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# STRATEGIC DIRECTIONS TO APPLY INFORMATION RESOURCES IN LOCAL GOVERNMENT SYSTEM

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#### **Abstract**

Local government by its nature significantly differs from state power for objective reasons. The issues of two-way communication between the power structures and the residents are of crucial importance now. Local government is more differentiated than state power in terms of economic, financial and other resources, depending on the specific territory in which it is exercised. This specificity must be taken into account when reforming it and defining the main development directions. The most important tendency in societal evolution and public administration system in recent decades is digitalization. Information technologies are being introduced in all spheres of governance and initiate the emergence of new administrative methods of work. It is necessary to introduce an official governmental concept determining the directions for information resource development in municipalities and the ways to overcome digital inequality among municipalities. Such a concept shall be of a comprehensive organizational and economic nature and should provide phased implementation of digital technologies at the local level, depending on municipality type. This is quite in line with the specifics of local government, which is based on enshrining various opportunities for different municipality types. It is proper to legislate the approach whereby different municipalities shall follow specific requirements for the use of electronic direct democracy forms as well as municipal information systems.

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# 1. Introduction

Since the late XX – the early XXI century all areas of social administration, including public administration, have been considerably influenced by modern digital technologies, which on the one hand create new opportunities for increasing the efficiency of administration, but on the other hand bear certain risks. Local self-governance is also subject to these processes. The introduction of modern digital technologies in municipalities provides great opportunities for substantive changes in local government institutions by constructing a fundamentally new system of vertical and horizontal communication links. However, the focus of scholars is usually digitalization of central government activities. Moreover, existing works have focused on the central government; digital transformation in local authorities is an underexplored area (Bousdekis & Kardaras, 2020).

## 2. Problem Statement

The article aims to outline the main digitalization directions of local government, its specific features as compared with state administration being taken into account.

# 3. Research Questions

The research subject matter is the influence of modern digital technologies on local government institute transformation, providing real everyday involvement of citizens in local decision-making process and effective local government work, the risks of existing digital inequality being considered.

# 4. Purpose of the Study

The purpose of the study is to analyze modern digital technology practice in the Russian Federation municipalities, as well as at highlighting legal regulation approaches in this area. The fundamental scientific problem this research shall solve is related to the fact that there is no comprehensive approach to the assessment of modern digital technologies' impact on local selfgovernment institution, not only in the Russian Federation, but in other states as well. The analysis of such influence makes it possible to construct a concept of local self-government development with regard to dynamic social, legal, economic and political changes. The implementation of modern digital technologies at the municipal level provides significant opportunities for essential changes in local government institution through the application of a fundamentally new system of vertical and horizontal communication within the municipality. The newest technologies, especially blockchain, make it possible to implement the ideas of e-direct democracy on a fundamentally new level and thus provide the municipality residents with a real opportunity to routinely participate in local government. On the other hand, the widespread implementation of big data based municipal information systems, artificial intelligence, IoT, etc., could significantly improve the efficiency of municipal authorities. At the same time, the very specifics of local government require considering the peculiarities of digitalization at the municipal level compared to the state level.

There is an objective need to assess all these processes and interconnected risks; to justify the

feasibility of using specific ones in various segments of the municipal government model; to analyze the

readiness of municipality residents for innovations; to study the factors facilitating and hindering their

implementation; and to formalize them by enshrining in national legislation.

5. Research Methods

Different legal scientific methods were used in the paper, such as description, comparison,

classification, analysis and synthesis, aimed at revealing the current state of local government

digitalization.

6. Findings

Local government is objectively very different from public authority. This is manifested, firstly, in

the fact that local self-government is a self-organization that comes directly from the residents; local self-

government is the authority closest to the population, and issues of direct and feedback communication

between the authorities at the local level and the residents of municipalities are of crucial importance

here. Secondly, local government is graded to a much greater extent than public entities where state

power is exercised, in terms of economic, financial and other resources, depending on the specific

territory they are exercised in.

The specified peculiarities of local government must be taken into account while reforming it and

determining the main directions of its development under contemporary conditions. The most important

trend in the evolution of both society as a whole and the public administration system in recent decades is

digitalization; information technology introduction in all new areas; and new ways of governance based

on their use. However, despite this, the focus of scholars' attention tends to be on works about central

government; the digital transformation of local government is an under-researched area. This is despite

the fact that it is the municipalities that have direct day-to-day contact with citizens, while the

implementation of digital technologies in their sphere is not fast (Bousdekis & Kardaras, 2020).

One of the main regional IT development directions in the Russian Federation is launching

electronic document management at the local level, which is an integral part of the state program of the

Russian Federation "Information Society (2011-2020)" run in 2014. By 2024, the internal and

interdepartmental legally relevant electronic workflows for state and municipal bodies, as well as

budgetary institutions should reach 90 per cent.

Such high indicators attribute to the need to change the very nature of governance. The main form

of exercising the powers by municipal bodies is management decision-making. The decisions of the

authorities and the data necessary for their adoption are documents, so it is possible to modernize the

nature of governance by minimizing paper-based and introducing electronic document management.

However, electronic document management is not limited to internal and interdepartmental

information exchange within the public authority system. Municipality residents are also involved in the

process. They get municipal services and information in electronic format and could submit applications

through official portals.

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Despite good electronic document management indicators, at the municipal level there still arise a number of problems, namely:

- Having no single legal act regulating electronic document management in different areas, which significantly reduces its efficiency;
- Insufficient computer literacy of the population and low-level material and technical equipment in rural areas;
- The risks of compulsory electronic document management implementation without regard to municipality specifics. A gradual transition to Internet interaction with the population is essential;
- Using binary system to assess municipalities' activities (the task completed or not completed) sometimes results in management informatization becoming an objective per se and does not lead to higher efficiency of public authorities.

Another strategic direction in the development of information technology and resources at the local level is making electronic databases and municipal information systems, which are an alternative channel to obtain information and a source of analysis and decision-making data. The large amount of data and information, including that collected at the municipal level, provides near-real-time information on the actual situation and the results achieved. This directly contributes to the construction of a new online transparency policy related to the provision of services and information to citizens in order to improve the efficiency of management procedures (Ribeiro & Carniello, 2021).

It is possible to determine a number of key areas for the future use of digital technologies at the municipal level.

First, their implementation may contribute to improving the efficiency in dealing with most local issues. For instance, through the use of GIS of the Ministry of Interior (Automated Information Retrieval System "Motor Vehicle Search", System "Portrait", etc.) community policing issues in municipalities are solved. The State Information System for Housing and Communal Services (GIS for Housing and Communal Services) makes it possible to monitor and regulate the communal services provided. In Lipetsk, information processed from Glonass allowed providing regular city cleaning (Kornienko, 2021).

Secondly, these technologies enable automatic collection, analysis and processing of information for subsequent decision-making, both by municipal managers directly and through the use of automated systems.

Thirdly, municipal information systems are an alternative objective source that does not depend on the authorities. Right away, a considerable amount of data comes not from official channels, but from alternative sources.

Along with the promising use of municipal information systems, there are still some problems with their application:

- most data generated at the municipal level does not get into these systems;
- there is duplication of reporting and, therefore, of information;
- lack of automatic visualization and information analysis tools;
- poor culture of using, processing, and understanding information relevance;
- funding shortfall for information technology platforms aimed at working with databases;

# legal restrictions related to information sources and reasonable validation.

In addition, the differences between municipalities lead to completely different opportunities for launching digital technologies in governance. For example, unlike state information systems that are standardized although there is no uniform federal legislation, municipal information systems tend to be set up ad hoc, by each municipality individually. Integration between them is rarely envisaged, and in case of necessity turns to be impossible or very challenging. As a consequence, the legal basis for intermunicipal information is not formed, and technical breakthroughs of some urban districts display information inequality of municipalities (Sokolova, 2012). As a result, unified information space at the municipal level is disrupted, which adversely affects public administration quality.

The next direction of digital technologies introduced in municipalities is their use for direct democracy promotion. The proximity of the population to the municipal government implies more intensive communication. Modern digital technology offers unprecedented opportunities in this area. It is now possible to convert into electronic form, in whole or in part, a number of traditional direct democracy forms that can be applied at the local level (Essex & Goodman, 2020). Information technology not only significantly reduces the cost of the referendums of various levels, but also significantly simplifies the implementation of initiatives. The referendum as a part of e-democracy could become an operative mechanism of solving a variety of problems by Russian people directly. In this case, an electronic referendum will allow the government to get really objective answers to these questions, which can no longer be ignored (Amelin et al., 2016). It is at the local level that the use of digital technologies makes it possible to blur the line between such forms of direct democracy as local referendum and citizens' gathering. They can be held remotely, solving all the most substantial local issues promptly and coherently.

For example, Federal Law dated June 12, 2002 "On guarantees of electoral rights and the right of citizens of the Russian Federation to participate in a referendum", the regulation procedures for holding elections and referendums are different. The procedure for initiating and holding a referendum and recalling a deputy (an elected official) is more complicated than the election procedure. In elections, the voter turnout threshold is not determined. Voting can last up to 3 days and can be held directly, by post and remotely (through e-voting). With any number of votes cast, the election is considered to be valid. A referendum initiative or recall of deputies cannot be conducted digitally via a public services portal, and it is necessary that actual signatures of 5 per cent of the total number of citizens residing on the municipality territory shall be collected. Referendum and recall issues shall be voted for only directly at the polling station. Electronic voting is not allowed. The number of voters shall be at least 50 per cent. Such an imbalance in direct democracy forms in conditions of a world pandemic is hazardous. It is essential that all forms of direct democracy can take place both directly and digitally.

Following the example of Germany, instead of a complicated law-making initiative procedure, electronic queries or requests shall be used. If such a request for a solution of a particular issue gathers 15 per cent of local community votes on an official website, the local government is obliged to solve the issue in any way permitted by law.

If managed well, digitalization can provide a range of benefits, from greater protection of e-democracy from undue interference, to greater usability for the public. This format of interaction with the public can significantly reduce voter abstention rate. At the same time, digital technologies ensure not only direct communication (of population with municipal bodies), but also feedback communication (assessment of authorities' work by residents).

At the same time, the issue of digital inequality in Russia is still burning. Not all municipalities have sufficient organizational and financial resources to implement modern digital technologies actively. Residents of municipalities do not have the same opportunities and skills either (Gcora & Chigona, 2019). It can be noted that the problem of the population being not ready to adopt new technologies is typical not only for Russia, but also for many other countries around the world (Datta, 2020).

The solution to this problem is quite obvious, but it belongs not to legal, but organizational and economic field, and should be exercised through development of information infrastructure facilities and improved digital technology skills of municipalities' residents, etc. As for the legal aspect, gradual introduction of e-democracy forms in municipalities is necessary, taking their diverse capabilities into consideration. However, this is quite in line with the specificity of local government, which is based on fixing various opportunities for different types of municipalities. In this regard, it is justified to gradually introduce electronic forms of direct democracy in municipalities of different types, starting with urban districts and inner-city territories of federal cities and ending with rural settlements.

# 7. Conclusion

The analysis revealed the following strategic directions for the application of information technologies and resources in local government system:

- 1. Electronic document management in workflow.
- 2. Creation and use of municipal information systems.
- 3. Development of information technologies for public involvement in local governance.

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