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# INFORMATION TECHNOLOGY IN PUBLIC AUTHORITIES: PERSPECTIVES FOR DEVELOPMENT

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#### Abstract

The study focuses on the use of information technology in public administration. This topic becomes particularly relevant in the era of the COVID-19 pandemic, where information technology has become the only way for government, business and the public to interact. In the research process, the authors consider the main advantages and disadvantages of using information technology. Notably, there are more advantages than disadvantages. Information technology in today's world needs to improve. There is still a high risk of information leaking into the public domain, especially personal data, including account passwords, phone numbers, tax returns, bank details. Unscrupulous users could use such public information for fraudulent purposes. It is, therefore, necessary to pay attention to the development of information security systems. In former times, firearms were the weapons of war; today, information has become the weapon. For whoever holds the information, holds the world. It is information in the modern world that has become the main factor of production, circulation, storage. The availability of the Internet plays an important role in the dissemination of information, providing users with access to scientific advances, virtual visits to museums and networking with each other. Information technology has a special role to play in business management, public administration, public services and the advancement of science and technology. The introduction of digital technologies and the rapid spread of information have brought the issue of the provision of information to the forefront, which plays an important role in ensuring the effectiveness of public authorities.

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# 1. Introduction

The current stage of society's historical development will be called informational due to the changes in the global marketplace. The informatization of society is of particular interest, where digital technologies play not the least role. Today, the development of the information society is receiving enormous attention. It is considered to be a vector for the socio-economic development of the state.

The development of a national economy is unthinkable without the tools to ensure the competitiveness of the economy and to generate competitive advantages. This explains the relevance of information technology, which today has become a tool for the informatization of society, leading to the constant introduction of innovative technologies in various sectors (Gumerova & Shaimieva, 2018).

When it comes to improving the efficiency of public administration, information technology plays not the least role. Today, information has become a new tool that characterizes the effectiveness of public administration and has become a factor of production.

The role of information is only increasing year by year. Information plays an important role in shaping the socio-economic space and implementing digital technologies. Before the advent of digital technology, information was delivered by paper. The introduction of digital technology has replaced paper-based media with new technologies, which include telephones, computers and other gadgets, and has, in turn, become a medium of information (Idigova et al., 2019).

There are also many ways to distribute information in today's world. Some information is of interest only to a small circle of people. Such information may include health, economic and financial, and industrial information. There is also a category of information interesting to ordinary people as well as businesses.

#### 2. Problem Statement

The introduction of digital technologies and the rapid spread of information have brought the issue of the provision of information to the forefront, which plays an important role in ensuring the effectiveness of public authorities.

Today, one factor determining the effectiveness of public authorities in providing the information is the level of openness and feedback to the public, the level of discussion during certain public measures, and the consideration of public opinion.

To meet the challenges of ensuring the efficiency of public authorities, the priority is to introduce information technology with the ability to automate public administration. We emphasize that information provision for citizens is only possible when the population of a region is equally involved in discussing government measures to ensure equal access to information for different segments of the population. In addition, the use of information technology is also beneficial in reducing corruption, as some tasks are only solved through the direct application of information technology. In addition, the use of information technology allows correcting human errors. Here we would like to point out that information technology and human resources need a direct relationship to monitor each other and to eliminate possible shortcomings.

To manage public authorities effectively, it is necessary to create a single information platform that allows finding all the necessary information on a single resource and entering into a dialogue with the public authorities.

#### 3. Research Questions

Despite a number of advantages, the introduction of information technology faces some challenges. Among such problems, we should first mention the protection of personal data. While cyberattacks were carried out every 14 seconds in 2019, various projections suggest that in 2021 that time will be reduced to 11 seconds. More than 14 billion records containing sensitive information became publicly available in 2019 alone. Against 2018, this figure increased by 10 % globally, while in Russia, this figure showed an increase of 40 % (Vaseyskaya & Glukhov, 2018).

The top three leakers included Germany, the Netherlands and the UK.

January 2019 saw the largest cyberattack in history, with more than 2.2 billion sensitive data records in the public domain, and six months later, another 2 billion records containing information about Chinese company user accounts were discovered on an unsecured server.

Also in November 2019, the phone numbers of 622 million email addresses belonging to social media users were in the public domain.

In May 2019, it was reported that First American Financial Corporation had caused a leak online of users' data, including bank details of payments made, purchases, transactions and others.

Regarding Russia, there was a leak of 20 million citizens' tax returns stored on an Amazon Elasticsearch server that was not protected in any way.

In addition, the data of users who paid for parking in Moscow was found to be leaked online. Anyone can get the data for a subscription of 750 roubles/day.

Based on the above, we can note that the leakage of information into the network risks being used by unscrupulous users for fraudulent purposes. Therefore, it is necessary to take measures for their information security (Borisova et al., 2020).

The next problem in the use of information technology is cyberattacks on government websites. In 2020, the Russian MFA recorded 1 billion attacks on digital sites: government agencies, banking institutions, healthcare and industry, etc. This can cause conflicts beyond information technology and lead to information wars.

In today's world, information has become the main tool for warfare between countries and even between different segments of the population. Information wars pose a significant danger to human consciousness. This kind of information can change people's moral values and instil new norms and morals in people's minds. The danger of information wars lies in their potential to become mouthpieces for those who seek to instil false values in people. Today, the Internet provides people with all kinds of information (Idigova & Rakhimova, 2021).

The Internet gave us the opportunity to listen to lectures on history and philosophy and to participate in international conferences. However, the development of the Internet has in turn led to an increase in information confrontation. A post on a website can go viral in a few hours and spread quickly

across the web. While newspapers and magazines make it possible to identify the author of a post, this is not always possible or takes a long time on the Internet.

However, the Internet offers a number of advantages. We have repeatedly highlighted the positive role of the Internet in learning new skills, staff development and information dissemination. A musician, writer, an artist can post their work online at various venues and receive an instant response. The average user has the opportunity to share their opinions and find like-minded people. Businesses can advertise their services and find new clients, expanding the market for their products (Idigova et al., 2019).

Thus, information technologies are important for the socio-economic development of the country. They play a leading role in realizing the democratic rights and freedoms of citizens, in further developing and learning new skills and in broadening their horizons.

At the national level, the introduction of information technology will enable people to improve their professional skills and perform their job duties promptly. Therefore, there is increasing interest in the impact of information technology on the formation of human personality and providing an individual approach to adaptation to new conditions (Yudina, 2019).

The aim of public authorities in applying information technology is to improve the efficiency of public institutions. This implies the creation of the necessary information infrastructure that meets the rules of information security and prompt communication with the public. One of these reference portals is the State Services website. According to statistics, during February 2021 alone, the website provided 242 complaints about the recalculation of pensions and 846 complaints about the provision of maternity capital (Novikova & Strogonova, 2020).

The most popular services on the State Services website were services such as booking an appointment with a doctor. There were 87 million applications for 2020, 15 million applications for one-off payments for children aged 3–16, 419,000 applications for a maternity certificate and 554,000 applications for marriage registration. The State Services website was particularly active during the pandemic, with 512,894 applications for one-off payments for children aged 0–8 and 4 million applications for monthly payments for children up to 3 years old.

The use of information technology at the state level should respond to the issues of consistency of the authorities in setting up information systems and the efficient use of budgetary resources.

Thus, we can note the important role of information technology in creating an enabling environment for both government officials and the public. This applies to obtaining necessary information and public services, which is good for the further development of civilization.

#### 4. Purpose of the Study

The purpose of our study is to look at the application of information technology at the state level. This purpose requires achieving a number of tasks:

- consider the advantages and disadvantages of using information technology;
- assess the level of application of information technology in the delivery of public services;
- describe the role of information technology in the socio-economic development of the country.

# 5. Research Methods

The research used statistical and comparative analysis methods, as well as methods of expert assessments, to identify the main problems in the application of information technology at the state level.

#### 6. Findings

Based on the above, we note that the modern era of development shows positive trends in the use of information technology in business management, public service delivery and quality of life.

The use of information technology in various sectors of the economy is a necessary element of development with the digitalization of various spheres of human activity, which is reflected in the increasing demand for such services.

Information technology has played an important role in the health and education process, which was particularly evident during the COVID-19 pandemic and has become the only means of communication.

In the modern world, the development of public administration is unthinkable without the use of information technology.

#### 7. Conclusion

The study identifies the main advantages and disadvantages of the use of information technology. To address the shortcomings of information technology operations, there are a number of measures aimed at preventing cyber-attacks and information wars.

The effective use of information technologies requires the development of a unified system for establishing information services that includes not only the federal administration but also the regional administration, where information and reference services will play a dominant role.

The role of information technology in modern society is to improve the quality of life of the population and its intellectual level.

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