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Transformation of business models in the mode of the Russian economy digitalization

La transformación de los modelos de negocio en el modo de digitalización de la economía Rusa

NOSOVA Svetlana S. 1; MAKAR Svetlana V. 2; GERASIMENKO Tatiana I. 3; MEDVEDEVA Olga E. 4; ABDULOV Rafael E. 5

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ABSTRACT:

The article was assessed for the role of digital business as a factor for the growth of the Russian economy, which ultimately contributes to the creation of a new technological foundation for overcoming turbulence in the modern Russian economy and solving the problems of coordinating actions on a global scale; we developed the mechanisms for implementing the digital model of modern socio-economic development of Russia, creating basic strategies for solving practical problems in forming the prestige of the domestic business and the Russian state as a whole. **Keywords:** business models, digital economy.

RESUMEN:

Se presenta una evaluación del papel del negocio digital como un factor del crecimiento de la economía rusa, que al final contribuye con la creación de un nuevo fundamento tecnológico para superación de la turbulencia en la economía moderna de Rusia y solución de problemas de la coordinación de las acciones a escala mundial; están elaborados los mecanismos de la realización del modelo digital del desarrollo social y económico moderno de Rusia, que va a crear las estrategias básicas para la solución de problemas prácticos de formación del prestigio del negocio nacional y del estado ruso en total. **Palabras clave**: modelo de negocio, economía digital.

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1. Introduction

Digital business is a general term used to denote the production of goods and services using digital technology, with a focus on automating a firm's business processes. Some view digital business as work in social networks and with clouds. Among the fundamental features of digital business, of particular note is, above all, the possibility of copying and transmitting information without a loss in its accuracy (byte for byte) – and, based on that, the potential for creating many cutting-edge technologies, which are termed 'digital technology' due to the digital representation of information. In the language of economics, this means that information does not vanish after it is consumed. In digital format these features are manifested especially vividly due to the fact that information is not distorted when it is transferred from one storage device to another. Currently, there is a lot of research into the problems of the digital economy, in particular building business

models. Adrian Slivotsky is considered "a pioneer in building a consumer-focused business model." He explains the growth of its key indicators (revenue, market share, profit and market value) by the fact that a company manages to create an innovative business model (Slivotsky, 2002). This business model consists of decisions that a company makes in eleven directions: fundamental ideas about the business; customer selection; range of activities; source of differentiation; cost recovery; procurement system; production system; investment rate; R&D and product development systems; organizational structure; market entry mechanism.

Hambrick and Fredrickson list five key questions, the answers to which form the business model. (Are you sure you have a strategy? (Hambrick et al, 2001) What area will we work in? How do we get into this area? How will we succeed? How will we make a profit? At what rate and in what sequence will we act?

In his book "Defining the Business: the Starting Point of Strategic Planning," Harvard Professor Derek F. Abell offers a three-dimensional business model that includes answers to the following questions (Abell, 1980): Who should be my target audience (what is the group of clients)? What goods or services should I offer my clients, what should distinguish my offer (what needs will be satisfied)? How can I do this effectively (which technologies to use)? This model is the foundation of a digital business strategy. Digital business (DB) is the development of new business models that combine the physical and the digital worlds (Gartner Digital Markets 2019).

A business model in digital economy (DE) consists of the following nine structural blocks: consumer segments, value propositions, sales channels, customer relationships, revenue streams, key resources, key activities, key partners, cost structure. (Ronan de Kervenoael et al, 2018) Relationships with customers using digital technologies are characterized by the increased role of SMM (social media marketing) tools in order to attract attention to a brand or product, with personalization of individual participants involved in virtual network communities (Fund of regional social programs, 2018).

Digital business is the main source of digital economy (DE). It pierces the real world with lightning speed and becomes the source material in building the business model. Automation and related analytics and communication become the basis of all processes. This is a phenomenon of the digital business model. Based on digital data, the business provides an increase in labor productivity, increased competitiveness, and opening new jobs.

Production of various goods is increasingly being robotized – digital sensors are being built into traditional goods making it possible to simplify control and use of the goods. Thus, in Russia digital transformation takes place – the use of new business models, combining the digital and physical worlds, leading to the achievement of fundamentally new results.

2. Theoretical analysis

The saturation of business processes with digital technologies leads to a digital transformation of the economy. Digital transformation is the application of new business models combining the physical and the digital worlds. Digital transformation is radical change. It changes everything. Digitalization forces CEOs to rethink how companies carry out their business processes, what management methods are used and how information systems are arranged, and also learn everything about the nature of customer relationships (Sibel Thomas, 2019). Digital transformation influences the association of tools into digital platforms, and suppliers and consumers into ecosystems. The success of digitalization depends on the perception of new products by consumers. This means that digital products must be created taking into account a deep understanding of the needs and hidden demands of consumers, as well as their behavioral scenarios. Today, digital transformations affect the media, retail, financial sector, telecommunications, and also production. The ideas of Industry 4.0, the development of digital and smart factories, the required production and management technologies create the possibility of mass production of personalized products. However, these products shall also be first come up with, linked to the services, sales and servicing system. And here methods of design thinking are irreplaceable. The very evolution that brought digital technologies to life forces manufacturers to create powerful digital subdivisions. This requires deciding on the vision and content of digital transformation and further applying digital technologies in a unified and consistent manner as part of a single strategy. David Rogers, the author of the book Digital Transformation. Practical Guide believes that "the main aspect of the digital revolution is not the new technologies themselves, but changes in the way of thinking and business strategies". The main areas of digital transformation business strategy, according to Rogers, are showed in table 1 (Rogers, 2017).

 Table 1

 Main areas of digital transformation business strategy

1.	big data as a key asset of an enterprise, formed by means of design thinking methods
2.	new values and consumption patterns
3.	clients - not passive targets, but dynamic networks
4.	competitors - the main tool for formation of market power which predetermines the situation in the markets
5.	innovation: experiment fast
6.	new values and consumption patterns; changes in communications with stakeholders of the company, and, first of all, with investors

In this case, it is about the development of digital technologies and their impact on the changes occurring in the organizational, institutional and essential characteristics of socio-economic activities of the society. These processes influenced the formation of a specific digital economy. (Dörner Carel, 2019).

It is proposed to highlight the following specific features of the digital economy:

• development and distribution of Internet technologies that create technical conditions for the formation and expansion of the scale of the network economy;

• transfer of various types of socio-economic activities to the electronic environment of the Internet, which, by the way, is very actively stimulated by various international and national organizations;

• transformation of traditional organizations into network structures, which in practice means the active use of information technologies, and a certain decrease in the share of traditional hierarchical forms of management by increasing the share of collective forms;

• creation of network options for "horizontal" economic structures that serve the entire diversity of organizations in the economy (such structures include: trade and financial infrastructures, labor relations system, legal system, etc.)

There is no doubt that digital transformation is an ongoing process that changes the way of doing business. It requires solid investments in skills, projects, and digital infrastructure. In addition, it requires changes in people, machines and business processes, with all the ensuing consequences. It also requires constant monitoring and intervention of the management (Davenport Thomas, 2019). New technologies are changing society and the world, and the future of people in the digital environment is not always obvious. Practice shows that in order to "pave the way" to the future, people and companies must use new technologies.

As practice shows, without the proper digital transformation roadmap and reasonable management necessary for its implementation, there is a real danger of traveling in the wrong direction, or moving too slowly in the right direction, or not moving forward at all. But moving forward requires applying new digital technologies.

3. Materials and methods

3.1. Multiplying effect from the use of digital technologies in Russian business

Digital businesses includes: big data, industrial Internet, neural networks, sensorics, artificial intelligence, robotics and other technologies, resulting in a multiplier effect in digital economy which leads to an increase in Gross Domestic Product (GDP).

It has been established that, on average, over the past three decades, every US dollar invested in digital technologies led to an increase in GDP of 20 US dollars, i.e. every dollar invested in digital technology leads to a significant increase in GDP. (Global Connectivity Index (GCI), 2019)

Digital business is mainly used in computing digital electronics, primarily computers, in various fields of electrical engineering such as robotics, cell phones, automation, measuring devices, radio and telecommunications devices, and many other digital devices.

Digital business influenced the emergence of an era of impressive technological changes. "The use of digital technologies in business gives rise to a digital business, including the development of new business models that combine physical and digital worlds" (Gartner Digital Markets, 2019).

Business models gave a powerful impetus to develop and increase the profitability of companies. They are used both online, and also in traditional business industries. Thus, according to Gartner's research, "today the costs of "the digitalization" of enterprises amount to an average of 18% of the IT budget with the potential for growth of this value to 28% in 2018. For market leaders, these figures make 34-44%." (Company "Ay-Teko" held a presentation "towards new frontiers", 2018). The entire business system is changing under the digital influence, and advertising and media are changing even stronger than production, and therefore staffing cuts may be of a larger scale. This can occur due to automation and, first of all, artificial intelligence and neural networks. In a digital economy, business models create added value.

Digitalization has touched almost all spheres of our life. And despite the fact that not everyone has switched to the use of modern technologies, many recognize their importance for future development, as well as in production. When we talk about smart factories, we mean not only the presence of innovative developments in the production process, for example, additive technologies. Machine builders are constantly improving familiar subtractive processing methods. But cardinal changes cannot be achieved only by equipment - for its efficient use, production requires actual cases of the introduction and use of digital technologies in domestic and international practice.

In addition to directly increasing productivity, companies get a number of indirect advantages from digital technologies, because the effect extends beyond the company: to its competitors and throughout the supply chain. Such "collateral effects of digitalization" materialize through numerous channels which is crucial for understanding their multiplicative role in the digital economy.

Maximization of the effects of digital business requires government involvement. Country leaders and governments face with the task of creating a favorable environment for digital companies. In other words, it is necessary to create a favorable infrastructure and institutions, to stimulate the development of digital entrepreneurship. This requires the government to work with a wide range of stakeholders, citizens, technology companies, educational institutions and entrepreneurs.

At present, without digitalization of the economy, it is impossible to integrate effectively into the world economy, as well as successfully compete in the external market. In Russia, the domestic digital technology market as a result of intellectual capital is poorly developed. Hence creation of the digital economy, first of all, requires entrepreneur's initiative, favorable economic environment, purposeful financing, creation of its own scientific schools, and also developed digital infrastructure, institutions of development and legislative support.

The innovative atmosphere for solving the problems of digitalization of the national economy must form in Russia as a whole. "Digital economy, as rightly emphasized, focuses on reducing average costs by reducing the cost of market transactions when entering into contracts for the production and sale of products as a result of their movement from the market system into the field of functioning of the company itself, and thus maximizes profits." (Nosova et all, 2018)

Given the experience of the global economy, in our opinion, it is feasible to abandon the modernization of outdated equipment. It is necessary to switch to a new generation of production capital. In this regard, new labor force should be grown which can be conditionally called "digital collars". Currently there are few of them. They are difficult to find. It is clearly seen in the labor market. But digital transformation can solve this problem, in particular, through the development of artificial intelligence.

3.2. Digital business solves the problem of turbulence in the economic development of Russia

The digital model is a complex network of interrelated economic actions between the production, distribution, exchange and consumption of the created product. "If there is a gap between the phases of reproduction, then inevitably there is turbulence (uncertainty) in economic development."(Nosova et all,2018) To avoid future uncertainties, it is necessary to

1) actively cooperate with international organizations and think tanks in theoretical and practical fields;

2) to study the possibility of technologies to contribute to economic development and innovation both at the level of an individual industry and on the scale of the whole country;

3) prove how valuable technology is on an economic scale.

Digital business models in Russia are able to eliminate turbulence, as they can be used to quickly and competently make accurate decisions in terms of changes in both the internal and external business environment. Production of various goods is increasingly robotized-digital sensors are built into traditional goods, allowing to simplify the control and use of goods. Thus, in the XXI century there is a digital transformation in Russia - the application of new business models that combine the digital and physical worlds, leading to the achievement of fundamentally new results

3.3. Methodical approaches

Among the methodological approaches in the implementation of business models in the Russian digital economy should be highlighted:

- end-to-end automation of all major production processes, - development of the market of personalized production and consumption, - increase in the overall efficiency of economic entities,

- mobilization of knowledge through international exchange, as well as the creation of new jobs in the digital sector.

In the system of growth factors of modern business models in the first-place digital technologies of the sixth technological order.

4. Discussion

Hence, the digital model of the reproduction process is a complex network of making interconnected economic actions between production, distribution, exchange and consumption of the created product. "If there is a gap between the phases of production, it inevitably causes turbulence in economic development" (Nosova, 2016). Digital technology may eliminate turbulence since with their help, it is possible to promptly and competently make accurate decisions in conditions of changes in both the internal and external economy management environment. Production of various goods is increasingly being robotized – digital sensors are being built into traditional goods making it possible to simplify control and use of the goods. Thus, in the XXI century, digital transformation takes place – the use of new business models, combining the digital and physical worlds, leading to the achievement of fundamentally new results.

Digital economy is positioned as the newest economy in the scientific literature already for a quarter of a century. There is an opinion that "conditionally called "digital economy" actually brings in nothing qualitatively new, it only reveals quantitative changes, therefore its use is possible in the regulation of the economy." ("Digital economy", some aspects of pro et contra, 2018). In other words, all known economic laws are valid. They do not disappear, because economic activity remains. So-called digital technologies, new for us, change only the technological basis of production. Digital technology basis requires other resources. So, human resources are required capable of creating and making a digital product. Attention should be paid to the changing logic of behavior of economic entities in the digital economy, determined by the specifics of their economic interests. In our opinion, this specificity lies in the fact that it is possible to distinguish the dual nature of the economic interests of opposing subjects. On the one hand, this is a classic inconsistency of interests, and on the other, the emerging common interest in the development of digital infrastructure network, i.e. network components — users, developers and computer manufacturers.

Another specific sign of economic entities within the digital economy is their higher, compared with the previous economic systems, speed of relations caused by faster development and variability of the digital economy itself.

No one will deny the importance of digital technology. In the history of technological evolution, there are six technological structures, each of them has formed a certain type of structure. Currently, the 6th type is under formation. Therefore, it is no coincidence that structures change. As soon as the core of the structure ceases to generate income, it will be replaced by a new technological structure born in the past structure. Thus, the following became the core of the fifth structure: electronics (which was used as the element base for creating devices for receiving,

transmitting, processing and storing information primarily in the military field), computers, information technologies, space exploration. In essence, in the fifth structure, a digital substructure has formed.

5. Results

5.1. Specificity of transformation of business models in the mode of the Russian economy digitalization

As is known, Russia is in the phase of creating a strategy for the development of its own digital economy. However, digital changes in Russia are no slower than in the West. The impetus to this is largely the need for innovative solutions that will lead to the optimization of business processes and help to find new sources of economic growth. Now we clearly see how Russia is seriously considering ways to improve business efficiency with the help of digital tools. In Russia, the Government Program was approved, which proceeds from the fact that "the digital economy is an economic activity, where the key factor in production is digital data, and contributes to the formation of the information space taking into account the needs of citizens and society in obtaining high-quality and reliable information, the development of digital infrastructure of the Russian Federation, the creation and use of Russian information and telecommunication technologies, as well as the formation of a new technological basis for the social and economic sphere." (Digital Economy of the Russian Federation. 2017). It focuses on information (data) in a digital format, which helps to understand the essence of the matter. This definition does not contradict scientific publications on this issue. It causes a shift in the market regulation mechanism to non-market regulation mechanisms and digital business models. Practically, a new economy emerges, say the Internet economy, or online economy. "Without a digital economy, Russia has no future." (Putin, 2017). In Russia, this statement of the issue has become relevant. Thus, the National Project "Digital Economy of the Russian Federation", intended for 2019-2024, includes six federal projects. "The total amount of funding will be more than 1.5 trillion rubles." (National projects, 2019).

In modern Russia, however, there is a low level of digitalization of industrial companies. In practical terms, we cannot talk about the modern national digital system at the level of world standards. It still has not developed. The main barrier is the unproductive relationship between science and national business. Moreover, contacts with world science are not established. The Russian economy is showing sustained immunity to digital innovation. Russian enterprises are not sufficiently involved in digital R&D of foreign companies. All this hinders digitalization of the Russian economy.

In Russia, a network of international research centers on the digital economy will be created in the future. In this regard, the emphasis is on the human factor - human resources! This is important. Especially now, when a new technological structure - digital (electronic) - is under development in Russia. We need new specialists: IT developers, neuroscientists, psychologists, physicists and other specialists, united in the context of creating digital technologies, in particular, software for business activities and artificial intelligence. In this case, first of all, we should talk about the transformation of education, the level of training of new specialists. The growth of innovativeness of industrial enterprise of Russia due to the commercial use of foreign specialists and technologies does not make national economy innovative in its pure form. High influx of Western digital technologies into our economy can make it dependent. This is not the best way to develop a country's economy. Especially the digital economy. In our opinion, the attraction of foreign experts hampers the development of the Russian system of own specialist training. We need to train our own staff. Although the question arises: Is it possible in the conditions of globalization in a single country, say Russia, to achieve innovative perspectives without taking into account foreign experience? The answer is simple: impossible. But you have to know the measure of the use of foreign digital technologies. If you lose the sense of measure, you can directly get into the system of colonial dependence. But this is not for Russia. It is better to try to solve the problems ourselves. Of course, in Russia it is necessary to change the existing educational system and the view of science as a servicing sector. Today, this isn't the case. Now more than ever, science is coming to the fore in the development of the digital economy. Moreover, a new science - digital is being formed. We should turn big business and the state towards the development of this science. We should be able to solve issues of intellectual activity in the mode of collaboration. (Nosova et al, 2018)

But the main thing is to understand that for the growth of digital business in Russia it is necessary to stimulate the creation of digital infrastructure.

5.2. The role of digital infrastructure in optimizing business processes in Russia

Around the world, digital infrastructure transforms business practices, finds and distributes new opportunities, optimizes and automates all sorts of processes. All components of the national digital infrastructure are the backbone for digital transformations of the economy and life activity, that is, is the basis for a variety of digital applications, services and implementation of digital platforms. One of the advantages of digital infrastructure is the reduction of transaction costs. The emergence of digital infrastructure facilities causes a significant reduction in the costs of transactions (deals) which include: the cost of searching for information, i.e. informational costs, the costs of negotiating and decision-making, the costs of control and securing contract execution. The better is the digital infrastructure developed, the better the competitive position of the digital economy, the higher its innovative potential. In other words, sustainability of growth in conditions of uncertainty can only be based on the growth of the innovation potential, not just production, but also infrastructure.

In Russia, the problem is not in sanctions, but in the underestimated role of infrastructure in the development of a new digital order. Hence, the primary task of the Russian government is to attract private investment in digital infrastructure projects in order to improve the information and communication environment. And we already hear about this in program speeches. In the meantime, Russia has not created a full-fledged digital infrastructure facilitating to the transition to a digital transformation of the economy and other aspects of the country's life

5.3. The foundation for the success of Russia's market economy is the growth of digitalization of business

In modern Russia, with an undoubted abundance of talented people, intellectual capital is not sufficiently demanded by production. Therefore, Russian specialists "leaked" abroad, building a digital economy there, not in their homeland, which is characterized by: high rates of renewal of digital technologies or products and services; a great contribution of human capital in comparison with material capital; development of such sectors of the economy as education, science (the production of fundamental knowledge), information technology and so-called intellectual services (consulting, information intermediation, analytics, marketing services). However, each epoch, having reached a certain apogee, having realized its capabilities in science, technology, culture, necessarily requires a new one.

The rapid growth of digital business in Russia is largely facilitated by a number of recommendations concerning its institutional transformations in this area. See Fig. 1

Figure 1 Institutional transformation in digital business



The industry of Russia today must, first of all, adopt what has already been done in the West: to bring the parameters and design of its digital products closer to international standards, to adopt products known on the world market, but not in Russia, to reorient production to the use of modern resources , to increase the "degree of time" of the applied digital technologies, to bring them to the level already existing in developed countries. It is clear that in such a situation it makes no sense to start digital activity from the "zero cycle", to repeat already performed research.

Much more urgent is the task of critically comprehending international best practices, adapting new digital products and digital technologies to Russian conditions and their early industrial development. Thus, to date, digital technologies must take on the mission of the "core" in the scenario of the Russian economy's exit from the system of existing global turbulence. The acutest problems of digital economy at the present stage: increasing the competitiveness of the business through the effective use of digital technologies in the industry.

5.4. Digital business as a new vector in the growth of innovation and competitiveness of Russian companies

Digital business create in the Russian economy in a new digital space. In this regard, access to a significant amount of data is available to numerous participants in the global economic space. Formed "big data", along with technologies, become one of the leading assets of the state, business, and civil society. Moreover, in Russia the development of national programs for the development of the new generation economy is underway, including issues of the development and introduction of high technologies, the analysis of "large data" and forecasting, the introduction of new management methods. In Russia the task of strategic importance is not only achievements in the context of the socioeconomic well-being of states, but also as a condition for maintaining sovereignty against the backdrop of globalization and the implementation of digital development programs by other participants in the world market.

In today Russian economy, the key factors in economic activity are the volumetric, multidisciplinary data presented in digital form, processing and analysis of which, in comparison with traditional forms of management, significantly increase the efficiency and quality in the production and consumption of goods, works and services. The advantage is enjoyed by those states whose economy is based on the most advanced electronic technologies and services, including analytical technologies for "large data" and predictive technology. All of the above properties of digital technologies can help Russia to solve pressing social and global problems, simplifying the communication between science and business, the state and civil society, increasing productivity, creating new opportunities for entrepreneurship and work, obtaining education and constantly increasing and expanding professional qualifications, allowing to take into account the special needs of socially unprotected groups, creating new opportunities for socially significant scientific research and mitigating the risks of climate change, energy shortages, etc. At present, the development of the digital economy is at the center of attention in the speeches of the leaders of many countries: the USA, Western Europe, Finland, Israel, Sweden, etc

5.5. Artificial intelligence as a driver of digital business growth of Russian companies

It is extremely important to emphasize that the development of artificial intelligence (AI) is directly related to the growth of digital business sourced by the values of intellectual capital. It is correctly stated that the accent of modern politics of Russia should be the process of AI production, for which Russia has all the prerequisites. At all levels of economic thinking, it is necessary to understand that AI is a factor of a strong economic breakthrough of the Russian economy. Thus, now it is necessary to set and solve large-scale tasks in the field of the development of science and education, on which AI creation really depends. It is difficult, but necessary. At present, we need to actively move to the development of automated technical systems - robotics. In the presence of the Deputy Prime Minister of the Russian Federation Maksim Akimov, the leaders of large business – Sberbank, Gazprom Neft, Yandex, Mail.ru Group, MTS and the Russian Direct Investment Fund (RDIF) signed an agreement on the creation of the alliance in the field of artificial intelligence. The signing ceremony took place at the conference on artificial intelligence Artificial Intelligence Journey. The alliance's tasks will include monitoring the implementation of the National AI Development Strategy. The document approved by the President of Russia Vladimir Putin in October, involves the implementation of the national strategy as part of the seventh federal project of the national program "Digital Economy."

The consortium aims to unite efforts to create technological components that stimulate the development of AI solutions. In particular, the parties will conduct scientific and expert analysis, analyze industry-specific problems of AI implementation and look for their possible solutions. The alliance will also have tasks to promote advanced Russian developments in this field abroad, allowing them to enter the global market and strengthen the position of Russian companies in one of the most competitive high-tech areas. The new association will work on the principles of public-private partnership (PPP). This is a all-national consensus on the implementation of the National Strategy for the Artificial Intelligence Development in Russia. Given the demographic situation in Russia, IT technology helps move forward. The jobs that AI is currently creating are the jobs that are difficult to employ. In order for the effect of the introduction of AI to be significant, it is necessary to increase the production of big data, establish regulation in the interests of business and citizens, and also implement the National Strategy for the Artificial Intelligence Development in consensus with partner countries and international associations.

In Russia, the task was set of getting in the top five of the most developed, large economies in the world. If Russia falls into the top three in terms of AI, as planned in the Russian strategic documents, then many international ratings will simply lose their meaning.

Big data production is the main task in the development of artificial intelligence

To achieve this, the Russian state must comply with three digital by default principles. First, everything that should leave a digital footprint should leave a digital footprint. Second, everything that can be read by a machine or network should be read. Third, everything that can be algorithmized in decision making should be algorithmized. These are tough principles. But they shall be resolved. These are very important decisions. In 2020, the center of the 4th industrial revolution will open in Moscow in partnership with the World Economic Forum.

Today there is every reason to assert that the generation of AI is becoming a key factor in the economic development of companies. Russian economy at this stage must reduce its lag in terms of AI development behind the developed countries of the world via an increase in the quality of labor force, accelerated growth of material scientific research potential, creation of favorable conditions for the inventive activity, widespread participation in the international innovation

division of labor. Russian leaders face the task of creating a favorable environment for digital companies engaged in the R&D in AI mode. In other words, it is necessary to create a digital infrastructure and institutions, to stimulate the development of the digital center of the economy. This requires the Russian government to work with a wide range of stakeholders, citizens, technology companies, educational institutions and entrepreneurs. In this aspect, AI can be a separate product that new digital companies will offer to the market. In particular, the Russian State Corporation Rosatom is pretending to become one of the key participants in the program for the artificial intelligence development and a leader in the related market.

6. Conclusions

1. The transformation of business models in the digital economy contributes to: - the growing role of information services (finance, telecommunications, social networks, advertising, media), which move from the category of related services to services vital for a person;

- the increased socialization of population through the use of a variety of network services (social networks, blogs, instant messengers);

- the increased share of self-servicing in the economy (Internet banking, online shopping, video surveillance, electronic hotel booking, tickets);

- the increased transparency of managing the activities of economic entities and authorities (due to the unique opportunities of processing digital information – contextual search, big data analysis, etc.);

- the expanded scale of production and exchange, increased market value of enterprises, more efficient use of the means of production and labor, both in the field of material production and the service sector, and, most importantly, increased competition and change in the existing style of economic management.

2. In general, the above mechanism for implementing the digital economy creates a new base for overcoming turbulence in the development of the Russian economy in the future, in particular, increasing the competitiveness of its economy through more active digital entrepreneurship.

3. Directions for further research on the digital economy are seen in continuing to study the digital entrepreneurship specifics, both in the scale of national economies and in the global economic space. Particular attention should be paid to the problem of finding and setting quantitative parameters that would allow measuring the scope of the digital entrepreneurship.

4. If not developing our own information services industry, the Russian market of electronic services, then the country's economy may turn out to be completely "occupied" by foreign companies.

5. Today, world leaders in the digital economy are countries that reasonably invest substantial funds in digital assets and use digital technologies — this makes it possible to benefit from the proliferating multiplicative effect of digitalization.

6. The development of digital business in Russia is currently hindered by the insufficient size of production and distorted motivation among Russian businesses, banks, and other financial institutions with respect to its advisability. However, without digital business, it is impossible to ensure effective economic development. The development of digital business ought to be accompanied by coordinated action among interested government and commercial establishments and harmonize with effort from the world community. In that case, digital marketing will serve as a stimulus for the structural and technological reform and modernization of the national economy. If Russia succeeds in creating a business environment that stimulates investment in digital technologies, it will lead the global community on the path to a global digital economy. It is necessary to transform institutional forms of scientific activity, in particular, by moving industrial research from specialized scientific units to production, which helps overcome internal institutional barriers, reduce transaction costs, and more efficiently translate scientific results into products and services.

7. Digital business in Russia creates a new basis for solving practical problems concerning the growth of innovation and increasing the competitiveness of the economy by providing customers with new services and goods that will shape the markets of the future more quickly

8. Artificial intelligence can be considered as a phenomenon of the digital economy, because it contributes to the increase of labor productivity, growth of competitiveness and innovation of companies, and, accordingly, to receive large dividends from its use. AI has an important place in the implementation of the national project "Digital economy" in Russia. Artificial intelligence can

be considered as a phenomenon of the digital economy, since it contributes to increasing labor productivity, increasing the competitiveness and innovativeness of companies, and correspondingly - obtaining high dividends from its use. AI has an important place in the implementation of the "Digital Economy" national project in Russia.

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1. Doctor of Economics, Professor of the Department of innovation and regional economics, National research nuclear university MEPhI (Moscow Engineering Physics Institute), nss_10@mail.ru

2. Doctor of Economics, Leading researcher Center of regional economy and interbudgetary relations, Financial University under the Government of Russian Federation

Doctor of Geography, Head of the Department of Geography and Regional Sciences, Orenburg State University
 Doctor of Economics, Professor of Department of economic policy and economic measurements, Institute of Economics and Finance, State University of management

5. Candidate of Economics Science, docent, Lecturer of Department of Economics, National research nuclear university MEPhI (Moscow Engineering Physics Institute), r.abdulov@mail.ru

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