TRANSFORMATION OF THE PUBLIC ADMINISTRATION SYSTEM IN THE DIGITAL ECONOMY

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ABSTRACT

Digitalization is an objective and inevitable process, which is impossible to halt. The development of the digital economy should allow the Russian economy to integrate into the global context and legal aspects of this process need to be analysed. This paper aims to study the influence of digitalization on public administration (especially in economic sectors) in Russia, to outline new requirements to public administration in digital era as well as to analyze new challenges caused by implementation of technical decision within global process of digitalization. The program “Digital Economy of the Russian Federation” dictates new requirements for the system of public administration. But despite the fact that the implementation of the Program requires serious simplification in the interaction of market operators and the state, interdepartmental interaction, it does not fully respond to the challenges of digital transformation of the public administration system. It should lead to a radical change in the approaches to the organization of the work of public authorities through the digitalization, reducing the “bureaucratic burden” when issuing electronic documents. It deals with the formation of conditions ensuring the development of information technologies and effective interaction of a state and business, which covers legal regulation, information infrastructure, personnel and information security, etc. As a result the authors came to conclusion that now it is not a primary task to set out new electronic systems in new fields as much as to improve already existing systems and the system of public administration itself in order to duly adapt it to new digital environments that was established. It is necessary to establish the limits for implementation of various electronic systems to ensure the proper protection of fundamental rights (for example, the right to the protection of personal data, the right to privacy, etc.) as well as to set up some limits for automated individual decision-making.

Keywords: interaction of subjects of markets and economic sectors, public administration, a new level of quality of public administration, transformation of the public administration system, digitalization, digital technologies, digital economy
INTRODUCTION

In the post-industrial society digital technologies are gradually becoming an indispensable part of the Russian society. A man is changing, economy relationships and social institutions are changing, public administration is transforming in the era of digital economy.


The national program “The Digital Economy of the Russian Federation” is aimed at enhancing the efficiency of the main branches of the Russian economy, transformation of Russia into the global leader of the world economy and its way to the new quality level of public administration.

The program prescribes the creation of the legal regulation system for the digital economy in Russia via formation of the legal base and production of digital products necessary for achieving the goals thereof, for transformation of the public administration system.

What should the digital transformation of the public administration be like? The state should create conditions, which ensure development of information technologies and effective interaction between participates of markets and branches of economy. This covers legal regulation, information infrastructure, human resources and information security, etc.

The objective of this article is to study the influence of digitalization on public administration (especially in economic sectors) in Russia, to outline new requirements to public administration in digital era as well as to analyze new challenges caused by implementation of technical decision within global process of digitalization.

MATERIALS AND METHODS

Legal base of this study is Russian legislation currently in force as well as applicable sources of international law (including judgements of European Court of Human Rights). Starting from programmatic documents setting out basic approaches to digitalization of public administration the authors will proceed to legally binding acts establishing particular measures to be implemented in order to achieve goals stipulated in such programmatic documents.

As a methodological basis for this study, authors used both general scientific methods of cognition and special methods and techniques used in legal sciences: dialectical method, logical deduction and induction, system approach, statistical analysis, formal legal method (interpretation method). Deduction (including its basic laws), a comparative method and a systematic approach, should make it possible to identify the essence and main trends in digitalization of public administration (especially in economic sectors) in Russia. The use of the method of dialectics should allow identifying general patterns of development of the legal framework in order to analyze, classify and systematize modern approaches to the digitalization of public administration, in the legislation of the Russian Federation. The conclusions formulated by means of a logical analysis will need to be transformed using the formal legal method in order to prepare proposals for reforming the legal regulation of digitalization in the Russian Federation.
RESULTS AND DISCUSSION

Digitalization of public administration: example of Russian “e-government”

Digital transformation is a complex of actions implemented by a government body which are directed to the reorganization of the public administration system and functions of government bodies, namely offering of governmental services and implementation of governmental functions with the usage of data in the e-form and implementation of information technologies into work.

For reorganization of the public institutions in Russia the decision was made to implement the concept of “e-government”, which includes more effective and less expensive functioning of public authorities, enhancing the mechanism of interaction between public administration and people. The program is based on a number of legal acts: Federal laws on “E-signature” [Federal law, 2011], “Organization of Offering of Governmental and Local Services” [Federal law, 2010], Governmental Regulations of the Russian Federation adopting the State Program of the Russian Federation “Information Society (2011–2020)” [Governmental Regulation, 2014], “Federal State Information System ensuring the pre-trial appeal process of decisions and actions undertaken while Offering of Governmental and Municipal Services” [Governmental Regulation, 2012], etc.

The most effective direction of the transformation of the public administration system is implementation of the project “Open Government” on the federal and regional levels. For example, Moscow is a successful region within the project. Despite the fact that portals “Active Citizen”, “Our City”, “Portal of Open Data of Moscow Government” and “Portal of City Services” have been functioning for several years, they are enhancing constantly. It is worth noting technical and organizational abilities to file an e-petition to government and municipal bodies.

The e-government in the Russian Federation consists of several systems, which constantly interact with each other:

1. Uniform system of regulatory and reference information (USRRI);
2. Uniform identification and authentication system (UIAS);
3. Pre-trial appeal system;
4. Inter-agency electronic interaction system (IEIS);
5. The head certifying center information system (HCCIS);
6. Unified portal of public services (Gosuslugi);
7. Federal situation center (FSC).

We would like to dwell on each system in more detail as they complement each other performing clearly defined functions.

Uniform system of regulatory and reference information (USRRI) is the basic state information resource. The system acts as a single source of reliable regulatory and reference data for governmental bodies and local governments. USRRI is an integral part of Russian electronic government, as it contains accurate information, which can be relied upon.

Human interaction with authorities is carried out through the unified identification and authentication system (UIAS). Electronic government services provision begins with registration in this system. The main advantage of UIAS is its universality. Its account is used for virtually all governmental information systems.

The pre-trial appeal system is an important element in Russian electronic government. Every citizen using this system can file a complaint if public services failed to dully provide to him or her services in question. A more expeditious handling of complaints is the main advantage of the pre-trial appeal system over traditional court procedures.

The interaction of state and local bodies in state electronic services provision is ensured by the inter-agency electronic interaction system (IEIS). The main feature of IEIS is the interaction of bodies’ and organizations’ information systems through the technology of electronic message queues with the use of a single documented method. When the inter-agency interaction system is fully operational, all the necessary data will be obtained independently from a single database, which is already available today.
on the websites of the State Services, the Federal Tax Service of Russia and the mayor of Moscow Mos.ru.

The head certifying center information system (HCCIS) is aimed at increasing the efficiency of public administration by forming a uniform space of electronic signatures trustworthiness in the process of public services provision with the aid of certificates and electronic signature keys. The important functions performed by the system are the following: the production and issuance of qualified certificates for the electronic signature key, the maintenance of their registers, their storage, as well as other functions. It is thanks to the HCCIS that the use of electronic signature in the Russian Federation is possible.

The unified portal of public services (Gosuslugi) allows citizens to receive information about the state and local services, which ensures the transparency of government bodies. The key role of the portal is the opportunity to submit a request for the provision of a particular service, to pay for it and get a result.

The Federal Situation Center (FSC) deems to be the core of electronic government in Russia. Analytical statistics maintenance allows it to track the effectiveness of a particular system, as well as to understand whether it meets social needs. The center coordinates the activities of all electronic government systems through operational information and support. It also contains the basic documentation of the listed above systems. Anyone can get access to these documents free of charge, which makes their use extremely convenient and effective.

We would like to highlight the electronic government role during the COVID-19 pandemic. Since the system was sufficiently developed at that time, it helped prevent the deterioration of the epidemiological situation. Electronic government made it possible to exclude unnecessary contacts between people. Even during the exacerbation of the epidemic when almost all organizations were closed, the system kept working, albeit with some restrictions. The pandemic has provided invaluable experience to our electronic government, and now the number of services provided completely contactless is increasing.

In addition to state authorities, digitalization has also “came” into the sphere of judicial proceedings: through the State Automated System “Pravosudie” (justice) [Order of Judicial Department at the Supreme Court of the Russian Federation of 14.03.2014] and the service “Moi arbiter” (my arbiter) [Order of Judicial Department at the Supreme Court of the Russian Federation of 28.12.2016] it is possible to file suits and other forms of procedural documents to the relevant judicial authorities. Legal base for such electronic systems is established by federal laws “On providing access to information on the activities of courts in the Russian Federation” [Federal law of 22.12.2008] and “On Amending Certain Legislative Acts of the Russian Federation Regarding the Application of Electronic Documents in the Activities of Judicial Authorities” [Federal law of 23.06.2016].

It should be noted that this, in turn, opens up vast horizons for the further development of the system of justice administration in the modern digital environment. For example, the results of activities in the field of recognition of the digital evidence legal force are now in place. However, there is work to be done in this direction, whereby it is supposed to “systematize the available knowledge on this subject in the legal sciences, establish scientific links between existing theories and develop common points of view on the same subject in order to comprehensively solve the problems associated with obtaining, fixation and use of digital evidence” [Vehov, 2016].

The federal law “On a unified federal information register containing information on the population of the Russian Federation” [Federal law of 08.06.2020] should improve the quality of public services. The Unified Federal Information Register (EFIR) introduced by this federal law will help to identify groups of people in need of targeted government support more accurately. The unified register may appear as early as 2022, the transition period will continue until 2025.

The EFIR system containing personal data of citizens can complement the “safe city” system, which has already been introduced even in small towns.
The next step will be the introduction of a face recognition system (a similar one is already operating in China) to provide services in a remote format.

However such face recognition systems should meet criteria established by European Court of Human Rights. Under Article 8 § 2 of the European Convention Human Rights, there shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.

Firstly, usage of such systems should not constitute covert surveillance which cannot be challenged by the applicant or other persons [Peck v. the United Kingdom, 2003].

Secondly, usage of such system should not violate privacy rights.

Under Article 8 § 2 of the European Convention Human Rights, there shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.

Private life is not only protected within private areas. As the Court of Human Rights noted there is a zone of interaction of a person with others, even in a public context, which may fall within the scope of “private life” [P.G. and J.H. v. United Kingdom, 2001, para 56]. Privacy issues may arise when pictures are taken by the police during a public demonstration in a public place [P.G. and J.H. v. United Kingdom, 2001, para 58]. In general, it is not the monitoring as such which is the most problematic, but the recording of the data and their processing which may create an unlawful interference with the right to privacy [Amann v. Switzerland, 2000, paras 65–66]. This interference will not be considered as intrusive as long as the data collected remain in an administrative file and are not put in a data system process in order to identify the persons [P.G. and J.H. v. United Kingdom, 2001, para 58].

At the same time right to privacy is not an absolute one. In accordance with Article 8 § 2 of the European Convention Human Rights in order to be lawful, a limitation of the right to private life must meet the following criteria: be prescribed by law, be necessary in a democratic society and pursue a legitimate aim. The European Convention Human Rights has decided that Article 8 § 2 of the Convention does not require as a legal basis an act emanating from the legislator in the formal sense [Opinion on Video Surveillance in Public Places, 2007, para 51]. The Court has developed rather high standards as to the quality of the legal basis of such an interference with the protected rights. Where domestic law does not indicate with sufficient clarity the scope and manner of exercise of the discretion conferred on the domestic authorities to collect and store in a surveillance database information on persons’ private lives – in particular, where it does not set out in a form accessible to the public any indication of the minimum safeguards against abuse – this amounts to an interference with private life as protected by Article 8 § 1 of the Convention [Shimovolos v. Russia, 2011, para 66]. The necessity in a democratic society requires that the kind of measures amounting to the interference must not be such that they have a deterrent effect on the exercise of human rights and other legitimate behaviour [Goodwin (Christine) v. UK, 2002, para 39]. Thus, the measure endangering greatly other fundamental rights fails to meet the necessity criterion.

**Digitalization and data protection**

A wide range of bodies will have access to personal data of Russians. State bodies, notaries, public services portal will be able to use the information. Ensuring the security of citizens’ personal data is a task of supreme importance today. The protection of personal data can be facilitated not only by the installation of anti-virus programs, but also by the increase in the cyber literacy of the population. The more the users are notified...
of threats to their personal data, the more security their personal data will be provided. The set goals are being fulfilled with some discrepancy from the target dates. Nevertheless, the result of the implementation of these measures is important.

The need to protect biometrics will only grow in the future as some of biometrics is already in use. For example in 2018 a Unified Biometric System was launched in Russia [Governmental Regulation of 14.07.2018]. This system allows credit institutions to open bank accounts, deposits or approve an application for a loan without one’s personal attendance. Data security in this case is ensured through distributed storage of such data. At governmental level were adopted rules of procedure [Ministry for Digital Development, Communications and Mass Media order, 2018] for processing of the parameters of biometric personal data for identification purposes, for posting and updating them in the System as well as requirements for information processing technologies and technical facilities used for data processing during personal identification. Relying on these provisions, banks ensure the correct collection and protection of biometric personal data of individuals.

Also should be mentioned Bank of Russia Guidelines [Bank of Russia Guidelines, 2019] on elimination of security threats relevant to the processing of biometric personal data. This Guidelines stipulates *inter alia* such measures as exclusion of the possibility of storing biometric data in an automated working station after the completion of their registration, implementation of security features against computer attacks, elaborating memos for clients providing information on the features of the software for remote customer identification using biometrics, integrity control and message authentication for messages sent by electronic means and containing biometric personal data of individuals.

Also information technology providing for data security should be mentioned, e.g. systems of security fetch protection, information security facilities against malicious codes (virus-protection programs), facilities for firewalling (restricting access for external users to internal resources of enterprise area network, access control of internal users to external resources), intruder detection systems (against cyber attacks). We believe that these technologies should be installed along with antivirus solutions (which are already subject to binding installation) if not in all devices that can be exposed to unauthorized tampering, then at least in those that contain a large amount of personal data of individuals, for instance, in state bodies’ computers processing personal data.

Additionally Russian Federal law on information, information processing technologies and information security [Federal law, 2006] provides for compulsory use of data encryption equipment ensuring data security while channeling for identification purposes.

It is also desirable to establish a legal framework for various mechanisms ensuring personal data security. These could be acts stipulating requirements to software to be installed in governmental bodies responsible for data processing. Such software can include full scan tools for illegal data storage, monitoring system for information transmission within network channels and to external storage devices, employee activity monitoring systems and at last investigation tools (the latter are necessary to indemnify an organization concerned in case of leak of data and impose liability for such leak to a certain official but not an organization itself). It should be noted that implementation of such technologies does not imply complete autonomy, but requires a certain level of training and ability to work with technologies. And this brings us back to the problem of cyber literacy and necessity of improving the skills of safe data processing since it is human beings who are responsible for system management and control irrespective reliability of an automation system itself.

**CONCLUSIONS**

As was demonstrated above digital systems were implemented in almost all spheres of public life. The COVID-19 pandemic has proved necessity of reforms introduced in the field of public administration digitalization.
Thus, now it is not a primary task to set out new electronic systems in new fields as much as to improve already existing systems and the system of public administration itself in order to duly adapt it to new digital environments that was established.

It is necessary to establish the limits for implementation of various electronic systems to ensure the proper protection of fundamental rights (for example, the right to the protection of personal data, the right to privacy, etc.) as well as to set up some limits for automated individual decision-making (as it is done in the EU, for instance) [General Data Protection Regulation, 2016, Art. 22].

The development of digital public administration implies a number of serious changes in order to simplify the interaction of individuals and legal entities with the governmental authorities and state bodies among themselves whereas regulation in force does not allow to solve all the current problems of inefficiency of public authorities and does not fully respond to the challenges of digital transformation.

The authors argue that the digital transformation of the public administration system should lead to fundamental changes in approaches to workflow management in state and local authorities via using digital technologies and algorithms.

For governmental bodies, the role of digital transformation is not yet obvious. They have no need to compete against privately owned companies while rendering public services, administrative costs have no impact on their competitiveness and ineffectiveness of state owned IT-services cannot bankrupt state body at hand.

Large-scale digitalization is impossible in the absence of systemic transformation of management processes, cardinal reforms of government machinery operational patterns. These requires:
- to balance the system of allocation of state powers, the institutional framework and interactions between state bodies;
- to increase the efficiency of budget expenditures

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