

# Use of Information Technologies to Prevent Conflicts of Interest in Judicial Activities

Ekaterina Ryabtseva<sup>1</sup>, \* Tatiana Kalenteva<sup>2</sup>, Tamara Shutemova<sup>3</sup>

<sup>1</sup> Russian State University of Justice, Russia

<sup>2</sup> Samara State University of Economics, Russia

<sup>3</sup> Volzhsky University after V.N. Tatischev, Russia

\*Email: [rev020680@mail.ru](mailto:rev020680@mail.ru)

## ABSTRACT

One of the elements of civil society is an independent judiciary. In modern conditions, information technologies determine the vector of development of the judicial system. Recently, there has been a sharp increase in interest, both among scientists and law enforcement agencies, in the need to develop programs that allow automating the process of administration of justice. Despite the positive results of using artificial intelligence, it will not be able to replace the judge, since the facts established during the consideration and resolution of the case should not be separated from the values that should be taken into account when making a decision.

The purpose of this study is to determine the impact of information technologies on the judicial system to ensure the impartiality and fairness of justice, to justify the impossibility of replacing a judge with artificial intelligence in order to exclude corruption in judicial activities.

Both general and specific research methods were used in this study. During the review of literature sources, comparative and logical methods and the method of analysis were used. Practical methods were also used in the work: methods of empirical analysis and synthesis, descriptions.

The authors conclude that the introduction of information technologies in court proceedings will minimize conflicts of interest by reducing the influence of the human factor in decision-making in the administration of justice. However, it is impossible to completely replace a person with artificial intelligence in the administration of justice.

The article provides recommendations for improving the current legislation. To do this, it is suggested to make appropriate changes to the current legislation: to introduce clear terminology that can be translated into a programming language, allowing the system to make unambiguous conclusions when evaluating the maximum possible number of parameters. It is also necessary to exclude from the current legislation the terms that do not have exact characteristics.

**Keywords:** Justice, Judge, Artificial intelligence, Information technology, Conflict of interest, Corruption.

## 1. INTRODUCTION

One of the elements of civil society is an independent judiciary. However, not everyone views modern justice as independent.

Conducted by the Public opinion foundation (POM) in 2017, the study "Reputation of courts and judges" showed that 56% of Russians surveyed believe that most judges take bribes. And only 21% believe that Russian judges are mostly not involved in corruption [1]. A similar survey conducted by the FOM in March

2020 showed that the share of Russians surveyed who believe that Russian judges take bribes has decreased to 51% [2]. Nevertheless, we have to say that almost every second Russian is sure that the majority of judges are subject to corruption in the administration of justice.

The pandemic caused by the COVID-19 virus that hit the world gave a strong impetus to the development of information technologies. The digital revolution has not passed by the judicial activity. In modern conditions, information technologies have a huge impact on the development of the judicial system. Can the

digital revolution minimize corruption risks in the justice system? The judicial community considers digital development as one of the priority areas of judicial reform, which will form the "justice of the XXI century" [3].

In the context of the development of the information society, the ways and forms of public administration are changing, including the vectors of managing conflicts of interest, and new ways of identifying and eliminating them are emerging.

## **2. RESEARCH METHODOLOGY**

The methodological basis of this study is systematic. Corruption as a phenomenon that permeates all spheres of public relations should be investigated not only by the methods of legal sciences, but also by the methods used by sociology, political science, and psychology. The study used both general and specific methods of scientific research based on the general dialectical method. During the review of literature sources, comparative and logical methods and the method of analysis were used. Practical methods were also used in the work: methods of empirical analysis and synthesis, descriptions, etc.

## **3. THE RESULTS OF THE STUDY**

In order to prevent the emergence and development of conflicts of interest with a corruption component at the current stage of information technology development, it is necessary to: develop and implement information technologies in all areas of the court's activities, both in the non-procedural and procedural activities of judges and court staff; ensure transparency of the judicial system by introducing the most modern digital technologies. Using such technologies, conflicts of interest can only be minimized by reducing the influence of the human factor in decision-making in the administration of justice. To do this, it is necessary to introduce clear wording in the current legislation that can be translated into a programming language, allowing the system to draw unambiguous conclusions when evaluating the maximum possible number of parameters. It is also necessary to exclude terms that do not have precise characteristics from the current legislation.

## **4. RESULTS DISCUSSION**

### ***4.1. Review of literature sources***

The introduction of digital technologies into the Russian judicial system is actively discussed in the literature. The authors use various terms for this purpose: electronic justice, digital justice, electronic court, application of information and digital technologies. "E-justice does not claim to change the

traditional procedure for considering a case in court and involves only" creating an open, convenient and accessible system for the administration of justice, integrating judicial bodies and their information systems, and implementing electronic document management" [4, p.5]. In the framework of the electronic court system, "the case is considered remotely, and some of the usual stages can be changed or skipped altogether" [5, p.21]. The third group of authors believes that it is possible to approach electronic justice in both the narrow and broad sense of the word [6, p.107].

Speaking about "electronic justice" in the broad sense of this term, we understand the introduction of digital technologies in the judicial process, which not only ensure the interaction of persons involved in the case with the court, exchange of information about the movement of cases through the website of the relevant court, placement of judicial acts on the Internet, but also the use of artificial intelligence in making procedural decisions [7, p.134]. According to a number of scientists, "conceptually, it is already necessary to determine the limits of using artificial intelligence in the preparation and adoption of criminal procedural decisions and in proving facts in a criminal case [8, p.203].

E-justice has also been widely understood in foreign literature, in particular by F. Francioni uses a "general approach" to defining access to justice: not only as a right to appeal to the court, but also as a right to have your complaint considered by the court in accordance with the proper standards of justice [9].

However, many researchers still question the use of artificial intelligence in court proceedings. Concerns are expressed about the ethical implications of using artificial intelligence using data and algorithms [10].

One way or another, but all the authors note that the introduction of digital technologies in legal proceedings will significantly increase its transparency.

There are various types of corruption in science. According to the foreign researcher F. Finlay, corruption is "not only a crime of corruption, but also all corruption manifestations, corruption risks that affect the proper behavior of certain individuals" [11].

The researches on the administrative corruption show that improving the overall quality of institutions, including improving the justice system, increases their ability to detect and deter corruption [12]. The colleagues from other countries also count on digitalization of the judicial system as a means of preventing corruption [13].

The problems of corruption are the subject of scientific research by both foreign and Russian scientists.

**4.2. Legal basis for the introduction of information technologies in the judicial system**

One of the most common causes of corruption is the inefficient functioning of state institutions. The complexity and ambiguity of conflicting laws and regulations increase the discretion of officials and, consequently, the risk of making illegal decisions. The situation is compounded by clientelism, through which personal connections are formed between political patrons and their individual followers based on personal mutual benefit. At the same time, the lack of personal responsibility and transparency creates additional conditions for corruption, since it becomes difficult to assess the legality of decisions that were made "behind closed doors" [14].

The nature of conflicts of interest is directly related to the subjective factor, its presence determines the decision-making by a person with authority. Conflict of interest reduces public confidence in government officials [15]. Therefore, the exclusion of the subjective factor in decision-making eliminates the risk of corruption, which is associated with the emergence of a conflict of interest.

"In recent years, the expert community has increasingly discussed whether it is possible to automate the entire process of administration of justice, that is, to replace the judge with a computer program or neural network that can analyze the actual circumstances of the case, give them a legal assessment and make an appropriate decision" [16]. Attempts to implement systems based on the use of neural networks are being made everywhere.

One of the principles for the use of artificial intelligence set out in the European ethical Charter on the use of artificial intelligence in judicial systems (2018), approved by the European Commission on the effectiveness of justice of the Council of Europe, is the principle of user control. According to this principle, the judge should be able to disagree with the decision proposed by artificial intelligence and make his own decision on the case, and the participant in the dispute should be given the opportunity to directly appeal to the court without using artificial intelligence and the right to challenge the decision made using artificial intelligence [17]. The existence of this principle indicates that the authors of the Charter understand the impossibility of completely replacing the judge with artificial intelligence.

**4.3. The Russian experience of implementation of information technologies in the judicial activities to prevent conflicts of interest**

The strategy for the development of the information society in the Russian Federation for 2017-2030

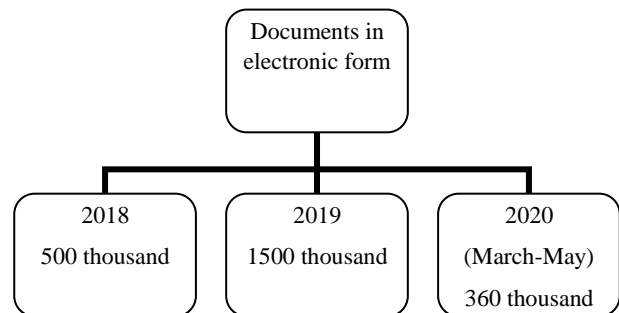
contains the main directions for the development of Russian information and communication technologies [18], many of which will be applied in the Russian judicial system in the future. These include: convergence of communication networks and creation of new generation communication networks; processing of large amounts of data; artificial intelligence; trusted technologies for electronic identification and authentication; robotics; information security, etc.

One of the most popular areas today is the processing of big-data. Based on this technology, it is possible to select and systematize documents (including court decisions) that meet certain criteria.

A number of these technologies (artificial intelligence, robot judge, etc.) are already used abroad [11]. The desire for universal informatization and e-justice inevitably raises a natural question: is information technology only an aid to a human judge, or is it a substitute for full e-justice?

Considering logical and probabilistic aspect of e-justice, A.V. Tyaglo believes that "at the moment the fatal role of intuition in dealing with the complex real legal cases casts doubt on a purely rational analysis of legal reasoning, although this does not exclude or in part by artificial intelligence today, nor, presumably, the fundamental feasibility of a complete e-justice over time" [19, p.41]. L.V. Borisova concluded that the most acceptable system for Russian justice is the artificial intelligence system "judge's companion" [6, p. 108]. However, it should be taken into consideration that the assessment of the use of information and communication technologies is carried out on the basis of modern knowledge with a far-reaching prospect of self-learning of artificial intelligence.

Information technologies currently operating in the Russian judicial system were subjected to a kind of test during the work of courts of all types and levels in March — May 2020 during the restrictions associated with the COVID-19 virus pandemic.



**Figure 1** "The number of documents submitted to the court in electronic form".

Chairman of the Council of judges of the Russian Federation V.V. Momotov, analyzing the Russian experience of adapting the judicial system to work in the

**Table 1.** Statistical review of remote case management during the pandemic

Statistical review of remote case management during the pandemic (from March 19, 2020 to May 11, 2020)	
The Supreme Court of the Russian Federation	Other courts of the Russian Federation
42 cases	3 400 000 cases

context of the COVID-19 pandemic, generally admitted that the judicial system has passed the test. "In total... from March 19 to May 11, 2020, the courts of the Russian Federation considered more than 3 million 400 thousand cases and materials. In electronic form, the courts received 360 thousand procedural documents (see Figure 1), Internet users over 300 million times used the resource of The state automated system (SAS) "Justice" [20]. When considering cases in the context of the COVID-19 virus pandemic, courts began to consider cases remotely, using video communication (table 1).

One of the principles of e-justice is the principle of information openness of justice. We believe that the principle of information openness of justice is one of the manifestations of the principle of transparency, and in modern conditions its application in remote cases is somewhat limited.

V.V. Momotov also stated that "the adaptability of the judicial system to external conditions, including such as the pandemic, depends on the systematic improvement of the material and procedural base of the courts" [20]. Indeed, in the foreground - the material and technical equipment of courtrooms with the necessary equipment, the creation of special service, as well as the necessary legal framework governing the use of information technologies and services. In addition, from the material and technical side, it is important to have the technical ability of potential participants in legal proceedings to apply remotely to the judicial authorities. Equally important is the training and psychological readiness of the judicial corps, participants in legal proceedings, and other persons to use information technologies, taking into account information security, maintaining confidential information, and secure electronic document management. The violation of this balance inevitably leads to the corruption risks, and, therefore, the conflict of interests.

## 5. CONCLUSION

Systemic anti-corruption measures aimed at preventing conflicts of interest include: development and implementation of information technologies in both non-procedural and procedural activities of judges and court staff; ensuring the effectiveness and accessibility of the judicial system through the use of electronic technologies for information openness of both the

activity itself and its results in the form of appropriate decisions.

In modern conditions, it is impossible to completely replace judges with artificial intelligence. With the help of electronic technologies, the conflict of interests can only be minimized by reducing the influence of the human factor in decision-making in judicial activities. This requires clear language that can be translated into a programming language that allows the system to draw unambiguous conclusions when evaluating the maximum possible number of parameters. In the case of electronic distribution of cases, this is possible by specifying the existing grounds for excluding the participation of a judge (assistant judge) in the case. In addition to including the TIN of the organization where the judge's close relatives and family members work, additional parameters should be included: the address of registration or actual residence that coincides with the judge's place of residence. At the same time, each list of persons, organizations in which close judges work, as well as other persons with whom there is a personal and financial interest is determined by the judge himself and approved by the president of the court before the relevant parameters are uploaded to the system. If there are questions regarding the inclusion of certain parameters (related to personal and financial interests) in the electronic distribution of cases, the judge or the president of the court may contact the Council of judges to obtain an opinion on the presence or absence of a conflict of interest. Taking into account the explanations of the Council of judges, the Chairman decides to include the relevant criteria in the electronic case distribution system.

At the state level, it is necessary to adopt a new Concept of information policy of the judicial system.

## REFERENCES

- [1] Data from the Foundation "Public opinion". Results of the research "Reputation of courts and judges" from February 19, 2017. Retrieved from: <https://fom.ru/Bezopasnost-i-pravo/13239> (In Russ.).
- [2] Data from the Foundation "Public opinion". Results of the research "Reputation of courts and judges" from March 20, 2020. Retrieved from: <https://fom.ru/Bezopasnost-i-pravo/14459> (In Russ.).

- [3] Speech of the Chairman of the Council of judges of the Russian Federation V.V. Momotov at the plenary session of the VI Moscow legal forum on the topic "Judicial power in the context of modern digital technologies" (MSLA (U), April 4, 2019. Access mode: <http://ssrf.ru/news/vystupleniia-intierv-iu-publikatsii/32548> (In Russ.).
- [4] V.A. Ovchinnikov, Ya.V. Antonov, Electronic justice as a project of electronic democracy: prospects for implementation in Russia, State power and local self-government 5 (2016) 3-7 (In Russ.).
- [5] V.Ya. Antonov, Electronic justice: prospects for implementation in Russia. Scientific works of NWIM RANEPa Vol. 5 Iss. 5(17) (2014) 15-22. Retrieved from: [https://www.elibrary.ru/download/elibrary\\_24390540\\_90337197.pdf](https://www.elibrary.ru/download/elibrary_24390540_90337197.pdf) (In Russ.).
- [6] L.V. Borisova, Electronic justice as a form of judicial protection in Russia. Actual problems of the Russian law Vol. 15. No. 6 (2020) 105-111. DOI: <https://doi.org/10.17803/1994-1471.2020.115.6.105-111> (In Russ.).
- [7] I. Chernykh, Reflections on "electronic justice". Judicial reform and problems of development of civil and arbitration procedural legislation: Materials of the international scientific and practical conference, Moscow: RAP, 2012, pp. 130-137 (In Russ.).
- [8] Alexander S. Alexandrov, Olga I. Andreeva, Oleg A. Zaytsev, On Development Prospects of the Russian Criminal Proceeding in the Context of Digitalization. Vestnik Tomskogo gosudarstvennogo universiteta, Tomsk State University Journal 448 (2019) 199–207. DOI: <https://doi.org/10.17223/15617793/448/25>
- [9] Francioni F. et al. Access to Justice as a Human Right. Florence, 2007, p. 30.
- [10] Vidgen, R., Hindle, G., & Randolph, I., Exploring the ethical implications of business analytics with a canvas business ethics. European Journal of Operational Research 281(3) (2020) 491-501. DOI: <https://doi.org/10.1016/j.ejor.2019.04.036>
- [11] Finlay, F. (February, 2016), Politics is corrupt, public administration is corrupt, and democracy is dead, Irish Examiner. Retrieved from: <http://www.irishexaminer.com/viewpoints/columnists/fergus-finlay.html>
- [12] Ch. Bajada, M. Shashnov, The effects of economic development and the evolution of social institutions on the level of corruption: comparing the Asia-Pacific with other regional blocs. Asia Pacific business review, 2019, pp. 7-8.
- [13] A. Alim, Corruption in civil litigation system: An approach to judicial reform in Bangladesh. Asian Journal of Law and Economics 9(2) (2018) 20170027. DOI: <https://doi.org/10.1515/ajle-2017-0027>
- [14] N.A. Petukhov, E.V. Ryabtseva, Influence of anti-corruption international principles and norms on the development of the judicial system in the Russian Federation, Bulletin of the Academy of law enforcement agencies under the Prosecutor General's office of the Republic of Kazakhstan 2 (2019) 90-96. Retrieved from: <https://www.elibrary.ru/item.asp?id=43918923> (In Russ.).
- [15] F. Staphenurst, Sahr. J. Kpundeh, Public Participation in the Fight Against Corruption, Canadian Journal of Development Studies. 1998. pp. 491-508. DOI: <https://doi.org/10.1080/02255189.1998.9669766>
- [16] V.A. Shestak, A.G. Volevodz, Modern needs of legal support for artificial intelligence, View from Russia, All-Russian criminological journal Vol. 13 Iss. 2 (2019) 197-206. Retrieved from: <https://cyberleninka.ru/article/n/sovremennye-potrebnosti-pravovogo-obespecheniya-iskusstvennogo-intellekta-vzglyad-iz-rossii> (In Russ.).
- [17] European Commission for the Efficiency of Justice (CEPEJ). Official site. Access mode: <https://www.coe.int>
- [18] Decree of the President of the Russian Federation of 09.05.2017 N 203 "On the strategy of development of the information society in the Russian Federation for 2017-2030", SPS "Consultant plus" (In Russ.).
- [19] A.V. Tyaglo Logical and probabilistic aspect of electronic justice. Philosophical problems of information technologies and cyberspace 2 (2013) 31-41. Retrieved from: <https://www.elibrary.ru/item.asp?id=24333928> (In Russ.).
- [20] Speech by the Chairman of the Council of judges of the Russian Federation V.V. Momotov at the first webinar of the network of Supreme courts of the ECHR "Russian experience of adapting the judicial system to work in the context of the COVID-19 pandemic" 14.07.2020. Access mode: <http://ssrf.ru/news/vystupleniia-intierv-iu-publikatsii/38571>. <http://ssrf.ru/news/vystupleniia-intierv-iu-publikatsii/38571> (In Russ.).