Present-day information technologies in public administration in Russia

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Abstract. The article discusses the use of modern information technologies in public administration. It is noted that at present, when a new information society is actively developing, the issue of introducing the latest information technologies into state and municipal administration is becoming the most urgent topic, as it makes it possible to effectively communicate with state and municipal authorities with legal entities and individuals, accelerates and simplifies the process of registration various documentation, contributes to the development of the economy and social sphere. The main goal of the study is the issue of the characteristics of modern information technologies in the public administration system in the Russian Federation at present and their practical application. The main research methods in this case are the collection of primary information and its analysis. The article highlights the main legislative acts on the basis of which the introduction of new modern technologies in the public administration system is carried out, as well as systematized indicators characterizing the dynamics and development of this process. It also raises the issue of the effectiveness of the “electronic government”, when the process of informatization of public administration is fully taking place. The study assessed the effectiveness of the “electronic government” in three main areas of interaction in the public administration system. This article provides statistics characterizing the dynamics of the implementation of the Information Society Development Strategy in the Russian Federation for 2017-2030. Analysis of statistics shows that, despite certain problems and shortcomings, the implementation of this Strategy at the present stage is quite effective.

1. Introduction

The history of the development of mankind has several millennia, which saw a constant accumulation of information by society. While transferring information from one generation to another, it was constantly analyzed and supplemented. Moreover, the development of civilization is accompanied by the constant complication of the methods of its transmission. In the 21st century, the processes of informatization, computerization and the development of telecommunications made it possible to create certain prerequisites, and then to execute the actual transition to the information society, in which information and communication technologies are implemented in absolutely all spheres of life, primarily in state and municipal government, and this explains the relevance of the research topics [1,2,3].

In order to increase the competitiveness of the Russian economy, to make the life of Russian people more comfortable due to the convenience of obtaining various information or preparing
documents related to state or municipal services, it is necessary to put the latest information and communication technologies into practice, that is, to enhance the efficiency of state and municipal government. For this reason, the informatization of state and municipal authorities is currently considered one of the priority tasks for the Russian authorities.

The issue of introducing modern information technologies, including the public administration system, is by far the most relevant not only for Russia but also for the entire world community. Therefore, the work of many foreign and Russian authors is devoted to the study of this topic. For example, Frank Webster, the famous English sociologist, provides a detailed description of the information society in his works and explains the need to introduce the latest information technologies for its further effective development [4].

Russian scientists, interested in the topic of introducing the latest information technologies in public administration from various perspectives, have also considered this issue [5]. For example, V.V. Trofimov pays special attention to the informatization of public administration in the economic sphere. N.Yu. Sokol dwells in detail on aspects related to the implementation of information technology in municipal administration. In her works [6], Yu.S. Bulgatova gives examples of the effective implementation of the latest information and communication technologies in state and municipal governments in developed foreign countries and analyzes the possibility of using them in Russian society [7].

Despite the adopted programs regarding the development of information technologies in public administration, serious problems are still observed in this area today [8, 9, 10]. First, this concerns the open lag of Russia from developed countries in this line. This situation is due to certain reasons related both to the economic lag of our country from the developed Western countries and to the mentality of Russian citizens. Besides, one cannot fail to note some imperfection of the regulatory framework regarding information and communication technologies, as well as an acute shortage of qualified personnel working in the field of development and practical application of the latest technologies. Naturally, all currently existing problems require their solution.

The purpose of this article is to consider information technologies used in the field of state and municipal government of the Russian Federation at the present stage of development. To achieve this goal, the following research objectives were set: indicate the main legislative acts governing the implementation of modern information technologies in public administration; to highlight the main directions of the introduction of modern information technologies in public administration, including the ‘electronic government’ in Russia; to describe the dynamics of the introduction of modern information technologies in public administration.

2. Materials and methods
To achieve the goal the following methods were used: primary data collection and analysis method. The systematization of indicators of the implementation of information technologies in the system of state and municipal government is made, its dynamics in recent years is demonstrated using the example of ‘electronic government’. The analysis method allowed concluding the effectiveness of the process of introducing new information technologies in public administration in Russia nowadays. The information base was composed of scientific works, articles published in printed Russian and foreign publications on issues of digital management in the state sphere; notes, reviews, statistical materials (characterizing the dynamics of the implementation of the Strategy for the Development of the Information Society in the Russian Federation for 2017-2030.), etc., on the Internet, including on the history of development, the current state and prospects for the application of information technologies in public administration.

3. Results and discussion
The development of information and communication technologies in the field of public administration of present-day Russia is currently coming to the fore in importance. In 2017, the Decree of the President of the Russian Federation approved “The Strategy for the Development of the Information
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Society of the Russian Federation for 2017-2030”, in which the issue of active implementation of information technologies in public administration was given the closest attention. Besides, the problem of information security, which is relevant for modern society, is also regulated. In 2016, the Decree of the President of the Russian Federation adopted “The Doctrine of Information Security of the Russian Federation”, on the basis of which the issues of national security of the state and Russians from various kinds of harmful information are regulated, including in the field of public administration.

In recent years, increasing importance has been given to the development of the digital economy in the Russian Federation. In 2017, the Government of the Russian Federation approved the Digital Economy of the Russian Federation program, where the need to introduce the latest information technologies to municipal and public administration to increase its effectiveness was highlighted.

Close attention in Russia is currently being paid to ensure that Russians are able to receive information on state and municipal services, as well as to use these services in the form that is most convenient for them and as soon as possible. For this purpose, the “electronic government” program was developed and put into practice, it is based on the Federal Law “On the Organization of the Provision of State and Municipal Services”, as well as the Decree of the Government of the Russian Federation of 2016 “On the requirements for the provision of electronic state and municipal services”. The first document outlined the general provisions regarding the rules for the state municipal services provided to Russian citizens, the specified regulatory legal framework for the provision of these services, provided a complete list of state and municipal services, terms for the provision of services, rules for appealing decisions from citizens in case of unfair rendering authorities services, etc.

Besides, a separate article of the Law is fully devoted to the provision of state and municipal services in multifunctional centers, which would significantly reduce the time for the provision of these services, as well as lead to the convenience of obtaining such services by citizens. The issue of introducing new information technologies is also addressed in this legislative act in general terms. The second legislative document, that is, the Government Decree “On the requirements for the provision of electronic state and municipal services”, is fully devoted to this topic, it specifies all the rules and terms for the provision of these services in more detail, and also obliges state and municipal bodies put the latest information technologies into practice at all levels, as quickly and actively as possible. Moreover, it is emphasized that everything should be carried out in the form most convenient for Russian citizens. This Decree, as practice later showed, significantly accelerated the implementation of the latest information technologies in the provision of state and municipal services, expanded the list of these services, pushed government bodies to create their own electronic sites, which provide information on the work of government bodies, and also helped to bring the state authorities and citizens through two-way communication.

The main distinguishing feature of the modern post-industrial information society is that information is of particular value and is the main resource in the management system. The introduction of modern information technologies into state and municipal administration contributes to the solution of such basic tasks as: ensuring the openness and transparency of administration, strengthening the accountability of state and municipal bodies to Russian citizens, ensuring a wider involvement of state citizens in governance processes, that is, the principle of democracy is implemented more fully.

Through the use of the Internet, citizens have the opportunity to receive the information they need regarding the work of state or municipal structures, for example, on the income and expenditures of budgets, the implementation of social programs, etc. Using enhanced information technologies, people have the opportunity to send various complaints and suggestions to all state and municipal authorities quickly and easily. In Russia, both individuals and legal entities are getting more and more opportunities to apply to government bodies on issues related to the introduction of unreasonable procedures or rules. Studies in this direction show that this relationship of the governing bodies with citizens and organizations allows establishing closer feedback, which makes it possible to timely identify violations and errors, with their subsequent correction. Such methods of interaction, of course,
bring power closer to citizens, reduce the formality of management processes, which has a positive effect on the psychological climate in society, on the general social environment.

On the other hand, the use of new information technologies by state and municipal governments gives them the opportunity to monitor various procedures on time, for example, applying for licenses, etc., as well as making public statements. Timely communication of information to citizens allows society to better understand the tasks and attitudes that are implemented by state and municipal authorities, which ensures the absence of social tension in society.

To ensure the effective movement of information flows, the latest information systems are used in practice. Currently, such departments as information and analytical centers, public relations departments, information retrieval systems, statistics departments, etc., are established in government bodies themselves, which monitor, analyze, systematize all information and also provide communication with citizens and legal entities.

Particular importance is currently given to the work of information and analytical services, since the timely delivery of information from the population to state administrative structures, as well as the relevance of this information, depends on their effective activity.

Conducted studies allow dividing the currently available information and analytical services into 3 classes with a certain degree of conditionality. The responsibility of the information and analytical services of the first class includes the ordering of information and the creation of reference arrays for the convenience of finding the necessary information. The duties of the information and analytical service of the second class cover the analytical information contained in the databases. Third-class information and analytical services themselves are directly involved in the development of analytical experimental technologies, which are then used in the process of work by government agencies.

Particular attention is paid to these centers, first, for the reason that they are harmoniously "embedded" in the process of public administration. Information and analytical centers perform such important functions as the solution of technical, operational, organizational, personnel and other issues. With their help, the information needs of the leadership that are necessary for the implementation of the direct management process are identified and formulated. The completer and more reliable the information provided by the information and analytical centers will be, the more accurately the development programs, and therefore, the management process will be drawn up.

Of great importance for increasing the efficiency of state and municipal government was the introduction of the so-called "electronic government", which is essentially a system of interaction between government and the population, based on the widespread use of modern information technologies, especially the Internet, to expand access to public services, as well as their accessibility and ease of receipt.

The formation of "electronic government", according to the authors of the article, pursued several goals simultaneously:
1. Improvement of the accessibility and quality of state and municipal services that are provided to citizens and organizations, the introduction of common standards of service, as well as reducing the time required for paperwork
2. Increased transparency of information on the activities of state and municipal authorities, as well as ensuring the convenience of access to this information by citizens and legal entities.
3. Improved quality of the processes of state and municipal government by expanding feedback with the state population, as well as due to the availability of a large amount of information for analytical research by information and analytical centers.

The “electronic government” system is not a separate supplement or analog of the traditional government, but simply defines a completely new modern way of interaction between the government and the population by using the capabilities of modern information technologies, which fully meets the needs of the modern information society [11].

“E-government” includes 3 areas of interaction in the public administration system:
1. Between state structures and citizens of the country.
2. Between government and private companies.
3. Between various government structures and levels of government [12].

However, in spite of the obvious prospects for the development of “electronic government” and the convenience of its use by both state management structures and citizens of the country, its universal implementation is still far from complete. The authors of the article note that, as the studies of sociologists and political scientists show, this state of affairs is explained by the mentality of Russian citizens, many of whom simply do not want to use new directions of contact with the authorities, and the inability to use new means of obtaining information, for example, the Internet.

Besides, it is worth mentioning the important fact that access to the “electronic government” today is far from being available in all regions of the Russian Federation [13].

The authors evaluated the effectiveness of the “electronic government” in the above areas.

1. The interaction between state structures and citizens of the country.

To assess the activity of using the State Services portal by citizens, the authors compiled a table displaying data on the number of registered users of the portal and the number of services rendered (Table 1).

| Indicator | 2010-2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|-----------|-----------|------|------|------|------|------|------|
| Number of registered users, mln people | 3.6 | 6.9 | 13.0 | 22.5 | 40.0 | 65.0 | 86.5 |
| Number of services rendered, mln issues | 7.7 | 14.0 | 17.5 | 49.8 | 380.0 | 1.3 bln | 2.6 bln |
| The proportion of citizens using the mechanism for obtaining state and municipal services in electronic form, % | 25 | 30 | 35.2 | 39.6 | 51.3 | 64.3 | 74.8 |

Thus, the vast majority of the population – 86.5% as of January 1, 2019 – is registered on the State Services portal. This situation has arisen as a result of the development of multifunctional centers, which citizens prefer to apply for services, rather than directly to individual government agencies. MFC employees register the citizens who applied to them on the portal, but later on the latter do not use their account. The more reliable indicator is the increase in the number of services rendered using the State Services portal. In 2015, the value of this indicator amounted to about 50 million services, in 2018 portal users submitted 2.6 billion applications for state or municipal services. The dynamics are noticeable and indicate that a significant proportion of Russian citizens have estimated the usefulness and ease of use of the service.

Its developers found out that all life situations faced by portal users can be divided into 25 enlarged blocks. They were called super services and as early as August of this year, users can test the first 10. Prototypes of another 15 super services should appear by the end of the year. In total, they will unite about 200 popular state and municipal services. It is assumed that by 2021, thanks to digital transformation, the level of failures in the provision of public services will decrease to 10% of the level of 2018. It is planned to simplify as much as possible filling out applications for the provision of services, halving the time for the provision of services and reducing the number of violations of the time limit to 4%.

2. The interaction between government agencies and private companies. Recently, many Russian companies are trying to maximize the translation of workflow into the electronic one. Largely this refers to the exchange of various documents with external contractors, including government bodies. An electronic document acquires legal force only after it is signed with an electronic digital signature (EDS). At the same time, a simple and unqualified EDS is equivalent to a handwritten signature on a paper document, and an enhanced qualified electronic signature (UKEP) is equivalent to a handwritten, certified seal. To interact with government agencies in electronic format, the latter is needed. New areas of application of UKEP are constantly appearing, which is associated with the wide
development of electronic document management. From July 1, 2018, suppliers are required to use UKEP to participate in public procurement.

In 2006, only about 600 thousand certificates of EDS were issued, then in 2018, this figure amounted to 32.8 million certificates (Figure 1).

The figures indicate that more and more Russian organizations start to introduce electronic document management in their business processes. An important factor in this is the development of “electronic government” since interaction with government bodies in electronic format is faster and easier.

3. Interdepartmental interaction between state structures. The interaction occurs within two systems: (1) MEDO, a system of interdepartmental electronic document management, (2) SMEV, a system of interagency electronic interaction in order to provide state and municipal services in electronic form. MEDO is designed to improve the efficiency of public administration by reducing the time of document management; minimize the cost of processing and sending documents; monitoring the execution of orders. The system assumed a gradual complete rejection of paper workflow between its participants, the number of which is constantly increasing due to the connection of regional EDMS to it. The Ministry of Construction of the Russian Federation proposed to include in the composition of the MEDO participants organizations subordinate to federal bodies of state power, the exchange of documents with which is still done in paper format.

SMEV is designed to provide a mechanism for electronic interagency interaction. Thanks to it, the recipient of state and municipal services should not independently collect various documents and certificates for receiving the service. At the request of the MEIS, they exchange data electronically. As of November 2018, 29 billion transactions were conducted using this system (Figure 2).
In total, in 2018, 42.3 billion rubles were transferred to the budget through the Unified Portal of Public Services.

4. Summary
The study shows that the question of the need for the development of modern information and communication technologies in state and municipal government is currently very urgent in Russia, which is recognized by the country’s leadership. Therefore, both the President of the Russian Federation and the Government have developed legislative acts regulating this area. To ensure the effective movement of information flows, the latest modern information systems are used in practice, which enable effective interaction between state structures and citizens of the country, state structures and private companies, state organizations and their employees, various state structures and levels of government.

The analysis of statistical data carried out during the study allows us to conclude that, although today there are obvious positive dynamics in the process of introducing new information and communication technologies into the system of state and municipal government in Russia, nevertheless, this is not so as fast as one would like to. This state of affairs is due to several reasons, the most important of which is the significant lag of the Russian Federation economically from developed countries. Besides, factors such as a lack of qualified personnel, features of the Russian mentality, etc., slow down the process of introducing new information technologies. However, all these obstacles are completely overcome with the joint efforts of the state and Russian society.

The introduction of enhanced information technologies in state and municipal administration in Russia is proceeding rapidly. Particular attention should be paid to the development and implementation of the necessary regulatory documents, which, as practice shows, are extremely necessary for the activation of ministries and departments in the implementation of new information technologies related to the provision of state and information services to Russian citizens. Therefore, Russian lawmakers need to pay close attention to this moment.

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