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# CHANGE IN PUBLIC ADMINISTRATION IN THE ERA OF ECONOMIC DIGITALIZATION

O. V. Trubetskaya (a)*, K. N. Ermolaev (b), I. A. Lunin (c)
*Corresponding author

(a) Samara State University of Economics, 443090, Soviet Army Str., 141, Samara, Russia, olgatrub@gmail.com
(b) Samara State University of Economics, 443090, Soviet Army Str., 141, Samara, Russia, ermolaevkn@yandex.ru
(c) Samara State University of Economics, 443090, Soviet Army Str., 141, Samara, Russia, Luninia0576@gmail.com

## *Abstract*

The authors consider the trends in the transition of the Russian public sector to the digital economy. They study the place occupied by public service bodies in the development of electronic government, and represent the list of services provided on-line, their features and dynamics. It was found that during the period of relevant government programs the number of users of electronic government services has increased, mobile applications have appeared that provide services such as payment of fines and tax debts, while payments are made through bank cards and electronic money. The implementation of the state program "Information State", which should ensure the transition from electronic to digital services, is analyzed. The authors emphasize the difference between e-government and digital one, which consists not only in providing a number of services using information technology, but in creating a system that ensures production and access to data, services and content of all economic entities. Difficulties faced by public authorities in the transition from electronic government to digital one are identified and the examples of foreign experience show the possibilities of increasing the efficiency of the state using modern digital technologies. Digitalization will reduce administrative costs, enable targeted production of public goods, reduce the risks of data manipulation, and test new public policy measures before introducing them into real life.

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**Keywords:** Public sector, digital economy, government.

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## 1. Introduction

The spread of information technology has a significant impact on all spheres of life in modern society, leading to new ways of interaction between economic agents. The public sector was not an exception, to which citizens and businesses began to make demands on optimizing internal administrative processes, make changes in the sphere of public administration in order to improve the quality of services provided by the public sector and create public goods demanded by citizens of the country.

The use of information technology to improve the quality of services provided by the state was first proposed back in the 1990s in the concept of new public management in developed countries. In Russia, the application of information technologies in the field of public administration began much later, which, on the one hand, led to some lagging behind the development of leading countries, on the other hand, made it possible to study the existing world experience and in the shortest possible time to develop the information and communication infrastructure necessary for the transition to a digital model of economic development.

## 2. Problem Statement

The categories Digital Economy and Digital Government are currently receiving close attention from all actors. At the same time, the main sign of digitalization is the exchange of knowledge and technologies between economic entities that can manage various processes (Ermolaev, Matveev, Trubetskaya, & Gromova, 2018).

Scientists see digital changes in the public sector from the perspective of transformation of providing public services (Lindgren & van Veenstra, 2018), as a service for creating personalized public goods using information technology (Romme & Meijer, 2019; Clarke & Craft, 2019), focus on ways to quickly switch from electronic to digital government (Mergel, 2019), study various aspects of management in the transition to digital, for example, the formation of a smart system city as one of the ways to improve interaction between authorities and society (Pereira, Macadar, Luciano, & Testa, 2017).

The state is given the role of a guarantor that protects public values, while state bodies are not the sole subject of responsibility for the policy pursued, sharing it with entrepreneurs, citizens, and other organizations (Bryson, Crosby, & Bloomberg, 2014).

## 3. Research Questions

In the course of the study, the authors posed the following questions:

- Assess e-government that has formed in the Russian Federation at present;
- Show how government functions in the digital economy using the example of Great Britain and India;
- Identify problems that impede the transition from electronic government to digital one in Russia.

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## 4. Purpose of the Study

The purpose of the study is to analyze the features of the transition of the public sector of the Russian economy to the digital sector, to identify the main directions of digital changes in government bodies based on the analysis of foreign practice.

## 5. Research Methods

In the course of the study, methods of analysis and synthesis, generalization, the method of graphical presentation of results, and methods of mathematical statistics were used. General scientific methods allow showing the features of the development of electronic government in Russia, identifying the problems that the government faces in the digitalization process, analyzing the features of the development of the digital state of other countries. Methods of mathematical statistics and a graphical representation of results made it possible to evaluate the quantity and structure of services received by the population and businesses in electronic form.

## 6. Findings

According to estimates by McKinsey Global Institute, Russia is already living in the digital economy, since in terms of the number of Internet users it came out in 1st place in Europe and 6th in the world in 2017 (Aptekman et al., 2017). At the same time, the total share of the digital sector in Russia's GDP is only 3.9%, which is 2-3 times lower than that of the leading digitalization countries. Fulfillment of tasks for the further transition of the economy to a digit, indicated in the national program “Digital Economy of the Russian Federation”, involves the introduction of digital technologies in the field of public administration and services.

It is assumed that the services provided should be based on a number of principles: they should be platform independent and focus on mobile devices; they should be provided on Internet Public Portal and with common data; there should be inter-agency services for sharing; cybersecurity and confidentiality should be ensured (World Bank Group, 2016).

The process of digitalization of public services is reflected in the state program “Information Society (2011-2020)”, which consists of four subprograms and one federal target program: 1 “Information and Telecommunication Infrastructure of Information Society and Services Provided on Its Basis”; 2 “Information Environment”; 3 “Security in Information Society”; 4 “Information State”; Federal target program “Development of Broadcasting in the Russian Federation for 2009-2018”.

The “Information State” subprogram should ensure the further development of electronic services provided by the state to the population, ensure the reliability and protection of state information systems and services, establish uniform quality standards for electronic interaction, support regional integrated projects for the development of information technologies (Ministry of Telecom and Mass Communications of the Russian Federation, 2018).

For the period 2008-2017 Russia implemented the concept of e-government, which had to provide state and municipal services in electronic form. Internet Public Portal of state and municipal services was created, on which interactive forms of 392 state and municipal services out of 888 planned were

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displayed. As of December 31, 2018, the number of citizens registered on Internet Public Portal amounted to 86,132,754 people, the growth of the user base was 24% compared to 2017.

The population actively uses services such as checking tax arrears, traffic police fines, enforcement proceedings, and informing about the state of personal accounts in the pension insurance system. Internet Public Portal operates electronic payment through bank cards and electronic money of housing and communal services, tax debts, debts on enforcement proceedings, fines for violation of traffic rules, state fees for obtaining a passport. The provision of state and municipal services in electronic form increased from 35.2 to 74.8% for the period from 2014 to 2018 (see Fig. 01).

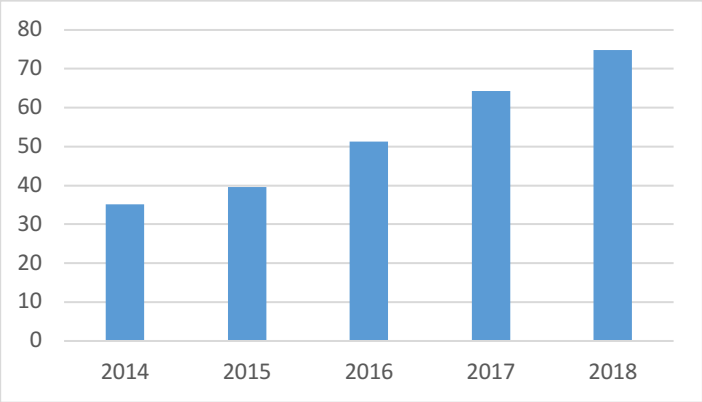


**Figure 01.** The provision of state and municipal services in electronic form.
Source: authors based on (Abdrakhmanova et. al., 2019).

For the period 2015-2018 the number of online interactions of organizations with public authorities has also increased. So, if in 2015-2016 the main areas of interaction were obtaining information from the Unified State Register of rights to real estate and transactions with it, as well as providing other state and municipal services to organizations, then in 2017, the main directions were sending and downloading of completed official forms - 67.8% (Abdrakhmanova et al., 2019).

In 2018, 2931 million state and municipal services were provided through Internet Public Portal and mobile application, of which 2871 million services were information on fines, tax arrears and enforcement proceedings. The number of service orders for 2018 through Internet Public Portal and mobile application of services amounted to 60 million. The amount of electronic payments for 2018 amounted to 52.6 billion rubles, which is almost 3 times higher than the total amount of payments for the same period of 2017 (17.6 billion rubles). The number of successful payments for 2018 also increased significantly: 48.1 million successful transactions (Ministry of Telecom and Mass Communications of the Russian Federation, 2017).

In 2018, as part of the initiative of the Central Election Commission of the Russian Federation to give voters the opportunity to vote at any polling station at their location, there was a convenient service for registering at a selected station, the so-called “Mobile Voter”. The service is available to users with a verified account who are 18 years old on the day of voting. During the election campaign for the President of the Russian Federation, more than 1.6 million such statements were submitted. There were almost 300 thousand applications during elections for state authorities of the constituent entities of the

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Russian Federation, as well as the additional elections for deputies of the State Duma of the Federal Assembly of the Russian Federation on a single voting day on Unified Voting Day – September 9, 2018.

The United Nations evaluates the level of development of e-government using the E-Government Development Index, which takes into account the number and level of services provided, the development of human capital, and innovation. In 2018, the United Nations rated the development indicator of Russian e-government as very high, in the overall ranking of e-governments Russia took 32nd place, improving its result compared to 2016 by three positions.

Currently, Russia is transforming e-government into digital one. This process involves improving the efficiency of public administration, the quality of services provided by the state, simplifying the interaction of citizens and business with the state. Such transformations, according to the UK Digital Government Performance Report, will reduce the cost of government services, as digital transactions are 20 times cheaper than telephone transactions, 30 times cheaper than mail, and 50 times cheaper than full-time mode (World Bank Group, 2016).

The change of e-government to digital one implies the creation of a system that includes government, non-governmental organizations, business, citizens, production and providing access to data, services and content based on interaction with the state. The fundamental difference of the digital state is the introduction of digital technologies in public policy to create personalized goods that meet the individual needs of citizens.

Further digitalization of the public sector faces a number of challenges:

- There are still no uniform rules for the creation of state information technology systems, the data are poorly structured and contradictory;

- A sufficiently large part of the services remains outside the scope of the electronic field, which leads to the constant need for physical identification of a citizen;

-There are more than 250,000 different state websites, thousands of state information systems;

-Each department has its own plan for digitalization and development of services.

To solve the above problems, we can turn to foreign experience in creating digital public services.

The experience of India is interesting, where the government has developed a single identifier Aadhaar to support low-income groups and to effectively spend public funds and increase the availability of public services. It includes fingerprints, scans of iris and a 12-digit number for each citizen. All data about the citizen, copies of his documents are tied to this identifier, which allowed more than 99% of the inhabitants of India to register in the electronic system. The program keeps records of food cards, subsidizes gas consumption, education, opens a bank account remotely, charges state benefits and compensations, and transfers money between citizens. All copies of documents are stored on a cloud server, and it is enough to indicate your identification number to receive public services.

The UK is one of the leaders in economic digitalization. A government transformation program has been developed in the country, within the framework of which the Predictiv platform has been created, which allows conducting behavioral experiments in real time. The state can on-line try new measures of state regulation with the participation of citizens and check how these measures will be implemented in real life. Thirty tests have already been carried out and the results are put into practice.

For example, the Office of Equality and the Department of Labor use the results of one of the trials to change state communication on parental maternity leave (OECD, 2018).

## 7. Conclusion

The concept of a digital state will allow solving a number of problems related to the use of administrative resources, data manipulation in favor of government bodies. Moreover, the use of big data technology will allow all entities to access online information of interest to them. Processing data in large networks will easily reveal the opinion of citizens on key issues of public policy, while the possibilities of the analysis will be significantly expanded through information technology.

The expansion of digital technologies will solve the problem of discrepancy between the demand and supply of public goods, since the state will have all the necessary information about the needs of citizens, and the targeting of state support will increase.

All these processes will increase the efficiency of government programs in all sectors: science, healthcare, public sector management, minimize face-to-face contact of the population and business with government bodies, which will increase the speed of public services, reduce administrative costs and allow real-time monitoring of the situation.

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