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"Global Challenges and Prospects of the Modern Economic Development"****LEGAL ASPECTS OF INDUSTRIAL POLICY  
TRANSFORMATION IN THE CONDITIONS OF  
DIGITALIZATION**

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***Abstract***

The article substantiates the need to transform the industrial policy of the Russian Federation, taking into account the development of the digital economy. A modern regulatory system for industrial policy in the context of digitalization is defined. Some gaps in the legal support of digital industrial policy were identified, and practical recommendations were proposed to address them through the adoption of regulations. Despite the existence of national programs and a roadmap for the digital economy, the adoption of the federal law "On the digital economy in the Russian Federation" is required, which applies the conceptual and categorical hardware of the digital economy. It is necessary to create legal conditions for the formation of a single digital environment of trust, which allows providing participants in the digital economy with reliable digital remote communications. It is also important to ensure the adoption of the federal law "On the introduction of digital technologies in the industrial sector", which governs: 1) the creation of digital production in the main industries, 2) the mechanism for the application of artificial intelligence in the industrial production process, 3) the mechanism for attracting investments in digitalization of the production process, 4) the use of biometric technologies to ensure industrial safety, 5) cybersecurity issues (legal status of the subject of cybersecurity, mechanics of protection of participants in legal relations of industrial enterprises) policy in the digital economy, 6) a mechanism for stimulating industrial enterprises using digital technologies in the Russian Federation.

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**Keywords:** Digital economy, industrial policy, digitalization legal regulation, digital transformation, Artificial Intelligence, robotics.



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## 1. Introduction

Digitalization of the production process provides significant advantages in industrial development. Firstly, when digitized, production and management activity acquires some efficiency, quick decision-making, transparency of actions, and the pace of development increases. Secondly, due to the introduction of digital technologies in the production process, the quality of products is optimized (Demchenko, Ruchkin, & Simaeva, 2019). However, it is important to take into account the professionalism and competence of production entities, since digitalization requires additional knowledge about information processes in production, including the provision of information and cybersecurity. All these points need additional legal regulation, which also affects the activity of investment activity by private investors. In addition, when implementing high-tech solutions in industrial production sectors, it is recommended to assess the possible risks associated with various information failures and digital frauds. Since in the Russian Federation the process of digitalization of the economy and industrial production is only gaining momentum, one should think about information and digital security and adopt the relevant regulatory legal acts (The development strategy of the information society in the Russian Federation for 2017-2030 (2017).

Improving legislation in the field of industrial policy implementation is an integral component of reforming the legislative system of the Russian Federation. Prior to the adoption of the framework law, the Federal Law dated December 31, 2014 No. 488-FZ "On Industrial Policy in the Russian Federation" (Law No. 488-FZ) did not operate in the legal field the Russian legal acts designed to comprehensively regulate measures to support industry, as well as the development of its individual industries (Federal Law "On industrial policy in the Russian Federation", 2019). Often, normative acts were aimed at regulating innovative technologies and their application in basic industries.

## 2. Problem Statement

Today, speaking about the introduction of digital and information technologies in industrial production, it should be noted that the Law on Industrial Policy regulates the state information system, which is designed to significantly increase the effective implementation of industrial policy. The information system contains the necessary information about the state and trends of industrial development, the mechanisms of their relationship, the forms of cooperation of subjects of entrepreneurial activity, the results of the state program "Development of industry and increasing its competitiveness. Simultaneously, it is need to pay attention to the modernization of industries, taking into account the use of artificial intelligence and robotics. In other words, it is advisable to harmonize industrial and digital legislation.

## 3. Research Questions

Among the issues to be addressed in this study are the following. What is the advantage and importance of digitalization of industrial production? How justified is the use of artificial intelligence in production and how this process will affect the employees of an industrial process? It is also necessary to raise the level of legal regulation of the digital transformation of industrial policy in Russia.

#### **4. Purpose of the Study**

In this regard, the aim of the study is to develop practical recommendations for improving the legal regulation of the digital transformation of the industrial policy of the Russian Federation based on the analysis of problematic issues that impede the effective regulation of the processes of modern industrial production and digitalization in Russia and the regions.

To achieve this goal, appropriate tasks should be solved. Firstly, it is necessary to evaluate the current industrial legislation, the regulatory framework for digitalization and the use of artificial intelligence. Secondly, to formulate factors that impede the effective digital transformation of industrial policy in the Russian Federation.

#### **5. Research Methods**

A methodology for studying the problems of economic and legal regulation of industrial policy in Russia in the context of digitalization with the aim of further improving the directions of development of digital infrastructure is a synthesis of methods of legal science based on materialistic dialectics: comparative legal, formal legal, systemic legal (legal aspect), - with an analysis of basic parameters of the development of the digital economy (economic aspect). The formal legal (logical) method allows for the interpretation of the legal norms governing the development of industrial policy areas, taking into account the provisions of the national program "Digital Economy" in the Russian Federation.

#### **6. Findings**

In addition to the national program on the digital economy, the goals of the development of the digital economy are outlined in strategic documents of the Government of the Russian Federation. However, they are aimed at the development of digital technologies in themselves, outside the context of increasing the competitiveness of the manufacturing industry: "the formation of demand for advanced Russian digital technologies, products and platform solutions; providing support for Russian high-tech companies – leaders developing products and platform solutions for digital transformation of priority sectors of the economy and social sphere; development and implementation of roadmaps for the development of promising end-to-end digital technologies.

With the expansion of sanctions and restrictions, practical successes in improving Research Institute of the business climate, the state is inevitable will additionally refer to politics advanced development. Such a decision believes a greater emphasis on the development of national technological base, to support leading companies on man-made new sectors (Simachev, Kuzyk, & Pogrebnyak, 2018).

In view of the introduction of new production capacity to stimulate the most promising directions for further development may be the production, focused mainly on domestic investment and consumer demand in part. Such industries are ferrous and non-ferrous metallurgy, timber industry, chemical and petrochemical industry, food industry, automotive industry (Simaeva & Tyutyunnik, 2017). If we consider the level of industrial development of the Russian Federation in numbers today, it should be noted that in June 2019, the growth in industrial production amounted to 3.3% in annual terms after 0.9% in May. The largest increase in output was noted in the manufacturing industry (+3.4%). The mining

sector increased by 2.3%. At the same time, in 2018, a decrease in industrial production was observed in 18 of the 85 regions of Russia (Analytical center under the government of the Russian Federation, 2019).

At the same time, the digital transformation of industrial policy should include the ability to systematically introduce innovations in the production process. Innovation policy remains a key factor for development; his role is increasing against background to the transition to a digital economy. The result of innovation is innovation itself, providing, firstly, additional profit for the enterprise, second competitive advantage in the form of financial stability and a certain superiority over competitors (Moreva, Obolenskaya, Tyutyunnik, & Simaeva, 2018).

There are also widespread implications for policies supporting industrial innovation. Currently, it is increasingly recognized that innovations and their processes exhibit important industry specifics (for example, conditions for the accumulation of knowledge, acceptability and diffusion). These heterogeneities raise fundamental questions about how innovation should be supported by political intervention in a concrete and effective manner (Coad, Grassano, Hall, Moncada-Paternò-Castello, & Vezzani, 2019).

Today, Russia adopted the Artificial Intelligence Development Strategy, which is designed to improve the technological process in the industry. Artificial Intelligence – a set of technological solutions that allows imitate human cognitive functions (including self-learning and finding solutions without a predetermined algorithm) and to obtain results when performing specific tasks, comparable, at least, with the results of human intellectual activity. Complex technological solutions includes information and communication infrastructure, software (including using machine learning methods), processes and services for data processing and search for solutions (The National Strategy for the Development of Artificial Intelligence for the Period until 2030, 2019).

A very serious drawback of Law No. 488-FZ is that many state support measures are spelled out with the prefix “may turn out to be”, that is, their implementation is not charged with the responsibility of the relevant authorities (Tyutyunnik & Tolkachev, 2019). Obviously, this law should not be exclusively framework (as it is in its current version), but instrumental in nature, should become an effective organizational and legal instrument for modernizing Russian industry. In this regard, it is necessary to improve it in the following areas, namely: To register in this law articles containing support measures for all the most important complexes of industries (in particular engineering, food industry, etc.) (and not just the defence industry, as provided for in the existing version).

The adoption of the law on robotics should be comprehensively analyzed, and based on issues of ethics and public morality, and not just the convenience of legal technology. After all, without all-round interaction of the creators of robotic technology and artificial intelligence, programmers, sociologists, psychologists and, of course, lawyers will be impossible offer a balanced solution to any problem (Fedorina, 2018).

## **7. Conclusion**

Industrial policy as a system of relations between power and business is designed to stimulate dynamically changing technology priorities development. Undeniable the economic benefits of digital economics should be combined with priority factors that positively affect human century, which will reduce the risks of the fourth industrial revolution (Romanova, 2018).

The process of institutionalization of the digital economy is carried out in three stages: the formation of the e-government system, the information society and the digital economy. This process has its own specifics (it is predetermined by external factors, has the opposite nature and faces a lack of practical implementation of the government plan) – that is, it is created artificially (by the government) in contrast to existing economic practices. It is substantiated that Russia is peculiar for contradiction of interests of the state, which are established in the legal norms, and interests of the society, which are reflected in the economic practice, in the process of building the digital economy. This contradiction hinders the formation of the digital economy in Russia and reduces its global competitiveness (Belokurova, Pizikov, Petrenko, & Koshebayeva, 2019).

Thus, based on the current situation, we can distinguish the following areas of development of legislative support for the digital economy in the industrial sector:

1. First of all, the adoption of the Federal law “On the digital economy in the Russian Federation” is necessary, which defines the conceptual and categorical apparatus of the digital economy, the principles of state regulation of the digital economy, as well as the basic infrastructural elements of the digital economy (information infrastructure, information security), legal status, responsibility of legal entities in the digital economy;

2. Creation of legal conditions for the formation of a single digital environment of trust, which allows providing participants in the digital economy with the means of trusted digital distance communications (Simaeva & Tyutyunnik, 2019);

3. Adoption of the federal law "On the implementation of digital technologies in the industrial sector", which regulates: 1) the creation of digital production in the main industries, 2) the mechanism for applying artificial intelligence in the process of industrial production, 3) the mechanism for attracting investment in the digitalization of industrial process, 4) application of biometric technologies in order to ensure industrial safety, 5) issues of cybersecurity (legal status of the subject of cybersecurity, mechanism for protecting participants in law relations of industrial policy in the digital economy), 6) a mechanism to stimulate industrial entities using digital technologies in the Russian Federation;

4. Amending civil law, defining a legal mechanism for protecting intellectual property rights and intellectual property results, including a mechanism for capitalizing intellectual property results;

5. Introduce amendments to tax legislation aimed at stimulating the development of the digital economy, provide for a special tax regime for subjects of industrial production in the digital economy;

6. To envisage the legal regulation of off-drills in the field of industrial technologies and the use of artificial intelligence. Among them are robotics for the implementation of individual tasks of the industrial process, robotic production participants, machine learning and big data analysis for the development of industry areas.

7. To provide participants of the production process, subjects of industrial policy with digital skills, raising the level of digital literacy through the adoption and implementation of state programs, both at the federal and regional levels.

Innovation and structural change are the driving force behind inclusive and sustainable development. Technological change allows countries to modernize their production system, thereby

ensuring conditions for entering foreign markets and the possibility of growth based on exports (UNIDO Inclusive and Sustainable Industrial Development Organization, 2016).

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