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**DIGITALIZATION OF THE STATE SUPPORT OF BUSINESS IN  
THE RUSSIAN REGIONS**

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***Abstract***

In article questions of digitalization of the state support for an entrepreneurship in Russian regions are analyzed. Allocating benefits of digitalization both to the state, and to business, authors determine problems of digitalization development, such as: insufficient budget financing; high administrative barriers; low level of interdepartmental interaction; insufficient competence of government employees in questions of digital technologies implementation; backwardness of business involvement in development and implementation of its support measures; monopolization by corporations of the digitalization industry. Methods are applied to a research digitalization of the state support of business in the Russian regions: comparisons of rating "Doing Business" and "E-intensity" results, legallistic analysis, statistical analysis, research of the best managerial practician. It is revealed that the countries which are successful by results of E-Intensity 2015 rating showed good results of Doing Business 2017 rating. Federal concepts, strategy and regulations of Russia digitalization are abstract and insufficient and require a specification at the regional level. Experience of Moscow and the republic Tatarstan allowed to reveal successful methods of regional policy in questions of digitalization of business support. This experience needs for distribution. To do it common efforts of federal and regional authorities must be required in the following directions: legislation specifications; expansions of the zone Internet covering; regulation of rendering electronic services procedures; development of digital competences among government employees; implementation of crowdsourcing; interdepartmental digitalization.

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**Keywords:** Digital economy, digital government, administrative barriers, state support of an entrepreneurship, digital competences of bureaucracy, best managerial practices.



## 1. Introduction

In the post-industrial era, the main competitive advantage of all states is the development of the knowledge economy. It is revealed that the knowledge-intensive business is capable to yield the results which are beyond financial theories in aspects of superefficiency in the most short time (Bredikhin, Linton, & Matoszko, 2017). Obvious signs of knowledge economy are: innovation, wider and effective use of new technologies, in particular information and communication (Godin, 2004). Trying to reach these positions, national governments implement large-scale investment programs for the development of neurotechnologies and artificial intelligence technologies, and also reduce administrative barriers for small and medium-sized businesses engaged in the knowledge-intensive sector of the economy. Regardless of the model of innovation policy that is being implemented in a country, the basis for its development is a large-scale multi-level digitalization of services, as well as public administration systems.

At the same time, processes of digitalization and development on their base of the knowledge-intensive business are fragmentary lit in developing countries including in Russia (Doroshenko, 2011).

Meanwhile, the level of digitalization in the subjects of the Russian Federation differs significantly depending on a number of objective factors (natural and climatic conditions, population density), as well as subjective conditions (the degree and nature of federal and regional support for the digitalization of the territory). Identification of these problems, as well as the search for ways to overcome them through the activation of the political and administrative factors, account for the relevance of the subject matter of this article.

## 2. Problem Statement

According to leading researchers, the development of digitalization has positive effects at all levels of the economy. Thus, digitalization and innovations are considerably connected with productivity and competitiveness (Carayannis & Sagi, 2001).

Advantages of digitalization to the state:

- increasing the effectiveness of public administration processes (for example, managing large data, collecting taxes);
- reducing opportunities for fraud and corruption in obtaining public services and access to public funding;
- improving the quality and speed of analysis of social trends through using "Big Data";
- increasing the effectiveness of interaction with business and citizens.

Advantages of digitalization to business:

- simplified market entry;
- improving the efficiency of internal processes (for example, logistics management);
- access to quality labor resources through the use of digital communication channels;
- increased transparency and simplified interaction with the public sector.

In the opinion of Chris Yu, an employee of the analytical center of the organization "Exchange of Political Strategies", public authorities, who skillfully use digital technologies in their interaction with

business, save 16 to 33 billion pounds annually due to the growth of management effectiveness (URL: <http://policeexchange.org.uk/images/publications/the%20big%20data%20opportunity.pdf>).

However, the process of digitalization of the system and procedures for state support of entrepreneurship in each state is fraught with a number of risks and threats, such as:

- insufficient budget financing. According to many researchers (Chavis, Klapper, & Love, 2011; Djankov & Murrell, 2002), access to financial resources — one of the fundamental factors defining conditions and the strategy of enterprise start in the knowledge economy. Alternative to the state financing - development by the governments of venture investment institute (Gstraunthaler & Sagieva, 2011);

- formal institutes are often inefficient in creation of the favorable environment for business and ensuring the fair competition, especially in developing countries. Thus, close connection between results of activity of small and medium-sized enterprises and quality of institutes is revealed (Aidis, Estrin, & Mickiewicz, 2008). At the same time, direct intervention of the state in process of a clustering of the knowledge-intensive sectors can only do much harm (Duranton, 2011). So, Yakovlev & Zhuravskaya (2013) mark out key factors that increase in efficiency of transformations in the sphere of a barrier-free business environment development. Among these factors are: transparency of government management, society knowledge of the carried-out changes, high level of industrialization, the developed fiscal autonomy of regions.

- low competence of public servants in questions of digital technologies using. According to Blinova & Bronnikov (2016), knowledge public servants of the advanced digital technologies and ability to put them into practice promotes to drop many risks of development and realization of state policy.

- insufficient transparency and development of interaction procedures between the power and business associations in the questions of digital economy development. This risk has been revealed by researchers (Freynkman & Yakovlev, 2014) during the analysis of business support experience by "the new institutes of development".

- high risk of monopolization of the knowledge-intensive sphere by corporations. It is proved that some large enterprises dominate in the political sphere, block to competitors' access to the market and establish the special relations with the government and banks (Tybout, 2000).

- insufficient competence of officials and civil servants in the application of innovative information and communication technologies. Improvements in the technology lead to opposite implications on wage inequality and organization than reductions in communication costs (Garicano & Rossi-Hansberg, 2006).

- disagreement among central and territorial government bodies in matters of strategy and tactics of digitalization. It is showed that the poor quality of coordination between government bodies significantly reduces efficiency of many forms of business support based on digital technologies (Nikitin, 2018).

These problems of digitalization are relevant for Russia, the country whose regions differ significantly both by objective conditions (climate, population density, natural resource potential) and by subjective factors (interest and competence of the regional government in developing the business climate in a knowledge-intensive economy).

### **3. Research Questions**

- What are the priorities of digitalization of the constituent entities of the Russian Federation in the field of supporting small and medium-sized businesses in conditions of development of the knowledge economy?
- What are the successes and problems of digitalization of the system of providing public services to business regions of Russia?
- What are the directions and possibilities of preventing / overcoming these risks?

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

The objectives of the study are:

- to study the conceptual and regulatory framework for the digitalization of the system of state support for business in Russia;
- to study the level of digitalization of the system of providing state services to entrepreneurship in Russia and its regions;
- to identify priority directions and technologies for the development of digitalization of the system of state business support.

### **5. Research Methods**

#### **5.1. Comparison of the ratings**

Comparison of the results of the Doing Business 2017 rating (indicator of favorable conditions for the development of entrepreneurship) and the E-Intensity 2015 rating (indicator of the development of the digital economy) suggests that the higher the level of digitalization in the state, the lower the administrative barriers, the more transparent procedures and speed of registration and business checks. This is explained by the fact that the majority of the countries leading in the Doing Business -2017 rating (the United States, Great Britain, Australia, Denmark, South Korea, Singapore) have reached the leading positions in the E-Intensity rating due to the introduction of information technologies for interaction with entrepreneurs (Report of the State Council of the Russian Federation, 2017).

#### **5.2. Formal legal analysis**

At the present time, at the federal level of Russia, there are the following normative acts concerning digitalization:

1) Strategy for the development of the information technology industry in the Russian Federation for 2014-2020 and for the future until 2025 (approved by the order of the Government of the Russian Federation dated 01.11.2013 № 2036-r), which determines the following objectives for the development of the information technology industry:

- development of human capital, among other things, through profile education and popularization of the professions of the industry;
- development of institutional conditions for the work of IT business in Russia and reduction of administrative barriers;

- supporting exports and stimulating the globalization of the industry;
- development of national research in the field of information technology and related fields;
- development of broadband Internet access.

2) The Concept of development of mechanisms for the provision of state and municipal services in electronic form (approved by the Order of the Government of the Russian Federation of 25.02.2013, № 2516 - r). For the implementation of the Concept were adopted:

- "road map" for the implementation of the Concept;
- The Concept of regional informatization.

The state target program "Information Society (2011 - 2020)", the objectives of which are: improving the quality of life of citizens, developing the national economy based on the use of information and telecommunication technologies;

3) Digital Economy of the Russian Federation Program (approved by Decree of the Government of the Russian Federation № 632-r of July 28, 2012), which outlines the priorities of the digitalization of Russia until 2024: legal regulation; education and personnel; key research and development competencies and technical resources; information security; information infrastructure;

4) Decree of the Government of the Russian Federation dated 03.26.2016 № 236 "On requirements for the provision of state and municipal services in electronic form", which approved the relevant requirements.

A comprehensive analysis of these acts allows us to conclude that most of them are recommendatory in nature, do not establish a unified system of requirements for the digitization of the business support mechanism at the regional level. In these conditions, development of digital forms and methods of interaction with business remains within the discretion of regional authorities.

### **5.3. Analysis of the level of digitalization in Russia**

As of 01.01.2018, we can identify the following positive results of digitalization of Russia and its regions:

- about 50% of Internet users in Russia use electronic channels for receiving government services;
- in a number of large regions of Russia the level of digitalization is equalized. Thus, if in 2011 the availability of the Internet in the Central Federal District was 50% of Moscow's level, in 2017 - more than 85%;
- development of the Unified Information System of electronic procurement, in which for the period from January 1, 2011 to October 5, were placed 11.9 million notices for a total of 41.2 trillion rubles;
- active development of federal geoinformation systems (for example, the State Information System of Industry).

The shortcomings of the development of digital technologies in Russia include:

- lag in the pace of digitalization of state and municipal services (as of 01.01.2018, only about 5% of all state and municipal services in Russia have been digitized, only about 4% of citizens have electronic digital signatures);

- preservation of significant gaps between subjects of the Russian Federation in terms of digitalization (Moscow and Tatarstan outperform the Yamalo-Nenets Autonomous District 17 times);
- low level of electronic interdepartmental interaction of state and municipal management bodies and resource-supply organizations rendering services to entrepreneurship (more than 70% of corresponding procedures do not envisage electronic forms of interaction);
- lack of a single federal information and service infrastructure for small and medium-sized businesses.

#### **5.4. Analysis of successful regional practices of digitalization of business support**

Russian leaders in terms of digitization of state support for entrepreneurship are Moscow and the Republic of Tatarstan.

In Moscow digitalization is carried out in stages and involves: consecutive translation of all services into electronic form; launch of electronic maintenance technologies with minimal functionality and gradual expansion of functions based on the results of operation; initiative digitalization of public services.

The successes of Moscow in the field of digitalization of business support measures are:

- translation into the electronic form of the most demanded and labor-consuming services for business (connection to power grids, obtaining construction permits);
- development of administrative regulations for the provision of certain public services (or separate procedures) to businesses solely in electronic form;
- the expansion, as compared with the federal requirements, of the list of information that the state authorities of Moscow cannot request from recipients of state services (they receive it through interdepartmental interaction);
- the launch of a number of digital services for businesses, based on state information resources, as well as for non-governmental organizations with which contracts have been concluded (banks, I-companies, transport companies, real estate agencies).

Digitalization of state support for entrepreneurship in the Republic of Tatarstan was implemented in stages. In 2008 - 2010 the infrastructure was developed and the population's access to the Internet increased; in 2011, the process of transferring all regional services for the population and business to the electronic form was launched.

By now in the Republic of Tatarstan:

- there are regional information systems which provide business with detailed information on all state and municipal services;
- all the services most demanded by business and population are translated into electronic form.

Thus, the experience of digitization of the regions studied reveals the following "managerial findings":

- encouraging consumers to use services in electronic form (since the time for obtaining electronic services is significantly lower than that in the traditional way);
- development at the regional level of standard municipal regulations for the provision of municipal services (for all municipalities within the region);

- approbation of "pilot" regional projects in the field of digitalization of state services for entrepreneurship- all the services most demanded by business and population are translated into electronic form.

Thus, the experience of digitization of the regions studied reveals the following "managerial findings":

- encouraging consumers to use services in electronic form (since the time for obtaining electronic services is significantly lower than that in the traditional way);

- development at the regional level of standard municipal regulations for the provision of municipal services (for all municipalities within the region);

- approbation of "pilot" regional projects in the field of digitalization of state services for entrepreneurship.

Unfortunately, the successes of individual regions are not typical for Russia as a whole, primarily because of the uneven level of digitalization of territories.

## 6. Findings

The study of strategic and regulatory foundations of the digitalization of the Russian economy has given grounds for concluding that the federal norms are laconic, vague and recommendatory. In these conditions, the efforts of regional executive bodies in the aspect of digitalization of business support are significantly differentiated and largely depend on the "goodwill" of the region's leadership.

Despite some enhancements of Russia's position in the aspect of digitalization of the economy, there is a significant gap in the performance of regions, by this criterion.

Analysis of the practices of the regions successful in the issues of digitalization has made it possible to identify a number of "managerial innovations". These include: the regulation of digitalization of municipal services, the development and testing of pilot projects for digital interaction between the public sector and business.

At the same time, the study of the experience of digitalization of the system of supporting entrepreneurship in successful and unsuccessful regions has made it possible to identify a number of objective obstacles to this process: the lack of centralized systemic solutions of the federal center to stimulate the process of digitalization of entrepreneurship support at the regional level; lack of the necessary means of regional budgets to transfer all public services to business into electronic form; insufficient level of development of competences of civil servants in working with digital technologies.

## 7. Conclusion

The process of digitalization of the system of state support for entrepreneurship, which is critically important for increasing the competitiveness of the state in the era of the knowledge economy, is uneven in Russia. Priority directions of intensification and equalization of the process of digitalization of the Russian economy in all regions are as follows:

- 1) at the federal level:

- to provide broadband Internet coverage not only for cities, but also for rural settlements, as well as territories along federal routes;

- to make a priority list of the procedures for digitalization of state, regional and municipal services to business, taking into account their importance for the development of entrepreneurship, as well as technological readiness and cost of digitalization solutions;

- to compile a set of standards for the provision of public / municipal services to businesses in digital format;

- to optimize the interdepartmental interaction in provision of services to business on a digital basis.

2) at the regional level:

- to adopt and enforce regulatory legal acts of the subjects of the Russian Federation regulating the process of developing an infrastructure for supporting entrepreneurship using digital technologies;

- to exchange successful experience of digitalization of procedures of interaction with businessmen;

- to promote the improvement of the competencies of state and municipal employees in the use of digital technologies.

## References

- Aidis, R., Estrin, S., & Mickiewicz, T. (2008). Institutions and entrepreneurship development in Russia: A comparative perspective. *Journal of Business Venturing*, 23(6), 656-672.
- Bredikhin, S., Linton, J., & Matoszko, T. (2017). Why and how the value of science-based firms violates financial theory: implications for policy and governance. *Foresight and STI Governance*, 11(1), 24-30. <https://dx.doi.org/10.17323/2500-2597.2017.1.24.30>.
- Bronnikov, I., & Blinova, N. (2016). Upravleniye riskami v protsess reformirovaniya i realizatsii gosudarstvennoy politiki: podkhody i tekhnologii [Risk management in the course of forming and implementation of state policy: approaches and technologies]. *Political sciences*. Special issue, 267-291 [in Rus.].
- Carayannis, E., & Sagi, J. (2001). New vs old economy: Insights on competitiveness in the global IT industry. *Technovation*, 21 (8), 501- 514.
- Chavis, L., Klapper, L., & Love, I. (2011). The impact of the business environment on young firm financing. *The World Bank Economic Review*, 25 (3), 486-507.
- Djankov, S., & Murrell, P. (2002). Enterprise restructuring in transition: a quantitative survey. *Journal of Economic Literature*, 40 (3), 739-793.
- Doroshenko, M. (2011). Innovatsionnyy potentsial sektora intellektual'nykh uslug v Rossii [Innovative Potential of the Knowledge-Intensive Services Sector in Russia]. *Foresight-Russia*, 5 (4), 50-65 [in Rus.].
- Duranton, G. (2011). California dreamin: the feeble case for cluster policies. *Review of Economic Analysis*, 3, 3-45.
- Freynkman, L., & Yakovlev, A. (2014). Agentstvo strategicheskikh initsiativ kak institut razvitiya novogo tipa [Agentstvo of strategic initiatives as development of new type]. *Economy Questions*. 6, 18-39 [in Rus.].
- Garicano, L., & Rossi-Hansberg, E. (2006). Organization and Inequality in Knowledge Economy. *The Quarterly Journal of Economics*, 121(4), 1383 – 1435. <https://dx.doi.org/10.1093/qje/121.4.1383>.
- Godin, B. (2004). The New Economy: What the Concept Owes to the OECD. *Research Policy*. 33, 679-690.



- Gstraunthaler, T., & Sagieva, G. (2011). Internatsionalizatsiya venchurnogo kapitala: vyzovy i vozmozhnosti [The Internationalization of Venture Capital: Challenges and Opportunities]. *Foresight-Russia*, 5 (4), 66 - 76 [in Rus.].
- Nikitin, A. (2018). Razvitiye sistemy monitoring effektivnosti upravlencheskikh komand v regionakh Rossii [Development of system of monitoring of efficiency of management teams in regions of Russia]. *Economic policy*. 3, 82-105. [in Rus.].
- Report of the State Council of the Russian Federation (2017). Investitsionnaya privlekatelnost regionov – osnova ekonomicheskogo razvitiya Rossiyskoy Federatsii [Investment attractiveness of regions – a basis of economic development of the Russian Federation. Moscow]. 2017. December. [in Rus.]
- Tybout, J. (2000). Manufacturing firms in developing countries: how well do they do, and why? *Journal of Economic Literature*, 38 (1), 11–44.
- Yakovlev, A., & Zhuravskaya, E. (2013). The unequal enforcement of liberalization: evidence from russia's reform of business regulation. *Journal of the European Economic Association*, 11 (4), 808 - 838.