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**E-JUSTICE: DEVELOPMENT PROSPECTS**

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*Abstract*

Modern digital technologies transform everything making no exception, and at most they do so to public communications and relations so they cannot but affect the process of administering justice. Therefore, questions rise among legal community in concern regarding such a complex institution as the institution of the judiciary, constitutional guarantees of the rights and legitimate interests of citizens implemented with its help. Serious concerns are raised by ethical issues arising from the use of data and algorithms by experts in the field of data science and artificial intelligence. In addition, opinions are expressed about the possible replacement of lawyers with technologies that will allow to perform simple repetitive legally significant actions with little or no human involvement. For example, there are chat bots that can already create documents contesting fines for violation of the road regulations are also compiled automatically. Nevertheless, expanding the scope of the application of digital technologies in the judicial system opens up new prospects for creating a more efficient and high-quality court that ensures the stability of the basic principles of judicial procedure: independence of judges, legality, access to justice, consideration of cases within a reasonable time, adversarial, openness and transparent judicial protection.

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**Keywords:** E-court, artificial intelligence, digitalization of law.



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## 1. Introduction

The seemingly indisputable assertion that the expansion of digital technologies use in judicial system opens up new prospects for building a more efficient and high-quality court that ensures the stability of the basic principles of legal proceedings finds its opponents. According to them, the automation of the judicial system in criminal proceedings reinforces the contradictions between investigative and adversarial elements (Alexandrov, Andreeva, & Zaytsev, 2019). Others believe that a traditional fact-finding approach is required in litigation (Caianiello, 2019). Concern is also expressed about the ethical implications of artificial intelligence using data and algorithms (Vidgen, Hindle, & Randolph, 2020).

The main issue discussed is the need to regulate the use of artificial intelligence in the administration of justice in order to prevent massive violations of human rights. The solution to this problem is to strictly enforce the limits of artificial intelligence in court cases.

The legislation of the Russian Federation on issues of digital rights is neither consistent nor structural. A significant number of blindspots in the legal regulation of these issues does not allow us state that domestic law is prepared to ensure wide use of artificial intelligence (Valeev & Nuriev, 2019).

## 2. Problem Statement

So, considering the current reality, is it possible to fully automate the judicial process, legal work, and solve emerging legal problems without human intervention? What will be the correlation of such progressive measures with guarantees of ensuring human rights, protection of personal data, maintaining the secrecy of private life.

A significant part of court rulings can be automated. This applies to rulings taken in a simplified manner, where evidence is provided in writing and there is no trial. Artificial intelligence can be and should be used to resolve legal situations in standard situations. Currently, the use of artificial intelligence in the legal sphere is achieved through solving only some of the problems such as the automation of information retrieval, its systematization, processing of large amounts of documents and even some analysis of them, the result of which can be a simple consultation on behalf of the chat bot. Having achieved significant success in these areas, legal scholars, together with engineers, are moving to the search for a solution that will allow artificial intelligence not only to recognize a human text, but also to "understand" its meaning. Existing systems using artificial intelligence already allow not only to analyse the case, but also to predict the outcome of the trial.

The analysis of the array of information in documents is the subject of activity of a company such as iCourt in China, Lex Quanta in Southeast Asia. AI searches in US law are provided by Lexis Answers and Westlaw Answers. They allow you to find specific cases and regulations by context. The Garant legal system, known to all Russian lawyers, currently allows using the Sutyazhnik service to obtain documents containing judicial practice on the issues contained in complaints or claims uploaded to it.

Such opportunities allow some researchers to draw conclusions about the imminent disappearance of such a profession as a lawyer. The prerequisites for such forecasts are well founded. Automation of the process of forming pre-trial documents, as well as any legal documents, is happening now. Template forms developed and offered by legal systems, various Internet sites, even a person without a legal education can

fill them out. An example is the Russian legal system “Consultant”. The “Contract Designer” service existing in it makes it possible to draw up almost any contract by selecting all possible legal options.

### 3. Research Questions

As we see, law is already changing under the influence of information technology. Competitions between artificial intelligence and lawyers on the assessment of legal risks that are possible in specific legal situations indicate a significant loss of the latter. So, the artificial intelligence of one of the Israeli companies, checking agreements on non-disclosure of confidential information in order to identify legal risks in them, surpassed the top 20 lawyers of American corporations, reaching 94% accuracy. Indicators of high-class lawyers amounted to 85%. And, of course, the time taken to complete these actions cannot be compared: lawyers took 92 minutes, while artificial intelligence managed in 26 seconds.

Many countries today use modern technology in litigation. For example, the use of robotic judges, who are entrusted with the consideration of minor civil cases, is being successfully introduced into the Estonian judicial system. In order to make this possible, the parties upload legal documents to the system, after which artificial intelligence investigates them and creates a judicial act. The balance of rights of the plaintiff and defendant in this case is provided by the opportunity to appeal such decision. The referee will be the human judge. Of course, Estonia is a state where digitalization happens at a fast pace so high technologies are widely implemented. The goal of automating the simplest trials is set to reduce the burden on court workers, to better deal with complex cases.

Artificial intelligence developed by scientists at University College London, the University of Sheffield and the University of Pennsylvania in 2016 can predict the decisions of the European Court of Human Rights with 79% accuracy. The object of the study was 584 cases related to complaints under such articles of the European Convention on Human Rights as the prohibition of torture (Article 3), the right to a fair trial (Article 6), and the right to respect for private and family life (Article 8). A high predictive result was achieved by artificial intelligence in its search for certain patterns in the texts of cases using algorithms.

Of course, speaking of such progressive means of implementation AI in the legal system, we have in mind technologically highly developed state. The delay and bureaucracy inherent in the judicial system of a country such as, for example, Bangladesh, do not allow for fair judicial protection of citizens of the state. Moreover, it is the use of digital tools in the administration of justice that can improve the existing civil justice system (Alim, 2018).

Understanding digitalization as the introduction of computer technology in all areas of the economy and government, one of the reasons for the low efficiency of the Greek judicial system is also the inadequate use of high-tech methods in the country's legal sphere (Katsikas & Gritzalis, 2017).

However, the issue of using artificial intelligence for predictive analysis of not only civil court decisions, but also decisions taken in criminal proceedings and ensuring constitutional guarantees remains controversial (Guimarães, 2019). The development of this discussion is facilitated by the “European Ethical Charter on the Use of Artificial Intelligence in the Judicial Systems and Their Environment”, adopted by the European Commission on the Effectiveness of Justice. Given these issues, it is necessary to assess the potential risks associated with e-justice, in particular the risks of the spread of prejudice, which can distort predictive research and its results.

#### **4. Purpose of the Study**

One of their main concerns to all legal professionals is the question of the limits of capabilities of artificial intelligence in law and the observance of ethical principles in its use in judicial systems. Is it possible to fully automate justice by replacing a judge - a person with a computer program or a neural network, and how to ensure that human rights are respected - these are the problems facing legal scholars of all states today?

High technologies in Russian judicial system are only used to carry out elementary tasks which in comparison with the worldwide use. The use of video-conferencing systems, the use of the state automated system “Justice”, electronic document management are all convenient tools that facilitate access to justice. Modern technologies strengthen guarantees of observance of the basic principles of legal proceedings, and ensure the optimization of the exchange of cases between courts of different instances. The use of blockchain technologies can affect the life of society as a whole, and will allow avoiding dishonest actions. However, issues related to the use of the blockchain remain the most difficult (Gurkaynak, Yilmaz, & Yesilaltay, 2018).

In addition, one needs to understand the problems on the issues of training specialists who are able to work in the amended legal system and determine ways to solve them. The legal industry is already undergoing a transformation process, a modern lawyer should be guided in technical terms, know the basics of high-tech processes and have the proper terminology. The professional sphere is being transformed and in the near future there will already be a need for such specialists as a legal engineer, a lawyer-technologist, and a specialist in online dispute resolution. Legal training needs to be adjusted.

#### **5. Research Methods**

The methodological basis of the study is set on general scientific knowledge, which includes analysis, analogy and synthesis. The comparative method allowed us to consider various approaches to solving the questions posed. The systematic nature of the study allowed to observe aspects of e-justice from a technical, legal and ethical perspective.

#### **6. Findings**

The processes of integration and globalization taking place in the world are directly related to the digitalization of society and the economy. Information technology is changing our lives, and change is fast. Already no one can discount the need to invest in advanced modern technologies, and the validity of the use of information and communication technologies in the judicial system as ensuring the stability of democratic processes in countries, both developed and developing, is beyond doubt. In the light of international requirements for the quality, efficiency and transparency of litigation, extraterritorial jurisdiction for investigating crimes in international law, tax, antitrust, information law, it is impossible to ignore international requirements for the quality, effectiveness and transparency of litigation (Terentieva, 2019).

Transforming the judicial system into an instrument of administration of justice using the latest information tools is the task of every progressive state. In the Russian Federation, for the implementation

of these tasks, a Concept for the development of judicial informatization until 2020 was developed, which confirmed that the development of the country's economy is impossible without creating a favorable investment climate, which is directly related to the effectiveness of the judicial system. Only a developed judicial system in which the latest technologies find their application can provide adequate protection of the rights and interests of citizens and organizations.

The legal system of Russia in recent years has undergone significant changes that have affected the procedural rules and the entire judicial system. Information technologies have also found their application, with the help of which information is searched and stored, electronic document management is provided, as well as the possibility of using audio and video recordings of court proceedings, and organization of video conferences. The status of evidence was received by electronic documents, it became possible to conduct complex computer examinations (Suslo, Trnka, & Drobnik, 2017).

The problems of the further development of e-justice in Russia are related to the fact that domestic legislation is complex and confusing, and sometimes difficult for a person to perceive. The success in the development of artificial intelligence is significant, but so far the machine can perceive and analyze the presented information from the point of view of normal logic. Conflicts of legal norms are often found in normative acts applied in Russia as they are abound with gaps, so legislation is unstable and constantly changing. In order to resolve a specific case, judges must obtain clarification in a higher court, refer to the decision of the Supreme Court. All this impedes the full use of artificial intelligence in the Russian judicial system.

## 7. Conclusion

As a result of the study, we can state the following. The process of digitalization of society, with current technical development, is irreversible. The world community has made significant progress in this direction, and Russia cannot and should not lag behind it. Recently, domestic justice has undergone tangible changes that allow us to talk about ongoing democratization processes in our country, that are partly guaranteed by the digitalization of justice. The main objectives of the development of e-justice in Russia today are to increase the pace of technical development, ensuring the relevance and stability of legislation adapted to the rapidly changing conditions of the existence of a digital society and economy. At the same time, in order to ensure guarantees of human rights, the first international act specifically dedicated to the use of artificial intelligence in justice can serve as a guideline. Such an act is the European Ethical Charter on the Use of Artificial Intelligence in the Judiciary, approved by the Council of Europe by the European Commission on the Efficiency of Justice.

## References

- Alexandrov, A., Andreeva, O., & Zaytsev, O. (2019). On development prospects of the Russian criminal proceeding in the context of digitalization. *Tomsk State University Journal*, 448, 199-207. DOI: 10.17223/15617793/448/25
- Alim, A. (2018). Corruption in civil litigation system: An approach to judicial reform in Bangladesh. *Asian Journal of Law and Economics*, 9(2), 20170027. DOI: 10.1515/ajle-2017-0027

- Caianiello, M. (2019). Criminal process faced with the challenges of scientific and technological development. *European Journal of Crime Criminal Law and Criminal Justice*, 27(4), 267-291. DOI: 10.1163/15718174-02704001
- Guimarães, R. R. C. (2019). The artificial intelligence and the dispute for different ways in its predictive use in the criminal process. *Revista Brasileira de Direito Processual Penal*, 5(3), 1555-1588. DOI: 10.22197/rbdpp.v5i3.260
- Gurkaynak, G., Yilmaz, I., & Yesilaltay, B. (2018). Intellectual property law and practice in the blockchain realm. *Computer Law & Security Review*, 34(4), 847-862.
- Katsikas, S. K., & Gritzalis, S. (2017). Digitalization in Greece: State of play, barriers, challenges, solutions. Beyond bureaucracy: Towards sustainable governance informatisation. In A. Paulin, L. Anthopoulos, C. Reddick (Eds.), *Beyond Bureaucracy. Public Administration and Information Technology*, 25 (pp. 355-375). Cham: Springer. DOI: 10.1007/978-3-319-54142-6\_19
- Suslo, R., Trnka, J., & Drobnik, J. (2017). Current threats to medical data security in family doctors' practices. *Family Medicine and Primary Care Review*, 19(3), 313-318. DOI: 10.5114/fmpcr.2017.69297
- Terentieva, L. (2019). Extraterritorial jurisdiction of state and perception transformation of its spatial boundaries. *Pravo. Zhurnal Vysshei Shkoly Ekonomiki*, 3, 160-180. DOI: 10.17323/2072-8166.2019.3.160.180
- The Concept of the development of court informatization until 2020 (approved by Decree of the Presidium of the Council of Judges of the Russian Federation of February 19, 2015 N 439). Retrieved from <http://base.garant.ru/71062432/> Accessed: 09.11.2019.
- Valeev, D. K., & Nuriev, A. G. (2019). Digitization of law: Some problematic aspects. *Journal of Politics and Law*, 12(5), 135-139. DOI: 10.5539/jpl.v12n5p135
- Vidgen, R., Hindle, G., & Randolph, I. (2020). Exploring the ethical implications of business analytics with a canvas business ethics. *European Journal of Operational Research*, 281(3), 491-501. DOI: 10.1016/j.ejor.2019.04.036