

DIGITAL PLATFORMS AS A TOOL FOR TRANSFORMING THE ECONOMY

Smotrova Tatiana¹, Narolina Tatiana², Nekrasova Tatiana³

¹Candidate of Sciences in Economics, Associate Professor, Voronezh State Technical University, 20 letiya Oktyabrya street, 84, Voronezh, Russia, E-mail: s-tanik@yandex.ru

²Candidate of Sciences in Economics, Associate Professor, Voronezh State Technical University, 20 letiya Oktyabrya street, 84, Voronezh, Russia, E-mail: narolina@inbox.ru

³Candidate of Sciences in Economics, Associate Professor, Voronezh State Technical University, 20 letiya Oktyabrya street, 84, Voronezh, Russia, E-mail: nekrasova-tatiana@list.ru

Abstract

The article discusses the experience of Russia in the strategic development of the digital economy. The new business environment requires the government and entrepreneurs to use digital technology. Experts highly value the potential of digital transformations of the world market; in monetary terms, it is estimated at more than \$100 trillion.

The relevance of the study of the digital economy formation is due to a significant change in the growth of communications through social networks, which are considered not only as an element of social communications but also as a way of doing business and promoting goods and services in some areas of entrepreneurial activity. In addition, technical capabilities allow the exchange of information on various digital platforms, which also gives rise to new ways of interaction between the seller and the buyer of various goods and services.

Changes in the external environment make it possible to talk about the digital revolution in business. Many countries, including Russia, determine the formation of a digital economy as the basis for strategic development and devise a set of measures to digitalize business and society.

I. INTRODUCTION

In today's world, business conditions are changing rapidly. These changes affect all existing business models and the relationship process between key market participants. The existing technological capabilities of interpersonal and business communications, increasing requirements for the level of service and the speed of provision of required services dictate the need for radical changes in approaches to building a business. Therefore, more and more companies are coming to understand the introduction of digital technologies and the transformation of existing business models.

In turn, Russia is taking a number of steps at the state level to support projects for the implementation of digital technology products and services. At present, the priority federal project "Digital Technologies" is being implemented as part of the national program "Digital Economy", and roadmaps have been developed for "end-to-end" digital technologies in such areas as "Virtual and Augmented Reality Technologies", "Quantum Technologies", and "New Production Technologies", "Wireless Technologies", "Distributed Register Systems", "Components of Robotics and Sensors", "Neurotechnologies and Artificial Intelligence".

Digitalization is aimed at maintaining a balance of interests of public administration and business, which is explained by the strategic vision of improving the quality of services the quality of life of the population.

II. METHODOLOGY

In the course of the study, an analysis was made of the current market conditions and of digitalization in Russia which had an impact on the progress trends.

The historical method made it possible to assess the prerequisites of legislative initiatives and the steps taken to develop digitalization at the state level since 2017. The tasks of strategic development of Russia for the period up to 2024 and the tasks of the national program "Digital Economy of the Russian Federation" were studied.

The information on the diversity of existing digital platforms was structured and systematized, and existing approaches to their classification were studied.

III. DISCUSSION

World experience and trends of recent years allow us to ascertain the onset of global digital capital. In January 2018, the number of users of Facebook, WhatsApp, Youtube was estimated at more than a billion users, which allows us to talk about their monopolization of information. The capitalization of companies using digital technologies is growing significantly and companies such as Apple, Amazon, Facebook in 2016 replaced the leaders of General Electric, Exxon Mobile, Shell, etc.

Digital platforms have changed traditional ways of doing business, including changing the balance of power in the market. Owners of digital platforms are gaining influence through pricing control, challenging traditional business owners.

Digitalization is becoming relevant not only in high-tech markets but also in consumer markets - for example, taxi services (Uber and Yandex-taxi platforms), rental real estate (AirBnb), car sharing, etc. Digital platforms are considered as a way of organizing interaction between suppliers and consumers in the industry and minimizing costs at all stages of interaction - when searching for partners, goods and services, paying for services rendered and feedback, for example, building the reputation of participants and meeting their deal conditions. Thus, digital platforms are changing the linear business model and economic principles.

In Russia, the issues of digitalization are currently receiving great attention. So in 2017, the issues of creating 50 "smart cities" were discussed, the "Digital Economy" program was approved, and the cost of the annual retraining of the population as part of this program was estimated. In 2018, a passport of the national program "Digital Economy of the Russian Federation" was presented and individual projects were dedicated to information security issues, and monitoring of the implementation of measures was launched. In 2019, six roadmaps for the development of "end-to-end" digital technologies were developed and plans for the development of artificial intelligence and other technologies of the digital economy were presented. Since 2019, there has been a multiple increases in budget expenditures for the development of "end-to-end" digital technologies: for the period until 2024, ₺282 billion will be allocated from the federal budget for these purposes.

As part of the federal project "Digital Technologies", roadmaps have been developed for priority sectors and areas of their development. The volume of budget financing with implementation in the industry is estimated at ₺647.32 billion. At the same time, the maximum amount of funding, according to an expert, is estimated at ₺1.115 trillion. The roadmap targets are planned to be achieved by solving technological problems, launching products based on them and introducing them in key sectors.

At present, a number of projects are already being implemented in Russia, grouped in three areas: improving the quality of life of the population, increasing the efficiency of public administration and increasing business efficiency.

Projects focused on improving the quality of life are implemented in various fields, for example, education (Yandex.Liceum, Electronic Journal, Student's Unified Card), healthcare (Telemedicine, Remote Health Monitoring, Unified Medical Portal, Regional Medical Information System (RMIS)), transport (Yandex.Transport, Video Analytics of Parking Space in the Residence Area), construction and Housing and Communal Services (MoyDom System, SKAUT hardware and software complex), public safety (Complex Urban Video Surveillance System), culture, leisure and tourism (Artefact, Kid-Friendly) and others.

Improving the efficiency of public administration is also implemented in various areas: construction and utilities (waste management, smart housing), transport (parking lots, automated fare payment system), society (facial recognition system), etc.

Projects related to improving business efficiency: industry (Industrial Equipment Monitoring System

“DISPATCHER”, Digital Laboratory System), agriculture (Electronic Herd, Vegetable Storage Climate Control and Regulation System), construction and Housing and Communal Services (Collection of Readings from Metering Devices, Apartment Fee 24), etc.

In accordance with the Decree of the President of the Russian Federation “On National Goals and Strategic Tasks of the Development of the Russian Federation for the Period Until 2024” dated May 7, 2018, the tasks of the national program “Digital Economy of the Russian Federation” by 2024 are defined.

The solution to the first problem is aimed at creating a legal framework and a flexible approach to regulating various areas of activity; the second task is related to the training of highly qualified personnel; the third one involves the formation of a highly competitive infrastructure for data transmission and storage based on domestic developments in compliance with the principle of security and protection of the interests of the individual, business and the state. The program’s objectives also include creating a system of financing projects for the development and implementation of digital technologies and platform solutions in priority sectors such as healthcare, education, industry, energy and transport.

The participants in the implementation of the “Digital Economy of the Russian Federation” program under the direction of B.M. Glazkov developed classification features of the types of digital platforms. Digital platforms should be distinguished based on the main activity and the main result obtained, as well as taking into account the level of information processing and the requirements of the main beneficiary.

Thus, based on this approach, three types of digital platforms are distinguished. The first type is an instrumental digital platform, which involves the creation of a software product, as well as tools for the development and debugging of software or hardware-software applications. The second is an infrastructural digital platform, which involves the formation of information for making management decisions. The third type is applied digital platforms as a business model for economical activity.

The world experience in the operation of digital platforms shows the success of their implementation under the condition of a positive network effect, i.e. a simultaneous increase in the number of participants (sellers and consumers) and the possibility of exchanging roles between them, and an increase in the number of participants leads to a decrease in the costs of their interaction.

The most important impulse for creating digital platforms is precisely the narrow and problematic links of interactions in the industry, and the greater the number of exchange participants bears the costs, the higher the effects and benefits of creating a platform.

The Ministry of Industry and Trade of the Russian Federation supports and implements a set of measures aimed at digitalizing the industry. Russian companies are supported through subsidies in developing digital technologies, products, platform solutions and services.

The departmental project "Digitalization of Industry" provides for three areas of industrial transformation. The first is related to the creation of a regulatory environment, i.e. the formation of legislative and regulatory acts in the field of digital technologies and the creation of a program for advanced training and retraining of personnel. The second direction involves the creation, integration and development of platforms of the State Industry Information System (SIIS). The third area is the digital transformation of manufacturing industries.

The aim of the project is to stimulate the development and implementation of software products and digital platforms in the economy and the creation of intersectoral digital platforms in industry and trade, providing intersectoral and intersystem integration of enterprises in the design, production and sale of products. The implementation of measures requires a total of ₺6 billion for 3 years (2019-2021). Key indicators of the project are the increase in the number of medium and large enterprises connected to SIIS services from 3.7 thousand in 2019 to 14.4 thousand by 2024; standards developed and adopted from 19 to 46 units, respectively, and an increase in revenue from the introduction of “end-to-end” digital technologies from 100% in 2019 to 220% by 2024.

IV. RESULTS

Implementation of state support measures for the digitalization of the economy is aimed at stimulating the creation of digital platforms and creating uniform working rules for all participants, as well as increasing consumer confidence in digital platforms and protecting trade secrets and personal data and introducing mechanisms for monitoring the actions of owners of digital platforms.

V. CONCLUSION

The digital economy is becoming a business priority. This is facilitated by dramatic changes in the influence

of environmental factors, the development of technologies and changes in the ways of interaction between market entities - sellers and buyers.

At the state level, a number of steps are being taken to develop the digital economy and stimulate various industries to change business models and introduce digital technologies.

Digital platforms are a new way of organizing business, changing the traditional approach and creating fundamentally new markets and ways of interaction between its participants.

REFERENCE LIST

- Decree of the President of the Russian Federation dated 07.05.2018 No. 204 «On national goals and strategic objectives of the development of the Russian Federation for the period up to 2024». // Official Internet portal of legal information. State system of legal information. URL: <http://publication.pravo.gov.ru/Document/View/0001201805070038> (in Russian).
- Decree of the President of the Russian Federation of 01.12.2016 N 642 «On the Strategy of scientific and technological development of the Russian Federation» // ConsultantPlus. URL: http://www.consultant.ru/document/cons_doc_LAW_207967/ (in Russian).
- National program "Digital Economy of the Russian Federation". URL: https://digital.gov.ru/uploaded/files/natsionalnaya-programma-tsifrovaya-ekonomika-rossijskoj-federatsii_NcN2nOO.pdf (in Russian).
- Resolution of the Government of the Russian Federation of 30.04.2019 No. 529 «On approval of the rules for granting subsidies to Russian organizations for reimbursement of part of the costs for the development of digital platforms and software products in order to create and (or) develop the production of high-tech industrial products» URL: <http://publication.pravo.gov.ru/Document/View/0001201905060036> (in Russian).
- The Ministry of Industry and Trade presented a project on the digitalization of industry. URL: <https://digital.ac.gov.ru/news/979> (in Russian).
- Ageev A.I. Management of the digital future // The World of the new economy. 2018. No. 3. URL: <https://cyberleninka.ru/article/n/upravlenie-tsifrovym-buduschim> (in Russian).
- Ageev A.I., Averyanov M. Digital Society: Architecture, Principles, Vision// The World of the new economy. 2017. No. 1. URL: http://www.inesnet.ru/wp-content/mag_archive/2017_01/es2017-01-114-126_Ageev_Averyanov_Yevtushenko_Kochetova.pdf (in Russian).
- Geliskhanov Z.I., Yudina T.N., Babkin A.V. Digital platforms in the economy: essence, models, tendencies of development // Scientific-technical Bulletin of SPbSPU. Economics. 2018. Vol. 11, No. 6. PP. 22-36 (in Russian).
- Geliskhanov I.Z., Yudina T.N., Babkin A.V. Digital platforms in What is the digital economy? Trends, competencies, measurement H-80 [Text]: Proc. of XX APR. International. Science. Conf. on Problems of Economic and Social Development, Moscow, 9-12 APR. 2019 / G.I. Abdrakhmanova, K.O. Vishnevsky, L.M. Gokhberg et al.; sci. ed. L.M. Gohberg; NATs. research. UN-t "Higher School of Economics". — Moscow: Ed. house of Higher school of Economics, 2019. - 82, [2] p. (in Russian).
- Yevtushenko S.N., Averyanov M.A., Kochetova E.Yu. Digital economy. Transformation of industries. // Economic strategy. 2016. No. 8. PP. 52-54. URL: <http://www.inesnet.ru/article/cifrovaya-ekonomika-transformaciya-otraslej/> (in Russian).
- Koshevenko, S.V., Digital transformation of the world economy // Economic Journal. 2018. No. 3 (51). URL: <https://cyberleninka.ru/article/n/tsifrovaya-transformatsiya-mirovoy-ekonomiki-1> (in Russian).
- Klimov A., Petelin D. Concept of organizing a new industrial platform. Economic strategies. 2018. No. 3. Pp. 82-87 (in Russian).
- Mesropyan V. Digital platforms - new market power. URL: <https://www.econ.msu.ru/sys/raw.php?o=46781&p=attachment> (in Russian).
- Osipov Yu.M., Yudina T.N., Geliskhanov I.Z. Digital platform as an Institute of the era of the technological

breakthrough of the platform // Economic strategies. 2018. No. 5. Pp. 22-29 (in Russian).

Smotrova T.I., Karpov V.V. Prospects of application of artificial intelligence technologies in marketing // in the collection: Step into the future: artificial intelligence and digital economy. Revolution in management: a new digital economy or a new world of machines. Proceedings of the II International scientific forum. Under the General editorship of P. V. Terrlyansky. 2018. Pp. 116-121. (in Russian).

Sudarushkina I.V., Stefanova N.A. Digital economy // ANI: Economics and management. 2017. No. 1 (18). URL: <https://cyberleninka.ru/article/n/tsifrovaya-ekonomika> (in Russian).

Tebekin A.V. To the question of the index of digitalization characterizing the processes of socio-economic development in the Russian Federation. 2018. No. 3. URL: <https://cyberleninka.ru/article/n/k-voprosu-ob-indekse-tsifrovizatsii-harakterizuyuschem-protsessy-sotsialno-ekonomicheskogo-razvitiya-v-rf> (in Russian).

Khokhlova M. New architecture for the digital economy // Economic strategy. 2017. No. 4. Pp. 132-144. URL: http://www.inesnet.ru/wp-content/mag_archive/2017_04/es2017-04-132-144_Marina_Khokhlova.pdf (in Russian).

Zvyagin I.S., Gladkikh A.O., Nekrasova T.A., Narolina T.S. Modernization of online interaction of power authorities with the population in the conditions of digitalization of economy // Development of modern society in the conditions of digitalization of key spheres of life: socio-economic, institutional-innovative and axiological aspects Interuniversity collection of scientific papers. Voronezh, 2019. Pp. 32-38 (in Russian).