European Proceedings of
Social and Behavioural Sciences
EpSBS

www.europeanproceedings.com

e-ISSN: 2357-1330

DOI: 10.15405/epsbs.2021.04.02.22

GCPMED 2020
Global Challenges and Prospects of the Modern Economic Development

DIGITAL TRANSFORMATION OF PUBLIC ADMINISTRATION: ACHIEVEMENTS AND PROBLEMS

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Abstract

The use of digital technologies in the field of public administration and provision of public services allows to get access to all necessary information and also makes it possible to quickly and efficiently receive the required public service. Accordingly, in order to speed up the digital transformation of this sphere, the author considers it necessary to describe the achievements and to develop a detailed classification of the problems associated with this process, so that the data obtained can be used to develop recommendations for improving the digital transformation of public administration. The article defines the specifics of the sphere of public administration, identifies the advantages of using digital technologies in the analyzed sphere, which allows us to characterize the achievements. At the same time the author reveals the problems that complicate the process of digitalization. The following problems were identified: limited budget funding, lack of qualified personnel, insufficient regulatory norms and inadequate technological standards. The author suggests continuing further standardization of digital systems and approval of unified technological standards, improving the level of information security and introducing new digitization tools that combine easiness of use with high functionality. The article also concludes that it is necessary to develop recommendations for improving the digitalization process separately for public administration bodies and the sphere of public services.

Keywords: Digital technologies, digital transformation of public administration, digitalization tool, e-government, modernization

https://doi.org/10.15405/epsbs.2021.04.02.22
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eISSN: 2357-1330

1. Introduction

Digital transformation (hereinafter referred to as DT) is a set of changes in society that are associated with the introduction and development of digital technologies (World Bank Group, 2016). Now this phenomenon affects all spheres of life, which is quite natural, because digital technologies provide many opportunities that previously could only be used rather sparingly (Belyakova & Pyrkina, 2021; Belyakova et al., 2020). For example, in the field of public administration, the use of digital technologies allows to create favourable conditions for citizens to get access to all necessary information and makes it possible to receive the necessary service quickly. Indeed, this is an effective management tool that helps to improve the efficiency and quality of information provided. The advantages of using digital technologies in the analyzed area are obvious: significantly reducing the time required for processing documents, simplifying bureaucratic procedures, facilitating coordination of actions, and achieving greater openness and transparency of public administration activities for citizens, which increases citizens ' confidence in state institutions.

Accordingly, it is not surprising that the digital transformation of public administration (will be referred as DTPA further in the article) is one of the key areas of economic modernization both abroad and in our country. The federal project “Digital public administration” as a part of the national program “Digital economy of the Russian Federation” has been introduced (Passport of Federal program “Digital economy of the Russian Federation”, 2018). Its main task of is to digitalize public administration, while providing citizens with direct access to public services, platforms and superservices through digital access. The goal of this includes the creation of a successfully functioning data management system and the development of e-government infrastructure. In particular, by 2024, it is proposed to carry out 70% of citizens ' interactions with government agencies in a digital form (Aptekman et al., 2017). All public services must be rendered in electronic form by this time, and the share of electronic document flow of state and budget institutions should be brought to almost 100%. In addition, 25 super services should be launched. Thus, the digitalization of DTPA sets new ambitious goals, which requires flexibility and speed of execution, and at the same time reliability and sustainability, therefore, it is necessary to determine what hinders this process.

2. Problem Statement

A number of works by foreign and Russian scientists are devoted to DTPA. For example, foreign studies identify the stages of digitalization, evaluate the achievements of digitalization based on performance platforms, analyzed electronic government services and describe the recent digitalization tools (Prendville, 2018; Osman et al., 2019). Russian authors discuss the features, principles and directions of digitalization in the public sector (Dobrolyubova et al., 2017). There are certain achievements in this area. Digital technologies and platform solutions are being actively implemented in this sphere. However, such a serious issue as the problems associated with the introduction of digitalization require more detailed consideration. There are some works devoted to it, but the difficulties associated with DTPA are considered very schematically and the available data are incomplete. In our opinion, there is a need to create a complete picture. A clear classification of the problems of DTPA, supplemented with the recommendations, should be created. Indeed, this issue should be considered carefully, since only an adequate assessment of such

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problems will help to work out detailed recommendations for further development and improvement of this area. This allows us to outline the main areas of research: identifying the achievements and the main problems of DTPA process with a view to promote the development of this promising area in the near future.

3. Research Questions

This article provides for a study of the problems of DTPA. Identifying such problems requires formulating a number of research questions. What are the features of public administration? Do the features of public administration determine its specifics? What are the achievements in the course of globalization of this sphere? How are these achievements connected with the previously set DT tasks? What are the problems connected with DTPA and how to solve them? In our opinion, such a statement of research questions allows us to reveal the main changes in the analyzed area and to outline the ways for improving the situation in the future.

4. Purpose of the Study

As it was mentioned earlier, the purpose of the study is to analyze the progress of DTPA in order to present a complete picture of the existing problems in this area and to work out the main recommendations for improving this process. It requires performing a number of tasks, which should be described in more detail. It is necessary to characterize features of the functioning of the state bodies, as well as the difficulties associated with its work. This will identify the main problem areas. The next task is to determine what will ensure the effectiveness of the implementation of DTPA and what are the main effects obtained as a result of DTPA. This will allow us to evaluate the progress which has already been made in the analyzed area. Further, there is a need to identify the range of problems that hinder the process of digitalization of this area, and in close connection with this information, it is necessary to work out basic recommendations for elimination of these problems in order to improve digital technologies in the future.

5. Research Methods

To conduct the research, the author uses a combination of classical and special research methods. These include basic methods such as analysis, synthesis, and comparison, as well as the grouping method. In particular, the research is based on the comparison method, which compares data on digitalization achievements in the field of study with the average indicators of the previous period. It allows us to determine the direction of changes taking into consideration the indicators. In addition, this method gives us the opportunity to compare the indicators of the pace of DTPA at present. The grouping method assumes a certain classification of the features of digitalization, as well as the causes and factors which lead to the emergence of problems. These general scientific methods are supplemented by the method of terminological analysis and factor analysis. The first allows us to clearly define the meaning of the underlying terms. The second one identifies the factors that influence the course of DT in the studied area. The study itself was conducted in the following sequence: reviewing the regulatory documents of DTPA; analyzing and interpreting the actual data on the process of DTPA both abroad and in our country;

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determining the effectiveness of the digitalization process in Russia with a description of achievements and identification of problem areas; proposing the measures to improve the situation. The sources of factual material for the study were the reports of the World Bank, estimates of the Digital Mckinsey expert group (Aptekman et al., 2017; World Bank Group, 2016).

6. Findings

The conducted analysis of empirical data shows that digital technologies are actively used in public administration both in Russia and abroad. The leaders in the field of DTPA are currently the United Kingdom, South Korea, and the United States. These countries have developed digital platforms which provide of a wide range of public services (Omar et al., 2017). In particular, the World Bank's review of the UK government e-services shows that if only a third of the public services provided are converted into a digital form, the annual savings will amount to more than 1 billion pounds (World Bank Group, 2016). Moreover, the interaction between citizens and the state in this form is 50 times cheaper than in a face-to-face mode of operation.

In Russia, if all public services are converted to a digital format, the estimated benefit will be about 4 billion rubles per year. This is a very impressive figure, which explains why DTPA is a priority. The available data show that digitalization of the Russian public sector is developing fast. This is proved by the increased volume of investment in this area. For example, the return on investment in the public sector in 2018 amounted to 83.4 billion rubles. The increase is by 11% compared to the data of 2017. The largest customer is the state, represented by the Pension Fund of Russia, the Federal Treasury, the Ministries and public authorities. The Russian e-government development index is also quite high. In recent years, it has grown significantly and is rated as "very high" by the UN, which makes Russia to occupy the 32nd place in the overall rating of e-government development. As for the provision of public services, at the beginning of 2019 more than 85 million people were registered on the official portal of public services of the Russian Federation users. The number of services provided amount to more than 2.6 billion rubles. Moreover, DTPA has led to the creation of numerous multifunctional centers, a Single Portal of public services, a system of interdepartmental electronic interaction.

The pace of digitalization of the public sector has accelerated significantly due to the pandemic, which has served as an important incentive. For example, in 2020, 12 fully digital services were launched, including the payment of benefits, the issuance of maternity capital, and the registration of electronic passes. More than 50 million applications were made and 46 million services were provided. All these services could be obtained without leaving home, which saves time and money. All of the abovementioned proves the increasing role of DTPA. In order to more accurately determine the benefits that the use of digitalization brings, it is necessary to first determine the features of the public sector.

Working in public administration requires building multi-channel relationships, and the whole sphere is complex and large-scale. In addition, the employees of public administration bodies perform various types of activities which requires the use of automation means (Troshani et al., 2018). Undoubtedly, it is also important that a public sector employee fulfils the will of the state in this case, he cannot increase his income by providing commercial services. At the same time, every civil servant must ensure high efficiency in managing the entire organization. All this requires reducing the time required for mastering

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digital technologies, improving the reliability of software and hardware for their implementation, increasing the volume and speed of information processing, and increasing the productivity of digital technology users. The effectiveness of the implementation of digital technologies in this case is ensured by achieving high speed of operations for working with information, improving the quality of calculations due to the creation of a single information base and due to its centralized processing, improving information services at different levels by reducing the time for drawing up and receiving documents. The main effects resulting from DTPA will be reduced to increasing employee productivity and decreasing decision-making time; creating new work opportunities (centralization of management, electronic document management, a single source of information); accumulating experience and improving activities through the integrated use of databases, information portals, corporate search systems; improving the flexibility of management decisions; reducing the number of errors in decision-making; minimising the time for providing public services by consolidating operations and functions.

All of the mentioned above shows the opportunities the DTPA provides in terms of improved availability, quality and functionality, and reduction of the cost of the state administration functioning and minimization of the cost of national projects. It is necessary to consider what hinders progress in this area. There are a number of obstacles to the dynamic development of this sphere. There are several problems to be mentioned: insufficient regulatory norms, limited budget funding, lack of qualified personnel in this sphere, inadequate technological standards and low level of information security.

The first problem to be considered is limited funding. The spread of digital technologies is an expensive process that requires significant investment especially at the initial stage of digitalization, while the return on investment will not be quick. That is why almost all countries, and Russia is no exception, are experiencing financial problems when implementing digitalization in the analyzed sphere. The allocation of necessary funds is difficult due to limited funding. So, in 2019, only 5.7% of the required amount money were allocated for the Digital public administration program, and the Digital economy project was funded only by 8.3 %. In the context of cost optimization, it is unlikely to be possible to finance this area in full, which may hinder the pace of digitalization. However, it should be remembered that this investment will quickly pay off due to significant savings in time, money and human resources, so it is necessary to keep up with the process and to stimulate the DTPA.

The above-mentioned problem is closely linked with the problem of inadequate technological standards. Here we face a very contradictory situation. On the one hand, Russia is characterized by some technological backwardness. This is due to the fact that Russia started digitalization later than other countries, so it takes time to catch up with them. At the same time, many users note the lack of a simplified and adapted software product for ordinary users, as a result of which some segments of the population cannot effectively benefit from the DTPA. Another aspect is the variety of digital technologies used in the public sector and, as a result, difficulties in integrating and working with various data, when solving a single task requires the creation of a separate tool, which increases the cost of performing a particular task. Common technological standards in this area need to be approved. In general, the solution of technological problems does not lie on the surface, but it is obvious that we should continue to work on combining individual information systems into a single unit, which implies the development of platforms. In addition,

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the work should be continued on creating a standardized, easy-to-use tool for digitalising public services that millions of new users can access to easily.

Problems with personnel include the lack of highly qualified staff in this sphere. Some employees even have a low level of computer literacy, which prevents the active use of digital technologies in their work. Not all employees are willing to acquire new skills. To solve this range of problems, it is necessary to encourage employees to actively use digital technologies, to increase the level of computer literacy by participating in seminars and webinars, which should be held on a regular basis in public sector organizations.

The problem of insufficient regulatory norms of digitalization of the public sector arises from the lack of coordination between the ongoing efforts for digital transformation and the current legal acts and administrative regulations. It is also worth mentioning the imperfection of legislation and the lack of single standards when choosing digitalization systems. This brings us to the conclusion that the current legislation lags behind the speed of development of the digital economy, so as a solution to this problem we should propose to bring into line regulatory documents that should correspond to the speed of changes in the field of DTPA. Moreover, more changes in the regulatory framework should be done, so that this contributes to a faster speed of digitalization of the analyzed area.

Finally, it is important to raise information security of in the sphere of digital services provision. Russia shows good results here, ranking 10th in the world. But the level of cybercrime is growing all over the world, so we also need to apply additional efforts to strengthen the level of information security. The use of distributed data storage technology (blockchain) is seen as promising in solving the problem of data security.

In general, Russia's prospects in terms of DTPA are bright, and there is a significant potential for further development. According to the expert group Digital Mckinsey, digitalization of our country's economy will have increased the GDP by 4.1-8.9 billion rubles by 2025 (Aptekman et al., 2017). It is planned to ensure the functioning and developing of the digital government, as well as further development and improvement of those information systems that are aimed at providing public services and performing public functions in a digital form.

7. Conclusion

The study allowed us to identify achievements in the field of DTPA and to reveal a number of problems that hinder the effectiveness of this process such as lack of qualified personnel and low level of financing, inadequate technological standards, insufficient regulatory norms and unsatisfactory level of information security. Further ways to improve the DT process were outlined. It is necessary to study the user experience all over the world. It is also required to analyze the current digital systems and to develop common requirements for the modernization, which would take into account the best practices. In addition, it is important to develop new standards for digital systems. Finally, it is needed to inform users more fully and quickly about the services available in a digital form. Taking all these into consideration we can outline its future prospects of the study. It is worth while developing even more detailed ways to improve the process of digitalization of information for public administration and public services, which will increase the efficiency of organizations in this area.

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