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## LAW AND DIGITAL TECHNOLOGY ПРАВО И ЦИФРОВЫЕ ТЕХНОЛОГИИ

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## Information technologies in judicial process: opportunities of artificial intelligence in evidence system

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Abstract. The study is devoted to ambiguous issues of using artificial intelligence (AI) in judicial process. The purpose of the study is to present foreign experience of using information technologies in court proceedings based on the example of the most controversial and debated ideas concerning resources of artificial intelligence in the system of evidence. Special attention is paid to successful mechanisms of using AI in foreign judicial practice at the stage of evidence assessment. The study presents several decisions of foreign courts, formed with the help of AI. The findings allow to express opinion about admissibility of evidence evaluated by AI. The study employs methods of general scientific cognition and special methods including comparative legal. The dialectical method allows to investigate genesis and progressive development of judicial process technologization. The methods of analysis and synthesis, induction and deduction contribute to highlighting disadvantages of predictive coding at the proving stage and advantages of electronic research of evidence, options for simultaneous disclosure of evidence using different methods on the example of specific court decisions. The comparative legal method helps to identify best practices of using artificial intelligence in the system of evidence in foreign countries. The study not only describes the tools of predicting justice in European judicial practice, but also examines the problems of Chinese "instrumental justice" that can arise in any country. Conclusion justifies predictive coding as a tool of predictive justice, provided that general rules for information disclosure are developed and specifics of machine learning for a particular case are considered. It is noted that artificial intelligence has not yet become the predominant method in any types of legal proceedings. This may be explained by insufficient confidence in it across legal communities and time needed to form a successful history of its use for solving legally significant tasks in various spheres of human life.

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**Key words**: artificial intelligence, disclosure of evidence, trial, predictive processing (coding), predicting justice, system of evidence, legal proceedings

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# Информационные технологии в судебном процессе: возможности искусственного интеллекта в системе доказывания

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Аннотация. О неоднозначном вопросе использования искусственного интеллекта (ИИ) в судебном процессе. Цель исследования – представить зарубежный опыт использования информационных технологий в судопроизводстве на примере наиболее спорных и обсуждаемых в научной литературе и практике идей о ресурсах искусственного интеллекта в системе доказывания. Особое внимание уделено успешно действующим механизмам использования ИИ в зарубежной судебной практике на этапе оценки доказательств. Приводятся решения зарубежных судов, вынесенные с использованием ИИ. Высказывается суждение о допустимости оценки доказательств с использованием ИИ. В ходе исследования применены методы общенаучного познания и специальные методы (сравнительно-правовой). Диалектический метод сделал возможным проследить генезис и прогрессирующее развитие технологизации судебного процесса. Приемы анализа и синтеза, индукции и дедукции позволили показать минусы предиктивного кодирования на стадии доказывания и плюсы электронного исследования доказательств, варианты одновременного раскрытия доказательств с использованием разных методов на примере вынесенных конкретных судебных решений. С помощью сравнительно-правового метода выявлены наиболее успешные практики использования искусственного интеллекта в системе доказывания в зарубежных странах, показаны не только инструменты предсказанного правосудия в европейской судебной практике, но и проблемы китайского «инструментального правосудия», которые могут возникать в любой стране. Делается вывод о возможности использования предиктивного кодирования как инструмента предсказанного правосудия при условии выработки общих правил раскрытия информации и учета специфики машинного обучения для конкретного дела. Отмечается, что искусственный интеллект пока не стал преобладающим методом ни в одном из видов судопроизводства. Это может объясняться недостаточным уровнем доверия к нему у юридической общественности и говорит о необходимости времени для формирования успешной истории его использования для решения юридически значимых задач в разных сферах человеческой жизни.

**Ключевые слова:** искусственный интеллект, раскрытие доказательств, судебный процесс, предикативное кодирование, предсказанное правосудие, система доказывания, судопроизводство **Конфликт интересов**. Авторы заявляют об отсутствии конфликта интересов.

**Вклад авторов:** *Шерстобоев О.Н.* – концепция исследования; сбор и анализ материалов; написание текста. *Михеева И.В.* – сбор и анализ материалов; написание текста.

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#### Introduction

Modern era is often characterized as the age of high technologies and information; they reign everywhere, replace man even in the spheres where intellectual activity has always been the priority, including jurisprudence. Will man be able to manage technologies, or will he be increasingly dependent on them until he finds himself in the position of having to obey them? Three well-known rules of Isaac Asimov come to mind. A robot cannot harm a human being or by its inaction allow a human being to be harmed. A robot must obey all orders given by man, except the cases when they contradict the First Law. A robot must take care of its own safety to the extent that it does not contradict the First or Second Laws (Asimov, 1991:30-55). Meanwhile, reality is much more complicated. New technologies live in a virtual space that is not tangible. We may think that we command them, but we may miss the point when they stop obeying people's orders, and people will begin to involuntarily obey the decisions of these intangible beings. In this regard, Justice Philip James Sales of the Supreme Court of the United Kingdom has accurately observed that digitalization is "intangible", "it is located in functions away in the cloud rather than in physical machines on our desks", it is global and extraterritorial<sup>1</sup>. This problem is especially relevant for jurisprudence, where such tools as artificial intelligence and big data are already applied. They are not only often employed in this purely human area, but also expand their space in it.

#### Genesis and development of the ideas of technologization of the evidence system

The use of such tools as artificial intelligence and big data in the judicial process is especially sensitive, since the legal proceedings have always been considered as the holy room of jurisprudence, where justice is rendered, and we often view court decisions as a standard of behavior for all participants of legal relations. The use of technologies in the evidence system is a well–known idea. If there are means that allow establishing the truth,

<sup>&</sup>lt;sup>1</sup> Algorithms, Artificial Intelligence and the Law. The Sir Henry Brooke Lecture for BAILII Freshfields Bruckhaus Deringer, London, Lord Sales, Justice of the UK Supreme Court 12 November 2019. Available at: https://www.supremecourt.uk/docs/speech-191112.pdf [Accessed 20th January 2023].

and thereby ensuring a fair trial, they should be used. One can see the reference point of the judicial system in such a statement.

In general, modern procedural laws operate the evidence theories dating back to the Renaissance and Enlightenment periods and legally formalized in the XIX–XX centuries (the time may vary from country to country). All of these theories are anthropocentric. The key role in evaluation of evidence is assigned to the judge, and the participants of the process have the opportunity to confirm or refute the facts that are significant for correct resolution of the case. For example, this is clearly visible in R. Dvorkin's theory of the methods of judicial discretion (Dvorkin, 2004:105-108), as well as in G. Hart's works, where the legal essence of discretion is derived from "our daily life", represented by "relatively simple examples" that allow to distinguish common features of discretionary decision-making (Hart, 2013:656). R. Posner puts the economic method into the hands of judges and defends its universality for establishment of the truth. His critics insist on a broader range of evidence. At the same time, none of them question the role of man in collecting and analyzing judicial evidence, summarizing it, and formulating general conclusions on the merits of the case. The list of famous names of the past and present can be continued, but the conclusion in general will remain the same. Let us confine ourselves to the opinion of A. Barak. He notes that the judge should weigh relevant evidence, determining its value for the case; highly convincing evidence should not be ruled out just because it lacks one of the tests of its admissibility (Barak, 1999:350).

The above argumentation is clear and boils down to several theses: 1) the judgment must be fair; 2) justice is achieved by evaluating the available evidence; 3) the evidence must be sufficiently substantial to exclude injustice. Different theories differ on how to achieve justice. However, the general line is the same in all cases – the human factor, based on the human reason, armed with professional legal skills, remains decisive. The origins of such views go back to the teachings of the past about the human reason and are found in the theories of human rights and the system of separation of powers, which force judges to seek the truth, assessing the aggregate of the circumstances of the case, including those related to the motives of the specific people, their desires, and subjective perception of reality. This can be read in the works of the founders of the system of separation of powers. Thus, J. Locke presents judges as reasonable people proclaiming the law and thereby ensuring the rights of citizens (Locke, 2009:310). The key word here is human reason.

C.-L. de Montesquieu characterized the judges as "the mouth of the law that pronounces the words of the law, mere passive beings, incapable of moderating either its force or rigor" (Montesquieu, 1900: 164). In such interpretation, a judge is a mechanism, but he needs a human reason to find the right law, to determine the subject of proof, to evaluate the evidence. Only then he is allowed to become "a mere passive being" proclaiming the will of the legislator. According to Montesquieu, cases involving noble and enlightened people should be considered in special courts, where judges will be comparable to the parties in nobility and enlightenment. Hence, this will allow avoiding partiality (Montesquieu, 1900:163-164). That is, a fair trial is an instrument, but it can only be a human being, and one endowed with certain qualities, not only intellectual, but also spiritual, as well as cultural.

It is no coincidence that totalitarian regimes did not strive to build an independent judiciary. In them, the court performed a technical function, separated the wrong people from the rest and officially reported it. In this case much importance could not be given to proving, since the courts operated on formal attributes important for the political regime (for example, belonging to a social group, etc.). Under such circumstances, some people made judgments against others. They could be unfair, but they were based on some facts important for political regimes. Reason was used here not to establish procedural truth, but to serve someone's political will, playing a key role in the process of making judicial decisions (there could certainly be non-politicized judicial decisions that fully met all the canons of the judicial process).

Now, let us assume that it is technically possible to replace the human reason with a computer program that can evaluate evidence and propose solutions objectively and independently of the participants in the process and the judge. If such conclusions are transferred into a court decision without human verification, can they be considered as fair, and justice — as done? It is premature to formulate a final answer now. Within the current procedural framework, it is more likely to be negative.

And yet... the issues of using artificial intelligence are increasingly attracting attention of researchers and practitioners, including the legal sphere. Today, the "concept of predictive coding" by the British philosopher Andy Clark is considered, perhaps, one of the most important scientific discoveries<sup>2</sup>. The method of predictive coding of computer technologies and information processing algorithms allows to analyze large unstructured volumes of data significantly reducing time costs. Arguments in favor of predictive, "foretold" justice involving artificial intelligence (hereinafter referred to as AI) are increasingly heard.

So far there are few court decisions in the world that have been rendered based on the conclusions of the program using artificial intelligence. The case of Da Silva Moore v. Publicis Groupe was, apparently, the first case where artificial intelligence was used to evaluate evidence<sup>3</sup>. It was resolved in the USA (New York) in February 2012 and dealt with the dispute on gender-based discrimination at work. The employer was accused of creating a "glass ceiling" for women employees. In order to reach a decision, more than three million electronic documents held by the defendant had to be examined. The defendant offered to use the predictive coding method<sup>4</sup>. Judge Andrew Peck, who heard the case, accepted the proposal. Interestingly, the plaintiffs, for whose benefit the computer program was to be used, disagreed and appealed the decision in the district court. Their arguments were as follows: the judge excessively relied on external documents; the defendant's expert was biased, since the chosen method of evaluating evidence would benefit him; the judge improperly conducted evidentiary hearing; the

<sup>&</sup>lt;sup>2</sup> I came, I saw, I taught: predictive coding in the service of lawyers. Available at: https://blog.pravo.tech/prishel-uvidel-obuchil-prediktivnoe-kodirovanie-na-sluzhbe-u-yuristov/?ysclid= lfqiz6t9d0943787247 [Accessed 14th March 2023].

<sup>&</sup>lt;sup>3</sup> Moore v. Publicis Groupe, 287 F.R.D. 182 (2012) Available at: https://www.lexisnexis.com/community/casebrief/p/casebrief-da-silva-moore-v-publicis-groupe [Accessed 14th March 2023].

<sup>&</sup>lt;sup>4</sup> Predictive coding (PC) is considered as a process of study of documents using computer technology, designed in order to facilitate preparation for complicated trials, when it is required to view hundreds of thousands of documents and select relevant ones for the case. Available at: https://pravo.ru/review/view/86718/?ysclid=lfcaz5prre685754246 [Accessed 18th February 2023].

judge used the version of the protocol on computer disclosure of information proposed by the defendant. These arguments are set out in the judgment of the district court<sup>5</sup>.

Judge E. Peck's example was not inspiring. Meanwhile, there are similar reasons in another case, heard in the UK in 2016 (the first British case). This was a corporate dispute of Pyrrho Investments Ltd v MWB Property Ltd<sup>6</sup>. Judge Paul Matthews analyzed the disadvantages of predictive coding at the evidentiary stage and highlighted the advantages of electronic examination of evidence. His decision may perhaps become a landmark for anyone advocating the use of artificial intelligence in litigation. The case originally required to disclose 17.6 million documents which was later reduced to 3.1 million. Obviously, three million is also an impressive figure for manual verification characterized by: 1) lots of people involved in search, selection and analysis of evidence; 2) considerable time spent by those people; and 3) huge financial costs of litigants for verification.

Among the likely disadvantages, both judges, E. Peck and P. Matthews, also mentioned the lack of an explicit legislative authorization for use of artificial intelligence in the evidentiary system and procedural difficulties related to verifying the "software solution". Objections to the court's use of predictive coding also rest on the fact that it diminishes the rights of the party that does not get access to documents. Also, the party is deprived of the ability to verify the results of document disclosure. In other words, the party who holds the documents and uses the computer program, is in a better position than its opponents, who can only rely on honesty of the other party and reliability of the program.

Another motive for criticism was that the judges were preoccupied with the cost of the evidence evaluation procedure, depreciating the objectivity of this evaluation in a sense. Thus, they did not use the golden rule of proof related to human verification of the documents constituting the evidentiary basis of the case. Here the criticism of a higher level is manifested; it rests on the idea of the judicial process as a highly intellectual activity of specialists, which is based on well-known procedural principles. Thus, Tonia Hap Murphy considers the use of artificial intelligence in US courts to be a matter of course, but fears departure from the traditional role of judges. This may entail greater expenses, delays, as well as probability of an unfair and biased decision, undermine the foundation of the judicial system, and eventually lead to the rejection of judicial evaluation, which is unacceptable. Therefore, in her opinion, the use of predictive coding should not become a mandatory procedure at the stage of evidence research (Murphy, 2013:657). In fact, T. Murphy designates the disadvantages that proponents of artificial interest in the judicial process are trying to avoid.

This and similar arguments manifest the distrust of natural intelligence towards artificial intelligence. The legacy of Aristotle, Roman jurists, Renaissance and Enlightenment thinkers, as well as rationalism of the XIX century is seen to be deeply rooted in legal thinking. Man is distinguished from all things by his reason; he creates

<sup>&</sup>lt;sup>5</sup> Da Silva Moore, et al. v. Publicis Groupe, No. 11-Civ.-1279 (ALC) (AJP), 2012 WL 607412 (S.D.N.Y. Feb. 24, 2012) Available at: https://jenner.com/system/assets/publications/11045/original/2012\_WL\_146534.pdf [Accessed 14th March 2023].

<sup>&</sup>lt;sup>6</sup> Pyrrho Investments Limited v MWB Property Limited [2016] EWHC 256 (Ch) (16 February 2016) Available at: http://www.bailii.org/ew/cases/EWHC/Ch/2016/256.pdf [Accessed 14th March 2023].

technologies and rules them, but not vice versa; he seems to be the bearer of a millenniaold culture that absorbed the ideas of justice. Can the technology, even the most perfect, be a judge in human relations? In general, answering this question, the judges – proponents of engaging artificial intelligence in the process, were aware of possible disadvantages and tried to ensure verification of conclusions drawn by artificial intelligence.

#### Verifiability of conclusions drawn by artificial intelligence

In cases involving artificial intelligence, the protocol determining interaction of participants at the stage of evidence disclosure comes to the forefront. In the available cases, judges assume that the parties are obliged to cooperate in disclosure of evidence. In Da Silva Moore case, the protocol was quite detailed and in many aspects was subsequently regarded as a model for other similar disputes. Thus, analyzing one of the, where the court also allowed to use predictive coding, Elle Byram notes that the protocol for the use of the software was as detailed as in Da S. Moore case. Specifically, the plaintiff's experts were given the opportunity to verify any information selected for machine learning, including privileged information. However, unlike Da S. Moore case, the protocol did not contain indication of statistical sampling and a threshold value for relevant records (Byram, 2013:692).

Let us note that the draft protocol may be submitted by the initiator of evidence verification, and this is not necessarily a judge. Thus, in case Da S. Moore v. Publicis Groupe, it was the defendant who developed the detailed disclosure rules and submitted them to the court. Hereby the plaintiffs objected to such a decision in general, as well as to certain parts of the protocol. Judge E. Peck agreed with the defendant, however, the plaintiffs managed to win back some specific moments, such as lifting the restriction on the number of records that the defendants were required to select for machine learning (Byram, 2013:686).

The British version, sanctioned by Judge P. Matthews, was the closest to the ideal. Both parties petitioned for the use of predictive coding, with which the judge agreed, approving the disclosure protocol. At the same time, the judge performed his duties thoroughly, showed due erudition to justify the use of artificial intelligence in the system of procedural evidence, as well as to develop a step-by-step instruction.

There are also cases where the court initiates and insists on applying artificial intelligence technologies contrary to the positions of the parties. This was the case with EORHB, Inc. v. HOA Holdings, LLC (USA)<sup>7</sup>. Initially, the judge obliged all participants to engage a computer program in the process of electronic disclosure of documents, and, first of all, to agree on a single software vendor. However, this requirement was changed upon the plaintiffs' request. As a result, the court corrected the original ruling, agreeing with the arguments of both defendants and plaintiffs. The former were allowed to contact the software vendor and use predictive coding, while the latter were allowed to use traditional methods of disclosing their documents. The ratio of a

<sup>&</sup>lt;sup>7</sup> EORHB, Inc. v. HOA Holdings, LLC, No. 7409-VCL, 2013 WL 1960621 (Del. Ch. May 6, 2013) Available at: https://www.wilsonelser.com/writable/files/Legal\_Analysis/389292-v1-eorhb-v-hoa-holdings-no-7409-vcl-2013-esi-update.pdf [Accessed 14th March 2023].

small number of documents that the plaintiffs were required to disclose and the cost of software, which would "outweigh any benefit" from artificial intelligence was taken into account. This case is interesting because the court (1) reversed its original position, (2) allowed simultaneous disclosure of evidence using different methods, (3) took a proactive stance, insisting on predictive coding as the primary method, and (4) mitigated its stance only after examining the reasoned arguments of one of the parties. The decisive argument in favor of preserving the traditional methods for the plaintiffs was the ratio of the final result and its cost. Note that there were no questions concerning the degree of reliability of one of the methods. This once again confirms that artificial intelligence at the evidentiary stage is considered, in most cases, not so much from the point of view of its reliability, but from the point of view of its financial cost. Obviously, predictive coding in this case was seen as a convenient means allowing the parties to accomplish time-consuming and costly actions, reducing other possible costs.

This trend was voiced even more clearly by Lord Hodge, Deputy Chief Justice of the UK Supreme Court, in March 2020. In fact, he noted the fundamental position of the Business and Property Court of England and Wales, where the parties are required to seriously justify the impossibility of using predictive coding in cases where it is required to analyze more than 50,000 documents (Hodge, 2020:13). Another conclusion suggests itself: artificial intelligence turned out to be the most demanded in litigation where commercial disputes are resolved. It is here that judges can rely on the agreed position of the parties, and if it is discordant, by arguing the inconsistency of opinions of the plaintiffs and defendants, issue an order requiring to apply such software.

Allowing the parties to determine the best method of disclosing electronic information, in the above examples, the courts acted within the law, but preferred to support their conclusions by referring to the authoritative doctrinal position. For example, a document called the "The Sedona Principles" is very common in the USA. It is formed as a result of periodic conferences involving leading American lawyers who united to address "some of the most difficult problems facing the legal system today". Thus, according to Principle 6, the party disclosing the evidence is better equipped than the court and its procedural adversary to navigate its own information, including knowledge of the technology and other specific peculiarities of its storage. Violation of this principle may entail disproportionate costs and burdens on non-information-holding parties, especially when complex, patent-protected software is used9. In this regard, the information holder has priority in determining how to disclose evidence, including through the use of artificial intelligence. However, the Sedona principles can also be applied as rejection of the "services" of artificial intelligence in litigation. This, in particular, is indicated by E. Byram, in relation to the circumstances of the Global Aerospace v. Landow Aviation<sup>10</sup>. There, the court allowed the parties to choose the

<sup>&</sup>lt;sup>8</sup> The Sedona Conference Working Group Series. Available at: https://thesedonaconference.org/wgs [Accessed 14th March 2023].

<sup>&</sup>lt;sup>9</sup> The Sedona Conference Working Group Series. Available at: https://thesedonaconference.org/wgs [Accessed 14th March 2023].

<sup>&</sup>lt;sup>10</sup> Global Aerospace Inc. v. Landow Aviation, L.P., No. 61040 (Loudon County, Va. Cir. Ct. Apr. 23, 2012) / Global Aerospace Inc., et al. v. Landow Aviation LP /dba/ Dulles Jet Center, et al., Consolidated Case No. CL

method of disclosure, noting that plaintiffs should not prevent the defendant from following the traditional scheme at the first stage of the proceedings, but were entitled to seek predictive coding in case of the second stage. Judge Nolan relied on the 6th Sedona principle (Byram, 2013:692). The reasonableness of such approach is obvious: the defendant makes disclosure by the method that he considers the best. If the claimants find that they are satisfied with the result, they accept the original procedure as well. If not, then they are given the opportunity to argue its shortcomings and point out sensible reasons why predictive coding would be a preferable option.

### Russian legislation, doctrine and practice of disclosure of procedural evidence

There have been no similar cases in Russian practice so far, although there is a stage of disclosure of evidence in procedural legislation. It was introduced in civil proceedings only in November 2018<sup>11</sup>. In the process of resolving economic disputes, this stage has existed since 2002<sup>12</sup>. Nevertheless, this phenomenon is relatively new for our legal system. Often, judges, as well as the parties, do not use the opportunities to disclose evidence, especially with the use of new technologies. Apparently, Russian lawyers have yet to experience the specifics of examining electronic documents, as well as the role of disclosure of evidence in judicial proceedings. At present, there are opinions about too radical position of the legislator that introduced the stage of information disclosure into the civil process, and unreasonably increased the burden of the parties (Smagina, 2019:119–123; Kudryavtseva & Smolnikov, 2019:104–113).

It should be noted that Russian practice has not developed a unified approach to the issues of disclosure of electronic evidence. It seems that this is due to the fact that the "models of evidence disclosure ... are either not formed at all, or are far from being perfect" (Fokina, 2019:29-46). At the same time, scholars show interest to this issue. Currently, the formation of theoretical basics, on which future practice could rely is under way. Thus, a number of important conclusions were formulated by A.T. Bonner. First, he noted that electronic documents are still considered in most cases as a form of written evidence. Second, he did not agree with this established practice, pointing out that evaluation of electronic documents by courts using the methods designed for written sources could lead to serious errors. Third, he noted that a written document is examined according to the rules of human logic, while an electronic document is designed for "machine" logic. Fourth: machine logic cannot be understood by man without using special technology that would transform the encoded information into a form understandable for man. Fifth: electronic documents should be examined at court in accordance with special methods developed only for this purpose (Bonner, 2017:413–416).

<sup>00061040-00, (</sup>Circuit Court Loudoun Cty., Apr. 23, 2012) (J. Chamblin). Available at: https://www.redgravellp.com/sites/default/files/PredictiveCoding-GlobalAerospace\_TamaraKarel.pdf [Accessed 14th March 2023].

<sup>&</sup>lt;sup>11</sup> Federal Law On Amendments to Certain Legislative Acts of the Russian Federation No. 451-FZ dated 28.11.2018 // Collected Legislation of the Russian Federation. 2018. No. 49 (Part I), Article 7523.

 $<sup>^{12}</sup>$  Federal Law Arbitration Procedural Code of the Russian Federation No. 95-FZ dated 24.07.2002 // Collected Legislation of the Russian Federation. 2002. No. 30, Article 3012.

Other Russian authors preserve and protect traditional approaches, follow the legislator and, at best, quote A.T. Bonner in the situations when they need to describe the phenomenon of electronic evidence. Most often, they talk about technical means of video and audio records whereas electronic document turnover is perceived by analogy with written evidence within the traditional methods of their judicial evaluation (Treushnikov, 2016:91, 103).

A.T. Bonner does not write about artificial intelligence in the judicial process, but his views are quite consistent with those who allow possibility of introducing relevant software into the procedural turnover. The main conclusion is that information created by a machine or with the help of a machine can only be evaluated by a machine... or by a human, but with the help of a machine. It is difficult to disagree with this, so this thesis can be accepted as a future analogue of the *Russian* "Sedona Principles", especially since artificial intelligence already has a certain position in the domestic entrepreneurial sphere, which is becoming more and more stable.

In 2005, the Russian legislator specified the methods of concluding civil law contracts, emphasizing that exchange of electronic documents could be one of them<sup>13</sup>. In 2019, this provision was finalized. Now electronic document management in the commercial sphere is not only not questioned, but is gaining popularity (including for the reasons caused by the COVID-19 pandemic). Back in 2012 the Association of Russian Banks approved the algorithm for concluding contracts in electronic form<sup>14</sup>. However, paragraph 2 Article 434 of the Civil Code of the Russian Federation describes electronic document as a kind of a contract in writing. On the one hand, this will not contribute to the development of independent assessment tools for this kind of evidence; on the other hand, experts in this field have received the argument from the legislator that means which allow analyzing written evidence are acceptable for electronic documents. Therefore, while in the sphere of substantive private law, electronic document has become a normal and even commonplace phenomenon, in the sphere of process it has yet to reclaim its place, separating itself from written documents.

According to expert estimates, in 2018, the country's artificial intelligence market grew by more than 40% over the year. The development of technologies in finance, analytics, as well as industry was registered<sup>15</sup>. In August 2020, the RF Government approved the Concept for Regulating Artificial Intelligence and Robotics Technologies until 2024<sup>16</sup>. It provides for the formation of a mechanism of legal regulation that would be comfortable and safe, would allow to develop technologies, based on the balance of interests of an individual, society, and the state. Attention is paid to data turnover, legal liability, insurance, medicine, industry, transport, public administration, urban planning, and space industry. The concept does not stipulate the problem of judicial

<sup>&</sup>lt;sup>13</sup> Federal Law On Amendments to Part One of the Civil Code of the Russian Federation No. 42-FZ dated 08.03.2015 // Collected Legislation of the Russian Federation. 2015. No. 10, Article 1412.

 $<sup>^{14}</sup>$  Recommendations for concluding contracts in electronic form dated 19.12.2012 // Bulletin of the Association of Russian Banks. 2013. No. 1 – 2.

<sup>&</sup>lt;sup>15</sup> Artificial intelligence (Russian market). Available at: https://www.tadviser.ru/index.php/Статья:Искусственный интеллект (рынок России)?ysclid=lgv1vs4wjn645731254 Accessed 14th March 2023].

<sup>&</sup>lt;sup>16</sup> Decree of the Government of the Russian Federation. The Concept for Regulating Artificial Intelligence and Robotics Technologies until 2024 No. 2129-R dated August 19, 2020. Available at: http://www.pravo.gov.ru Accessed 14 March 2023].

evaluation of information using artificial intelligence, but it can be assumed that with the development of industries mentioned in the document, the need to resolve the disputes will arise.

Elaboration of electronic services in the economic sphere means that sooner or later Russian judges will face a huge array of digital information and a proposal to use a service equipped with artificial intelligence to evaluate it. This was discussed by V.V. Momotov, Chairman of the Council of Judges of Russia (Qatar, February 2020). In his opinion, neutral artificial intelligence towards humans, is a myth, but its auxiliary value in the judicial process is indisputable. V.V. Momotov admitted that in the near future, Russian judges will have access to software that allows to recognize the general meaning of the text with the ability to highlight the key theses, to use speech and video image recognition systems for marking audio and video protocols of court sessions and even automated preparation of draft judicial acts<sup>17</sup>.

There are certain cases already, when judges face unusual evidence. For example, two individuals entered into a contract of rendering services (one undertook to render services related to granting of US O-1 US visa to the other, as well as to provide him with a job in the USA, for which he was remunerated with 8,500 US dollars). The obligations were not fulfilled; the parties did not form written contracts, did not draw up acts or receipts. Their relations were confirmed only by e-mail correspondence for the period from October 2017 to February 2019, as well as Facebook<sup>18</sup> posts. The Court held that the plaintiff could not confirm transfer of \$8,500 to the defendant under such conditions. At the same time, the court examined the submitted electronic correspondence and assessed it, including by stating that it does not follow clearly from this correspondence on which terms the parties entered into legal relations<sup>19</sup>. It is not so much the result that matters here; it was clear that the parties did not seek for a proper legal form in their relations, and perhaps a criminal-law character should have been given to this case. The main thing here is that the plaintiff's representative formed an evidentiary base from electronic documents, and the court, at least, evaluated this evidence. However, the court dealt with not electronic media, but their paper copies certified by a notary. That is, the parties and the judge operated the evidence evaluation methods that were formed for documents in hard copy. The question is what decision would have been rendered if the evidence had been examined by artificial intelligence?

Russian scholars, on the one hand, admit the participation of AI programs in making a legally significant decision by a judge within the writ proceedings under certain conditions; on the other hand, they do not support attempts to completely replace the judicial activity of a judge, including evaluation of evidence, with artificial intelligence (Stepanov, Pechegin & Diakonova, 2021:12).

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<sup>&</sup>lt;sup>17</sup> Momotov V.V. Prospects for use of artificial intelligence in the judicial system of the Russian Federation. Available at: http://www.ssrf.ru/news/lienta-novostiei/36912 Accessed 14 March 2023].

<sup>&</sup>lt;sup>18</sup> On March 21, 2022, the Tverskoy District Court of Moscow satisfied a lawsuit filed by the Prosecutor General's Office of the Russian Federation and recognized the activity of the social network Facebook and Instagram, owned by Meta, as extremist, banning its operation in Russia.

<sup>&</sup>lt;sup>19</sup> Decision of the Golovinsky District Court of Moscow on Case No. 2-2394/19 dated June 11, 2019. Available at: https://www.mos-gorsud.ru/rs/golovinskij/services/cases/civil/details/5eab8c01-6c9a-4989-9006-29ee95 21e638?year=2019&actDocStatus=2&formType=fullForm [Accessed 4th April 2023].

#### Artificial Intelligence: the experience of Chinese justice

In this sense, the experience of China where digital courts in Hangzhou<sup>20</sup>, Beijing and Guangzhou began functioning in 2017–2018, and where appropriate digital tools are used to disclose and evaluate evidence as one of the procedural stages is of certain interest<sup>21</sup>. The issue concerns the intelligent evidence analysis system within online litigation (blockchain plus artificial intelligence, cloud data, etc.). Upon presentation of evidence by the parties, this intelligent system analyzes and compares it, simultaneously forming the list of required evidence used in general judicial practice in similar cases. Accordingly, additional evidence not submitted by the party (downloaded incorrectly or not meeting the requirements) can be requested automatically. This especially facilitates the operation of judges in financial disputes, when it is required to make a lot of complex calculations, to give grounds to the judge for considering the case and making the final decision (Sheremetyeva & Baturo & Y Shuan, 2020: 160). This opportunity arose partly due to use of distributed ledger technologies. Documents uploaded to it are anonymized, tagged and stored in cloud storage. They are analyzed using AI and big data technologies. If at the beginning of the Internet courts operation, only those cases that were considered by the Internet court were uploaded into the repositories, later decisions of other courts were added, which actually leveled the problem of variability of judgments on identical cases.

Introduction of blockchain technology into the judicial system took place in stages, first in a test mode in individual courts, then a single technology was created for all courts. In all cases, the state cooperated with Chinese technology giants, primarily, Alibaba Group Holding Ltd (including through subsidiaries). So, in 2018, the Judicial Blockchain program was launched in Hangzhou. In fact, in 2019, similar services were launched in Beijing (March) and Guangzhou (April). In the same year, the national Unified Platform of People's Court Judicial Blockchain was announced to connect all courts in the country. It is known that introduction of the platform allowed the parties, legal entities, to save significantly by authenticating electronic evidence, whose placement in the system costs them 1 yuan (as opposed to traditional notarization with an estimated price of 4 thousand yuan). However, there are also comments related to the information storage technology and the courts trust in it. The technological challenge is related to involvement of private companies that could potentially act in their own interests in creating the system; another challenge is that the mindset of traditional judges is changing very slowly: from June 2018 to December 2019 they approved the electronic evidence stored in a blockchain only in 400 cases (Wang, 2021).

The PRC's online courts are limited to the subject matter – these are Internet offenses in online commerce, a number of financial transactions, copyright disputes, and nearly all disputes related to online interaction. The jurisdiction of these courts is exclusive: the parties may not withdraw from proceedings in this court if their case falls under the jurisdiction of the Internet court. Unlike, for example, Internet courts in South

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<sup>&</sup>lt;sup>20</sup> Hangzhou Internet Court website. Available at: https://www.netcourt.gov.cn/?lang=En [Accessed 3rd March 2023].

<sup>&</sup>lt;sup>21</sup> The experience of the People's Republic of China is only in the focus. The judicial practice of Taiwan, is not looked at.

Korea, where consent of both disputing parties is mandatory. The proceedings are conducted entirely in digital format, starting with submitting materials to the court; they include court hearing and judgment with participation of artificial intelligence.

One of the successful examples features a network company that held exclusive rights to webcast the FIFA World Cup in Qatar. It discovered that the championship games were illegally broadcast through a mobile application owned by one of the capital's companies. On the eve of the final, a lawsuit seeking a ban was filed with the Beijing Internet Court, which ruled favorably on the case on the same day. The experts and the court itself suggested that the shown promptness did not only correspond to the nature of the case, but also allowed for the effective protection of the plaintiff's rights, which, apparently, would have been difficult in ordinary proceedings<sup>22</sup>. If the case had not been resolved before the final game, that is, on the day of filing the application to the court, the losses of the right holder would have been too high, and their compensation might have been indeterminable.

It is worth noting that despite the discussion of China's transition to a "smart courts" system in the context of applying a new model of court operation within the intelligent judicial system, researchers pay attention to the fact that there is no such thing as a digital judge making AI decisions as such. The "smart court" is aimed not so much or even not at all at replacement of the judge with AI, but at minimizing corruption risks and ensuring sound judicial decisions. This was done not to replace a live judge with an electronic one, but rather to reduce corruption and unreasonable decisions<sup>23</sup>. Thus, the decisions of the Beijing Internet Court are ensured by twenty-nine judges, chaired by Jiang Ying, who, in addition to diplomas of legal education (bachelor's and master's degrees), also have engineering background (bachelor's degree)<sup>24</sup>.

If we compare the first full-fledged online courts and their subject matter jurisdiction, it will seem that the state has formed a specialized justice system for disputes arising from the use of Internet. To some extent, such a decision is viewed as a reaction to a new phenomenon of electronic evidence, which, according to Zhuhao Wang, was not fully perceived as such by traditional judges. The judges also lacked sufficient competence to assess the credibility of such evidence (Wang, 2021). At the same time, A. (Lu) Xu notes the potential problems of applying online justice, linking them to the possibility of making decisions based on statistics, for example, on their previously overturned cases, to the detriment of thorough analysis of the law (instrumental justice), reduced access to justice for people who do not have "access" to Internet or do not use its services frequently (electronic inequality), etc. (Alison (Lu) Xu, 2017). Critics also beware that new technologies may encourage the authorities and judges to disregard traditional procedural safeguards with the result that justice will be sacrificed to efficiency, measured by speed and cost savings. For example, the trend may affect the stages of discovery and examination of evidence with parties and judges taking more

<sup>&</sup>lt;sup>22</sup> Illegal live broadcasting of World Cup prohibited by BIC. Available at: https://english.bjinternetcourt.gov.cn/2023-04/03/c\_614.htm [Accessed 10th February 2023].

<sup>&</sup>lt;sup>23</sup> Judicial AI has been introduced in China. Or not? Available at: https://habr.com/ru/post/677920/ [Accessed 20th March 2023].

<sup>&</sup>lt;sup>24</sup> Judges: Beijing Internet Court. Available at: https://english.bjinternetcourt.gov.cn/judges\_3.html [Accessed 5th April 2023].

passive positions trusting artificial intelligence. There are also technological challenges (Shu Shang & Guo, 2020).

However, the option that was eventually adopted by the Chinese authorities demonstrates understanding of the problems. The jurisdiction of online courts is limited to a certain category of cases; the decision is not made in a few clicks of a computer mouse, traditional stages are preserved, as far as possible in the context of technologization of justice. Analysis of judicial statistics and its impact on justice is a matter of the future, since its resolution requires relevant statistics covering a fairly long period of time.

#### Predictive justice in European judicial practice

Although cautiously, predictive practices are spreading in European litigation. There are interesting projects of the European Union related to "predictive justice", when algorithms are used with the help of artificial intelligence (AI) to analyze a multiple cases in a short timeframe allowing to anticipate the outcome of the dispute to a certain extent (Biryukov, 2019). In December 4, 2018 European Commission for the Efficiency of Justice (CEPEJ) of the Council of Europe approved the European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems and their Environment<sup>25</sup>. From the content of the Charter it follows that judges in the member states of the Council of Europe do not often apply predictive tools for forecasting, although a number of studies have been conducted.

Thus, at the initiative of the French Ministry of Justice, in spring 2017 two appellate courts, in Rennes and Douai, agreed to test predictive justice software on various court appeals, using it as an experiment in resolving civil disputes. Criminal cases were excluded from the scope of the experiment for ethical reasons. As a result, civil, social and commercial decisions of all French appellate courts were analyzed. A three-month trial was conducted using software called as "predictive" by the panel of judges<sup>26</sup>. It was proposed to assess the value of quantitative (innovative) analysis of the amounts allocated by the two courts, in addition to geographical classification of discrepancies noted in similar applications and trials. The purpose of the software was to create a decision-making tool capable to reduce, if necessary, their excessive variability in the name of the principle of equality of citizens before the law. The controversial result of the experiment was discussed by the two courts of appeal, the Ministry of Justice and LegalTech, the company that developed the product. On October 9th, 2017, having emphasized the contemporary character of the approach, the Ministry of Justice and the first Presidium

<sup>&</sup>lt;sup>25</sup> European Commission for the Efficiency of Justice (CEPEJ) European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems and their Environment. Available at: https://www.europarl.europa.eu/cmsdata/196205/COUNCIL%20OF%20EUROPE%20-%20European%20Ethical%20Charter%20 on%20the%20use%20of%20AI%20in%20judicial%20systems.pdf Accessed 14th March 2023].

<sup>&</sup>lt;sup>26</sup> CEPEJ, European Ethical Charter on the Use of Artificial Intelligence in Judicial System and their Environment 34 (CEPEJ (2018)14, Dec. 3, 2018). Available at: https://rm.coe.int/ethical-charter-en-for-publication-4-december-2018/16808f699c, archived at https://perma.cc/7XP4-SWK6 (accessed 1.04.2023); Philippe Rozec & Louise Thiebaut, Intelligence artificielle: les limites de la justice predictive [Artificial Intelligence: The Limits of Predictive Justice], LES ECHOS (Nov. 2, 2017). Available at: https://perma.cc/K2WM-3399, archived at https://perma.cc/K2WM-3399 [Accessed 1st April 2023].

of the Court of Appeal of Rennes did not find "particular value for judges" of the software, since "high-quality tools for analyzing the judicial practice of the Court of Cassation and Courts of Appeal" already exist. Moreover, it was pointed out that domination of the statistical approach in the software to the detriment of qualitative analysis was evident and, in some cases, erroneous results were recorded. Indeed, unlike the Anglo-Saxon system, the French legal system is not built on case law system, and court decisions are based on "an accurate analysis of the facts in each case" without reference to previous decisions (Rozec & Thiebaut, 2017).

It should be noted that examples of programs using artificial intelligence built on deep learning technology in order to predict the decisions of the European Court of Human Rights are well known. Having accessed the evidence in a case, the technologies evaluated it in accordance with the specified parameters with the verdict accuracy of about 79% of 584 considered cases (Aletras, Tsarapatsanis, Preoţiuc-Pietro & Lampos, 2016:93). All this was pointed out by the European Commission for the Efficiency of Justice<sup>27</sup>.

It is obvious that the member states of the European Union are making attempts to implement the ideas of "predictive justice" at the national level using predictive technologies/tools. In this context, by Regulations 2018/1724 (October 2, 2018) and 2020/1784 (November 25, 2020) the European Parliament and the Council of Europe established a single digital gateway for cross-border exchange of evidence and a procedure for delivery of judicial and non-judicial documents on civil or commercial cases (requests, acknowledgements, receipts, certificates and communications). It is believed that this should increase the speed of transfer of both judicial and non-judicial documents in cross-border civil proceedings<sup>28</sup>.

#### Conclusion

Thus, when solving the issue on the possibility of using predictive coding as a tool of predictive justice, judges adhere to certain rules. They try to obtain consent of the parties for disclosure of evidence using such programs, even if they themselves are the initiators of this process. The protocols governing the disclosure procedure require the parties to cooperate with each other. The verifiability of the data is of great importance, since it is difficult for litigants, as well as for court, to verify its veracity once the program has reached a verdict. For this end, much attention is paid to the pre-launch phase of the program, including development of the general disclosure rules and specifics of machine learning for a particular case. This ensures confidence in the future result. If the parties cooperate with each other, if each of them gets access to information, if the court responds reasonably to the claims and objections of the participants, then in the future it will be difficult for them to challenge the results of disclosure of evidence deduced by artificial

<sup>&</sup>lt;sup>27</sup> European Commission for the Efficiency of Justice (CEPEJ). European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems and their Environment. Available at: https://www.europarl.europa.eu/cmsdata/196205/COUNCIL%20OF%20EUROPE%20-%20European%20Ethical%20Charter%20 on%20the%20use%20of%20AI%20in%20judicial%20systems.pdf [Accessed 4th April 2023].

<sup>&</sup>lt;sup>28</sup> Digitalization of the judicial process: The experience of the European Union. Available at: https://habr.com/ru/company/digitalrightscenter/blog/696846/ [Accessed 4th April 2023].

intelligence, since everyone had equal opportunities to participate and influence the result.

It should be noted that in the process where public and private interests compete, these computer tools are not so widely applicable anywhere. The reason is inequality of the parties, when it is more difficult to agree on a single method, having previously overcome mutual distrust. Although in civil proceedings, artificial intelligence has not yet become the predominant method either. Manual human verification of documents still remains the golden rule of evidence. This can be attributed to the fact that this software has not yet gained full confidence of the legal community. The credibility of decisions made in the process of proving also reflects people's willingness to trust the court. Thus, the European Court of Human Rights once stated: indeed, it is unacceptable to seek the protection of the court in which the applicant has completely lost confidence<sup>29</sup>. To earn a comparable degree of confidence, artificial intelligence needs time and successful record of its use to solve legally significant tasks in various spheres of human life.

#### References / Список литературы

Aletras, N., Tsarapatsanis, D., Preoţiuc-Pietro, D. & Lampos, V. (2016) Predicting Judicial Decisions of the European Court of Human Rights: a Natural Language Processing Perspective. *PeerJ Computer Science*. 2:e93. https://doi.org/10.7717/peerj-cs.93

Alison (Lu) Xu (2017) Chinese judicial justice on the cloud: a future call or a Pandora's box? An analysis of the 'intelligent court system' of China. *Information & Communications Technology Law.* 26(1), 59–71. http://dx.doi.org/10.1080/13600834.2017.1269873

Asimov, I. (1991) I Robot. New York, Bantam Books.

Barak, A., (1999) Judicial Discretion. Moscow, Norma Publ. (in Russian).

Барак А. Судейское усмотрение. М.: Норма, 1999. 376 с.

Biryukov, P.N. (2019) Artificial Intelligence and "Predicted Justice": Foreign Experience. *Lex Russica*. 11(156), 79–87. https://doi.org/10.17803/1729-5920.2019.156.11.079-087 (in Russian).

*Бирюков П.Н.* Искусственный интеллект и «предсказанное правосудие»: зарубежный опыт // Lex Russica (Русский закон). 2019 № 11(156). С. 79–87. https://doi.org/10.17803/1729-5920.2019.156.11.079-087

Bonner, A.T. (2017), Selected Works: in 7 vols. V. Problems of the Theory of Judicial Evidence. Moscow, Prospect Publ. (in Russian)

*Боннер А.Т.* Избранные труды: в 7 т. Т. V. Проблемы теории судебных доказательств. М.: Проспект, 2017. 560 с.

Byram, E. (2013) The Collision of the Court and Predictive Coding: Defining Best Practices and Guidelines in Predictive Coding for Electronic Discovery. *Santa Clara High Technology Law Journal*. 29(4), 675–701.

Dvorkin, R. (2004) *Taking Rights Seriously*. Moscow, ROSSPEN Publ. (in Russian).

*Дворкин Р.* О правах всерьез. М.: РОССПЭН, 2004. 392 с.

Fokina, M.A. (2019) Law of Evidence in the Civil Procedure: Unrealized opportunities. *Herald of Civil Procedure*. (1), 29–46. (in Russian).

Фокина М.А. Доказательственное право в цивилистическом процессе: нереализованные возможности // Вестник гражданского процесса. 2019. № 1. С. 29–46.

<sup>&</sup>lt;sup>29</sup> Zhdanov and Others v. Russia (Applications nos. 12200/08 and 2 others – see appended list), Judgment on 2019, 16 July, Par. 85. Available at: https://hudoc.echr.coe.int/eng#{%22itemid%22:[%22001-194448%22]} (accessed 11.04. 2023).

- Hart, H.L.A. (2013) Discretion. Harvard Law Review. 127(2), 652-665.
- Kudryavtseva, E.V. & Smolnikov, D.I. (2019) The court's role in the proof of facts in the light of civil justice reform. *Zakon*. (4), 104–113. (in Russian).
  - *Кудрявцева Е.В., Смольников Д.И.* Роль суда в процессе доказывания в свете судебной реформы в гражданском судопроизводстве // Закон. 2019. № 4. С. 104–113.
- Locke, J. (2009) Two Treatises on Governance. Moscow, "Canon +" ROOI "Rehabilitation" Publ. (in Russian).
  - Локк Дж. Два трактата о правлении. М.: «Канон+» РООИ «Реабилитация», 2009. 400 с.
- Montesquieu, S.-L. (1900) The Spirit of Laws or on the Relations in which Laws should be to the Government, Morals, Climate, Religion, Trade, etc. Saint Petersburg, From L.F. Panteleev. (in Russian).
  - *Монтескье Ш.-Л.* О духе законов или об отношениях, в которых законы должны находиться к устройству каждого правления, к нравам, климату, религии, торговле и т.д. СПб.: Из-е Л.Ф. Пантелеева, 1900. 800 с.
- Murphy, Tonia Hap (2013) Mandating Use of Predictive Coding in Electronic Discovery: An Ill-Advised Judicial Intrusion. *American Business Law Journal*. 50(3), 609–657.
- Sheremetyeva, N.V., Baturo, I.V. & Y SH (2020) Features of Electronic Justice in China. *Law and practice*. (2), 159–163. (in Russian).
  - *Шереметьева Н.В., Батуро И.В., У Шуан.* Особенности электронного правосудия в КНР // Право и практика. 2020. № 2. С. 159–163.
- Shu Shang C. & Guo, W. (2020) The Rise of Online Dispute Resolution-Led Justice in China: an Initial Look. *Australian National University Journal of Law and Technology*. 1(2), 35–41.
- Smagina, E.S. (2019) Is the Procedural Revolution Completed? *Bulletin of Civil Procedure*. (4), 119–123. (in Russian).
  - Смагина Е.С. Завершена ли процессуальная революция? // Вестник гражданского процесса. 2019. № 4. С. 119–123.
- Stepanov, O.A., Pechegin, D.A. & Dyakonova, M.O. (2021) Towards the Issue of Digitalization of Judicial Activities. Law. *Right. Journal of the Higher School of Economics*. (5), 4–23. https://doi.org/10.17323/2072-8166.2021.5.4.23 (in Russian).
  - *Степанов О.А., Печегин Д.А., Дьяконова М.О.* К вопросу о цифровизации судебной деятельности // Право. Журнал Высшей школы экономики. 2021. № 5. С. 4–23. https://doi.org/10.17323/2072-8166.2021.5.4.23
- Treushnikov, M.K. (2016) *Judicial Evidence*. Moscow, Gorodets, Publ. (in Russian). *Треушников М.К.* Судебные доказательства. М.: Городец, 2016. 304 с.
- Wang, Zh. (2021) The Supreme People's Court of China has Embraced Blockchain, Built online Courthouses, and Moved to Digitalize Court Systems in a Bold Embrace of Technology. Here's How it's Going. *Judicature*. 105(1), 38–40.

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