging industrial products of member states.

Keywords: EEU, digital space, transformation, industry.

Introduction.

To implement the event on digital transformation of industry in the Eurasian Economic Union (EEU), normative legal acts are being adopted in the following areas:

- digital transformation of economic sectors (in industry);
- general «digital» agenda aimed at creating a common digital space.

The priority direction of industrial cooperation within the framework of the EEU is the creation of conditions for the digital transformation of industry in the member states and the formation of a single digital space for industry.

Creating the conditions for digital transformation the industry is implemented to enhance industrial cooperation in scientific-technical, innovative industrial sector, development of industrial-innovative infrastructure, modernization (technical retooling) of operating manufactures and creation of new innovative sectors of the member states of the EEU.

The plan for the development of acts and measures for implementation provides for the implementation of the following measures:

- analysis of world experience in industrial development;
- development of the concept and creation of conditions for the digital transformation of industry and the formation of a single digital industrial space;
- provides other tools for industrial cooperation that are closely related to the digital transformation of industry and the formation of a single digital space for the EE industry:
- priority economic activities for industrial cooperation of the EEU member states;
- creation of the Eurasian network of industrial cooperation and subcontracting and the Eurasian network of technology transfer;
- spreading the practice of creating and ensuring the functioning of industrial and innovative infrastructure facilities;
- the formation of the Eurasian technology platforms;
- list of priorities for cooperation between member States to accelerate technological modernization and increase the innovative activity of organizations.

Analysis of recent research and publications.

The Union digital space is formed for the integration of countries and their inclusion in the transformation processes, but since these spaces are heterogeneous and multi-layered, each country participates in the formation of their own space in other countries [1].

The Council of the Eurasian Economic Commission recommends that member States ensure the development of: digital industrial cooperation, transformation of industrial cooperation and industry of the member States in accordance with [2-4].

Scientists of the Union member States studied the problems of changing industrial policy in *Russia*: O. S. Sukharev [5], E. M. Primakov [6], E. V. Bodrova, M. N. Gusarova, V. V. Kalinov [7]; *Belarus*: V. F. Baynev [8], A. E. Daineko [9], A.V. Danilchenko[10], S. S. Sidorsky [11], A.M. Filiptsov [12]; *Kazakhstan*: M. T. Kezhebayeva [13], A. S. Zhuparova [14], N. K. Nurlanova [15]; *Kyrgyzstan*: G. A. Turgunbayeva [16]; *Armenia*: A. S. Bargesyan [17], A.V. Vagharshakyan [18].

Purpose.

The purpose of the study is to study the parameters of industrial transformation in the EEU.

Research methodology.

The methodological basis of the research was the work of leading scientists on updating the

mechanisms of digitalization of cooperation in the economic space of the EEU in order to study the parameters of industrial transformation taking into account the global challenges of digital transformation.

The methodological basis of the study is formed by the general scientific principles of a systematic approach; analysis methods - logical, comparative, strategic, managerial and others.

Results.

Analysis of the main economic indicators shows that the volume of industrial production in January 2020 amounted to 94,4 billion us dollars and increased compared to January 2019 in constant prices by 1% (in January 2019 compared to January 2018 – by 2%).

Indicators of industrial production by type of economic activity (January 2020 in % to January 2019 in constant prices) are shown in table 1.

Table 1. Indicators of industrial production by type of economic activity*

Indicators	Armenia	Belarus	Kazakhstan	Kyrgyzstan	Russia
Industry	113,4	94,2	104,1	100,8	102,1
Mining and quarrying	138,7	96,4	102,8	111,0	105,4
Electricity, gas, steam and air conditioning	109,1	89,5	96,5	105,6	101,8
Water supply; sewerage system, control over waste collection and distribution	88,9	101,1	102,5	95,6	96,3

*Source: systematization of authors based on [19].

In January 2020, Russia accounted for 8,6% of the total industrial production of the EEU, Kazakhstan – 6,5%, Belarus – 4,3%, Armenia and Kyrgyzstan – 0,3% each.

The digital transformation of industry provides for the implementation of a set of measures aimed at developing industrial cooperation and creating conditions for the digital transformation of industry and is a stage of development that brings the economies of the member States to a higher level of technological development.

The process of transition of the industrial sector from one technological structure to another through the large-scale use of digital and information and communication technologies to increase efficiency and competitiveness. The goals of digital transformation of industrial cooperation and digital transformation of industry are shown in figure 1.

Goals
Updating integration cooperation mechanisms taking into account national agendas
Development of recommendations for defining strategies and tools

Figure. 1. The goal of the digital transformation of industry*

*Source: [20].

The main tasks of digital transformation of the industry are as follows:

- creation of information resources and mechanisms for industrial cooperation and cooperation;
- digitalization of industry, production, management and support processes;
- application of digital platforms in industrial sectors, increasing labor productivity and efficiency of use of production resources by automating production processes;
- improving the level of industrial safety (using information systems and digital platforms in production processes);
- formation of the industrial structure based on new organizational principles and modern technological base, a system of tools for digital transformation of industry.

The principles for implementing the digital transformation of industry are shown in figure 2.

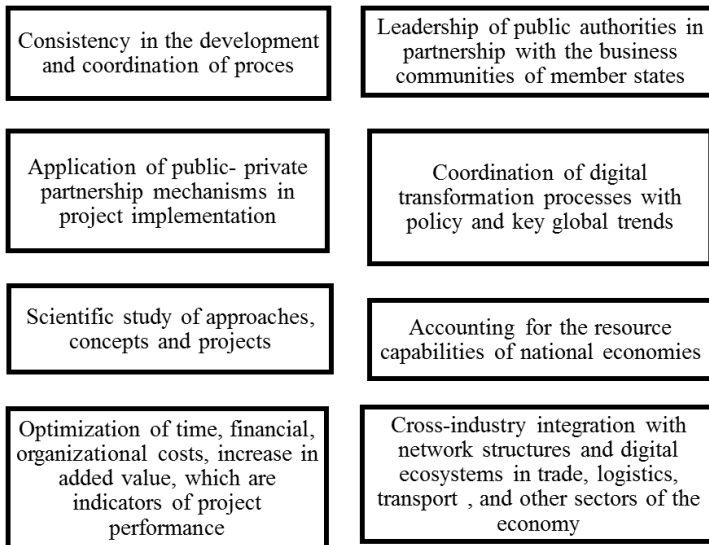


Figure. 2. Principles of digital transformation of industry*

*Source: [20].

Digital transformation of the industry is carried out taking into account the following measures:

- creation of an assessment and rating system (industrial enterprises, complexes and industries, objects of industrial and innovative infrastructure);
- the identification of systemic issues;
- the implementation of practices of digital and industrial technologies;
- the establishment of cooperation with third countries;
- identification of financial instruments to encourage the introduction of digital platforms in the industry;
- stimulating interaction between the business communities of the member states;
- creation of a system for cataloging industrial products of member states.

For the digital transformation of industrial cooperation and the digital transformation of industry, is recommended the development of:

- standardizations;
- information and communication infrastructure (broadband Internet);
- information security and data protection;
- means and systems (technologies) for electronic identification and tracking of production process elements;
- cyber-physical systems, including robotic complexes (Autonomous robots), sensors and sensors that provide real-time control and monitoring of production and technological processes, service-oriented architecture, network infrastructure (data exchange environment), application software for real-time monitoring and management;
- additive manufacturing;
- technologies of industrial (industrial) «Internet of things»:
- industrial platforms of the «Internet of things», inter-machine interaction, standardization of technological solutions in the field of wireless communications (radio frequency bands and communication protocols) for mobile platforms and the «internet of things», allocation of radio frequency bands (radio frequency channels) for these purposes;
- digital technologies that enhance the potential of industry's digital transformation:

- 3D modeling and prototyping, cloud computing and cloud infrastructures, blockchain technologies (including smart contracts), big data and its Analytics, augmented and virtual reality, artificial intelligence, digital B2B and B2C platforms («business for business», «business for the consumer»);
- digital platforms and ecosystems based on a common architecture and supporting infrastructure;
- other digital technologies in the industry.

Digital transformation of industrial cooperation and industrial transformation are being implemented in stages figure 3.

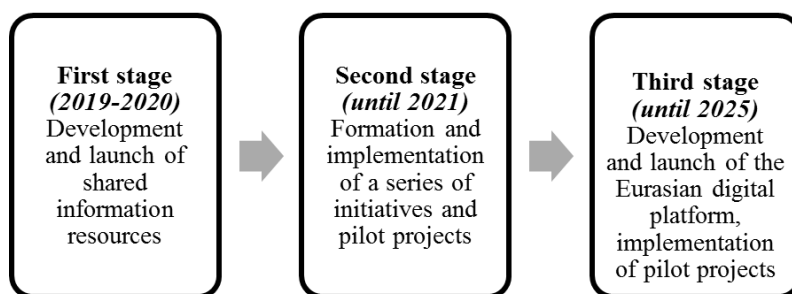


Figure 3. Stages of digital transformation of industry*

*Source: systematization based on the source [20].

Conclusions and discussion.

The digital space of the Eurasian economic Union presents new opportunities for the implementation of the goals, principles and stages of the digital transformation of industry within the Union.

The cooperation of Member States in the implementation of the digital agenda will stimulate and support new digital initiatives and projects, promote open, broad and equal cooperation between Member States, their business entities and citizens, increase the efficiency and size of the economy of each Member State, and transfer to a new level of economic, technological and social development.

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