THE ROLE OF ARTIFICIAL INTELLIGENCE IN ALTERNATIVE DISPUTE RESOLUTION

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Abstract: The article focuses on Alternative Dispute Resolution (ADR) as one of the areas where Artificial Intelligence (AI) can play a significant role, and it can be assumed that this role will grow even more. With the development of society, the methods used for efficient and fair dispute resolution must also evolve, which can facilitate access to justice in society. This article aims to contribute to the discussion regarding the possibility of implementing AI in ADR. Also, it addresses the potential benefits of implementing AI in ADR, its challenges and possible implications for the future of dispute resolution.

Key words: Alternative Dispute Resolution. Artificial Intelligence. Efficiency.

Introduction

ADR has been an important part of the legal landscape and provides an alternative to resolving disputes through the courts. The parties decide to use ADR mechanisms because of the court process's time-consuming and primarily financial demands.\(^1\) With the development of society, the methods used for efficient and fair dispute resolution must

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also evolve. Technology has emerged as a transformative force in this rapidly changing environment, with AI gaining the most attention. As already stated, the fact is that AI permeates almost all areas of society, and the legal field is no exception. This article analyses the potential use of AI in ADR and its implications. Also, it explores the prospective difficulties in integrating, its advantages, and potential consequences for future conflict resolution.

1. Why should we think about implementing AI in ADR?

One of the areas that AI can influence is the area of dispute resolution. Currently, disputes can be resolved through the courts, or alternative methods can be used. However, this article focuses only on ADR. Alternative dispute resolution mechanisms, such as arbitration, mediation, conciliation or negotiation, have become more prevalent in the past to resolve disputes rather than traditional court proceedings. ADR methods were created mainly as a reaction to the lengthy and financially demanding judicial resolution of disputes, as some of these methods may be faster and less financially demanding, mainly in mediation and conciliation. Therefore, many companies and individuals use alternative methods to resolve disputes to save time and cost.

With the rapid advancement of technology, especially AI systems, the impact of AI on ADR mechanisms has increasingly begun to be considered. According to some authors, the use of AI in ADR, mainly in online dispute resolution (ODR), after the initial higher costs of implementing the technology, may improve efficiency and reduce the costs of the dispute resolution process. We are already seeing the use of AI within the legal profession, and it can be expected that this use will continue to grow soon. The availability of AI systems makes it possible to use algorithms, for example, to analyze data to predict outcomes and identify patterns. This can lead to more efficient and

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4 ODR is one of the forms of alternative dispute resolution that are completely or at least partially resolved over the internet (online)

5 See supranote 1 p. 337
Accurate dispute resolution. In society, we can already see the gradual infiltration of AI into dispute resolution. AI can be highly effective, as it relies on automation and performs tasks much faster than humans and on a much larger scale. This is precisely the purpose of algorithms - *the ability to handle mass decisions at high accuracy and low cost*. However, in the case of dispute resolution, it is necessary to remember that this automation means - *that a human does not decide human problems*. This automation can appear problematic mainly because algorithms cannot easily learn human values, and this can cause a problem in the acceptance of the decision by the addressees, and this decision can thus be at the expense of legitimacy and justice in individual cases.

Why should we think about the possibilities of implementing AI in ADR? Following the increase in demand for effective, less financially demanding and fast dispute resolution, such decision-making can be ensured by combining AI with ADR mechanisms. However, like any technology implementation into a specific process or activity in society, it brings advantages and certain risks or limitations, which must be carefully considered and resolved before implementation. The following chapters are dedicated to exploring the possibility of how AI can be implemented in ADR, but especially the above - the opportunities and limitations that this implementation offers.

### 2. The Integration of AI in ADR and its benefits

The most likely use of AI is through predictive analytics, which uses algorithms and machine learning to analyze data and predict future outcomes. This is one of the main ways AI is expected to impact ADR, particularly by examining data on previous disputes and their outcomes to predict how comparable disputes are likely to be resolved in the future.

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In the context of the possibilities of how to integrate AI into ADR, we can consider two ways. The first way is the complete automation of decision-making, and the second is using AI systems as a support tool in decision-making. However, the question is which method is currently feasible. The use of support systems in ADR can provide support to experts in ADR but also to individual parties to the dispute, they can also provide information or give recommendations. These technologies can also improve ADR outcomes by eliminating administrative tasks such as drafting documents or reports. AI can also influence ADR through chatbots or virtual assistants who can provide legal advice or information about their rights and obligations to the parties or help them draft some legal documents. This could improve access to justice because it should reduce legal aid costs. Therefore, people who cannot afford a lawyer would be able to get access to it. As an example of a support system, we have to mention the beta version of the Harvey system - a large platform based on a language model intended to facilitate the legal analysis of contracts, lawsuits and due diligence in several world languages. In particular, the system might provide faster and more cost-effective recommendations and predictions. However, the output so far requires a thorough review by lawyers - so it cannot be assumed that it will become a fully automated decision-making system shortly. Currently, many support systems are being used in ADR mainly in ODR. These systems are differentiated according to what functions they provide, and in the sense of the above, they can be divided, for example, into decision support systems or case reasoning systems.

On the other hand, when we consider the possible fully automated decision-making, it can be mentioned that, unlike assistive technologies, this method faces more significant concerns because their outputs could be used to determine the outcome of ADR cases with little or no human supervision. Proponents of this approach note that if AI

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10 In November 2022, the international law firm Allen & Overy started testing the beta version of this platform, which is based on the latest Open AI models (GPT-4) improved and aimed mainly at the legal profession.


12 See more: supranote 9

13 See more: supranote 1 p. 326
can detect correlational patterns in large data sets with a speed, scale and accuracy that often exceeds human capabilities, it could study past disputes and apply underlying functions, rules and insights to future disputes.\textsuperscript{14} Although the existence of automated decision-making in dispute resolution is rare, there are some systems, such as British Columbia’s Civil Resolution Tribunal (CRT)\textsuperscript{15} or SmartSettle\textsuperscript{16}. However, most existing automated systems\textsuperscript{17} cannot perform significant tasks independently or without human supervision.\textsuperscript{18}

Several potential benefits that the implementation of AI in ADR can bring are currently being discussed. As was mention, we can look at the use of AI in ADR from two points of view, i.e., the use of AI as a support system, or we can consider full automation of ADR. However, for both approaches, it can be determined that one of the most significant advantages is speed and efficiency when processing a large amount of data, which also leads to the acceleration of the dispute decision process itself.\textsuperscript{19} Given that AI algorithms can analyze large amounts of data, supporters of the use of this type of technology assume that if AI can identify patterns or trends from previous disputes and their outputs, there is an assumption that such a system could analyze previous and apply fundamental rules and knowledge to future disputes. The faster process also significantly reduces costs for litigants, another potential benefit of using AI systems in ADR.\textsuperscript{20} AI systems can also


\textsuperscript{15} CRT is an AI expert system that independently performs case intake, management and communications and provides disputants with a negotiation forum. See more: https://civilresolutionbc.ca/about-the-crt/

\textsuperscript{16} Smartsettle is a negotiation tool that can independently provide a compromise between disputants and provide a recommended settlement to a human neutral. See more: https://www.smartsettleresolutions.com/

\textsuperscript{17} See more: ZELEZNIKOW J. Using Artificial Intelligence to provide Intelligent Dispute Resolution Support. Group Decis Negot. 2021;30(4):789-812.


\textsuperscript{19} See supranote 7, p. 689

automate certain activities, such as various administration, which can reduce costs.

As it follows, AI in ADR can improve access to justice for the parties to the dispute because AI systems may provide less expensive legal advice in real-time, allowing the parties to the dispute to obtain information about their position and so on. In the case of creating a decision, it can be stated that, in general, people can be influenced by various factors in their decision-making, including their subjective feelings, and they often select information that is relevant for them to make a decision. On the other hand, since emotions or personal biases do not influence AI systems\(^{21}\), they are less likely to make decisions based on subjective factors. AI system decisions would not be affected by human errors like bias and unfairness. This system can be programmed to consider relevant legal principles and regulations or other rules and to analyze large amounts of data, including historical case data, to identify patterns and trends that can further improve the accuracy and fairness of decisions and using AI in direct communication between parties can play a role in mitigating conflict.\(^{22}\)

### 3. Limitations, challenges and considerations of implementing AI in ADR

Despite these potential benefits, there are also concerns about the use of AI in ADR. One of the main concerns is the potential for bias in the data contained in the algorithms and datasets. An AI platform's accuracy and "fairness" is only as good as the data fed into it. The AI program would be limited only to the information the programmer and the party provided. If the data sets contain biased information, then the results generated by the AI will also be affected.\(^{23}\) Another concern arising from using AI in ADR is the issue of transparency, or the need to understand how users make decisions through AI. Some AI systems

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\(^{23}\) Ibid. p. 482
may lack explainability and transparency, which means that the logic according to which they make any decisions or recommendations is not sufficiently explainable or not in a way that makes sense to system users. It follows from the above that the use of such non-transparent dispute resolution systems can weaken the right of individuals to a reasoned decision, as well as their right to challenge the decision. This fact thus he opponent's claims of this implementation, as they have concluded that decision-making using automated technologies should never replace existing human dispute resolution processes since technology cannot replace human reasoning and common sense nor achieve fairness and justice in the context of ADR. 24

Another limitation that can be considered is that AI systems lack emotional intelligence. On the one hand, this fact represented an advantage in the form of the possibility of unbiased results, but these systems cannot read and interpret non-verbal cues that can be important for understanding the perspectives of the parties and making a decision; these systems are not empathetic and cannot react to emotions. Concerns about AI's accuracy, bias and fairness are significant, given the impact results can have on the rights of individuals. AI may need to be better equipped to successfully automate the interpretative human aspects since disputed facts are integral to many conflicts.25

Furthermore, it is necessary to mention that this implementation faces various challenges. The main challenge is the lack of flexibility in implementing AI in ADR. AI systems are designed to make decisions based on specific criteria, which can make it difficult to adapt to unique or complex cases. Given that, for example, the laws or the rules that can govern the ADR process do not provide "the kind of structure that can easily help an algorithm learn and identify patterns and rules, which presents a significant weakness.26 Legislation needed to implement AI into ADR is also a challenge. There are currently no established

24 CONDLIN, R. J., "Online Dispute Resolution: Stinky, Repugnant, or Drab?" (2017). Faculty Scholarship.1576. [online]. [last accessed 15.09.2023] Available at: https://digitalcommons.law.umaryland.edu/fac_pubs/1576 p.729
guidelines or rules on how AI should be used in ADR. In connection with the legal framework, it is necessary to mention the so-called EU Artificial Intelligence Act (AI Act), which was proposed in 2021 and is awaiting enactment. The AI Act will regulate systems that pose a potential risk to fundamental rights and categorize AI use cases into levels of risk. According to the aforementioned law, the use of AI technologies in law enforcement was considered a high-risk application subject to the following mandatory requirements.

“High risk – Risk assessment and mitigation systems, high quality datasets, activity logging to promote traceability, appropriate levels of human oversight, and high levels of robustness, security, and accuracy.”

It can further be stated that in 2018, the European Commission for Efficiency of Justice (CEPEJ) adopted five ethical principles for the use of AI in judicial systems, including ADR or ODR. In terms of this adopted document, it can be stated that the commission itself has acknowledged that the use of AI in ADR could significantly improve access to justice but users should assess the appropriateness and degree of integration of AI into the dispute resolution process in order to ensure compliance with all requirements and that these technologies must not interfere with the rights guaranteed in all civil, commercial and administrative proceedings. From the above, it can be assumed that the emerging AI rules will also apply to ADR.

From the above, it follows that there is a need to have clear ethical and legal frameworks that would guide the use of AI in ADR. It is also necessary to address issues related to the protection of personal data. AI systems need access to large amounts of personal data, which can have data security and privacy concerns. In the case of automated systems, CEPEJ refers to section 22 of Europe’s data protection law, the General

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29 See supranote 20, p. 44

30 For example: access to a court, adversarial principle, equality of arms.
Data Protection Regulation (GDPR), which allows individuals “to refuse to be the subject of a decision based exclusively on automated processing” when the automated decision is not required by law and entitles them to decisions made by human decision-makers. At this point, it is necessary to appeal for compliance with the principle of personal data protection and to take measures to prevent their misuse.31

There is also the issue of the professional responsibility of lawyers and other experts who use the system in case of mistake; if the AI system gives incorrect advice in mediation, who is responsible for the error? Is it to seek an AI-based mediator, the party that implemented the system, or the party that relied on advice? For example, the European Parliament proposed that users of AI systems should be in control of the risks and have corresponding liability for damages caused by AI (Committee on Legal Affairs 2020). ADR experts can thus be liable for damages caused by AI systems they implement in a way that they would not be liable for similar damages they directly cause. For example, an ADR provider may be held liable for using an AI system that ultimately proves to have systemic racial bias, or ADR systems found to be operating with errors or unfair biases will need to be reprogrammed or decommissioned, creating another accountability mechanism for ADR.32

Conclusion

AI is becoming a part of our everyday life. Given the rapid technological progress, using AI in the legal profession cannot be avoided. The possibility of using AI in resolving disputes, including ADR, is gaining awareness in society. Using algorithms to analyze large amounts of data can significantly facilitate the work of lawyers, judges, or arbitrators. It can be assumed that AI integration will significantly impact ADR mechanisms' functions. This implementation presents many benefits, opportunities, and challenges that must be addressed. AI can become an important tool in the ADR process with the right approach. It is also essential to note that AI is not intended to replace human decision-making but to help and support it.

31 See supranote 7, p. 696
32 See supranote 7, p. 699
In conclusion, we believe that decisions should always be made by humans; however, AI systems should be used to the extent that they can provide suggestions and help make the process faster, more efficient and more objective, but the use of AI must be impartial, transparent and responsible. While AI has several potential benefits in ADR, risks and concerns need to be addressed. As AI technology advances, it will be significant for ADR practitioners and policymakers to carefully consider the potential benefits and risks of integrating AI into ADR and to take measures to ensure that AI is responsible, impartial and transparent. However, more data and research is needed on the effectiveness and use of AI in ADR. Despite the existence of studies and pilot projects, further research will be needed to understand the impact of AI on the ADR process and its outcomes. However, one of the biggest challenges in the implementation of AI in ADR remains the issue of costs for the development and maintenance of the technology itself. AI systems require significant investment in terms of resources including data, computing power and skilled professionals. The use of AI in ADR mechanisms has its strengths and weaknesses. The use of these technologies may have the potential to make dispute resolution more efficient and reduce the costs of the process, but it also brings new concerns and challenges that are not yet sufficiently resolved. For example, it concerns issues of privacy and data protection, responsibility, legal and ethical consequences, but also the issue of admissibility of evidence that is generated by AI. Despite the fact, as we stated at the beginning of this chapter, that there are already pilot projects or supporting systems that make their activities easier for lawyers, it is necessary to further research the issue of AI in ADR and to pay attention to it in order to address the potential benefits but also the risks to the relevant policymakers as well as experts in the field of ADR and also programmers, and it is necessary to appeal for their cooperation in the implementation of AI in ADR.

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