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Masters Thesis
**“Reliable Use of Generative Artificial Intelligence in field of
Dispute Resolution”**

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Abstract

The swift adoption of the generative artificial intelligence (AI) in alternative dispute resolution (ADR) and online dispute resolution (ODR) has revolutionized the handling of legal disputes. With AI tools becoming more helpful to arbitrators and mediators with their services such as legal drafting, research, and settlement offer, there exist concerns regarding their reliability, fairness, and transparency. Although its proponents portray the advantages of efficiency and cost-cutting, opponents alert about prejudices, inaccuracies and the risk of undermining procedural fairness. This paper critically analyses these issues, and looks at the dangers of the use of AI in high-stakes legal environments. This study will attempt to critically assess the valid application of generative AI in dispute resolution, its effects, limitations, and regulatory and ethical measures that will be implemented to maintain fairness and responsibility. It adopts a mixed-method design that includes thematic analysis as a qualitative method and quantitative assessment of AI application in the ADR and ODR. The paper involves a literature review, interviews with legal professionals, developers of AI and regulators, and analysis of empirical evidence regarding AI use cases and regulatory environments. Among the major issues that the research finds are the risks of AI in terms of unfairness, lack of transparency, and impartiality in resolving disputes, especially in terms of the possibility of bias and faults in the decision-making process made by AI. It also emphasizes the necessity of a thorough regulatory system that will provide accountability and transparency of AI systems. Generative AI can be beneficial in enhancing efficiency and access to dispute resolution, although there must be high-protection measures to avoid bias and to be overseen by humans and procedural justice. There is a need to have an effective regulatory framework and a sound institutional governance to facilitate responsible use of AI in matters of law.

Keywords: Generative AI, Dispute Resolution, Ethical Safeguards, Accountability, Procedural Justice

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List of Abbreviations

AI – Artificial Intelligence

ADR – Alternative Dispute Resolution

ODR – Online Dispute Resolution

HITL – Human-in-the-Loop

GDPR – General Data Protection Regulation

DSA – Digital Services Act

CRA – Consumer Rights Act

OECD – Organisation for Economic Co-operation and Development

EU – European Union

AI Act – European Union Artificial Intelligence Act

HRI – High-Risk AI Systems

OER – Online Education Resources

MDR – Model Dispute Resolution

GDPR – General Data Protection Regulation

Introduction

Relevance of the Study: The swift incorporation of the generative artificial intelligence into the alternative dispute resolution (ADR) and online dispute resolution (ODR) systems has dramatically changed the nature of operations of conflict management in the modern world. It is also anticipated that arbitrators and mediators start to use generative AI to generate, research, summarise, and support procedures, which is a sign of transitioning to experimentation to adoption. Simultaneously, challenges in regulation and fragmented governance strategies, especially in the United States and the transnational platforms on the whole, also present a grave issue when it comes to supervision and enforceability.¹ Although advocates highlight the benefits of efficiency, cost-saving and access-to-justice, critics do not know whether AI-enhanced procedures can maintain neutrality, confidentiality, and procedural fairness.² The increasing use of AI in low-value consumer litigations and civil litigations illustrates the systematic risks, such as errors in hallucinations and flaws in the design, which can be over-representative of users who are vulnerable. Further, the discussion is also moving beyond the question of whether AI is appropriate to use in the dispute resolution process and how to make its application in high-stakes legal settings ethical and dependable.³ It is thus a timely and relevant study since it fills an urgent regulatory, ethical, and institutional vacuum at the intersection that is changing between generative AI and dispute resolution practice.⁴

Exploration of the Study

This study critically discusses the practical and normative consequences of applying generative AI to dispute resolution by looking at specific examples of its usage and reported failures. Instead of being descriptive, it challenges the notion that AI-driven automation can

¹ Newman, Bradford, and Daniel Garrie. "The Current State of US Regulation of the Use of AI in Dispute Resolution." *Disp. Resol. Int'l* 18 (2024): 105. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/disreint18§ion=17

² Yu, Hao, and Yunyun Guo. "Generative artificial intelligence empowers educational reform: current status, issues, and prospects." In *Frontiers in education*, vol. 8, p. 1183162. Frontiers Media SA, 2023. <https://www.frontiersin.org/journals/education/articles/10.3389/educ.2023.1183162/full>

³ Currie, Geoffrey M., K. Elizabeth Hawk, and Eric M. Rohren. "Generative artificial intelligence biases, limitations and risks in nuclear medicine: an argument for appropriate use framework and recommendations." In *Seminars in Nuclear Medicine*, vol. 55, no. 3, pp. 423-436. WB Saunders, 2025. <https://www.sciencedirect.com/science/article/pii/S0001299824000461>

⁴ Evans, David L., Stacy Guillon, Ralph Losey, Valdemar Washington, and Laurel G. Yancey. "Dispute resolution enhanced: How arbitrators and mediators can Harness generative AI." *Dispute Resolution Journal* 78, no. 1 (2024). <https://testcdn.kluwerlawonline.com/api/Product/CitationPDFURL?file=Journals\DRJ\DRJ2024005.pdf>

indeed improve the quality of decisions or even speed up the processes of mistakes in the name of innovation. A specific emphasis is placed on the application of generative AI in legal drafting, predicting the result, and an automatic settlement proposal, where probabilistic results can be used to affect the process of negotiation and judicial decision-making. The research also examines problems of structural governance in the context of the private dispute resolution systems, in which the integration of technologies does not always keep pace with the regulatory protection.⁵ It analyzes the consumer dispute systems and documented hallucination risks to assess whether the existing ODR designs restore old access-to-justice issues rather than address them. By making this, the study places generative AI in a wider context of transformation of dispute resolution, and poses the question of whether more technological options are bound to be more equitable or dependable results of justice.⁶

Research Problem: Generative artificial intelligence (AI) is also becoming part of alternative and online dispute resolution (ADR/ODR) systems to enhance efficiency and cost-cutting. But procedural fairness, impartiality and accountability are critical concerns in regard to its potential to be biased, hallucinate and unexplainable, particularly in high-stakes legal proceedings. This study discusses the circumstances in which generative AI could be trusted with the use of dispute resolving procedures, how AI could address the legal requirements of fairness and transparency, reduce bias, and maintain accountability without reducing justice or the sanctity of legal practices.

Research Aim: To critically examine the reliable use of generative artificial intelligence in dispute resolution.

Research Objectives

- To analyse the impact of generative AI on ADR and ODR processes.
- To identify risks and practical challenges associated with its use.
- To evaluate regulatory and ethical safeguards for ensuring reliability.

Originality of the Research: The study presents an original discussion of how generative artificial intelligence can be incorporated into dispute resolution systems, along with alternate

⁵ Obenza, Brandon Nacua, Alexa Salvahan, Alexandra Nicole Rios, Althea Solo, Rea Ashlee Alburo, and Rey Jose Gabila. "University students' perception and use of ChatGPT: Generative artificial intelligence (AI) in higher education." *International Journal of Human Computing Studies* 5, no. 12 (2024): 5-18. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4724968

⁶ Tan, Vivi, Jeannie Marie Paterson, and Julian Webb. "Generative Artificial Intelligence in small value consumer claims: Hallucination risk, system design, and governance in online dispute resolution." *The University of New South Wales Law Journal* 48, no. 4 (2025): 1257-1257. <https://search.informit.org/doi/abs/10.3316/informit.T2025122100000800166626867>

dispute resolution and online dispute resolution. Although earlier literature has discussed the technology behind AI or the overall implications of AI, this paper offers a comprehensive and critical examination of the dangers, and ethical issues, and the reliability the matter of generative AI in the legal market. The research adds novel knowledge on the topic of making AI deployment in dispute resolution responsible by analyzing actual-world examples of failure and success.

Research Methods: In this research, the methodology chosen is mixed-methods research, that is, a combination of a qualitative and quantitative analysis. The first step will be the systematic review of literature, which will contextualize the theoretical underpinnings, such as the history of the emergence of generative AI and its effects in the field of ADR and ODR. Primary data will be gathered by interviewing legal practitioners, AI developers, and regulators as the experts and using secondary data on AI use cases, legal outcomes and regulatory frameworks.⁷ Qualitative data will be analyzed using thematic analysis, whereas any existing empirical data on AI usage in the dispute resolution systems will be evaluated with the help of statistical methods. The study will critically examine the current holes in the regulations and governance of the use of AI in law.

⁷ Kong, Siu Cheung, Yin Yang, and Chunyu Hou. "Examining teachers' behavioural intention of using generative artificial intelligence tools for teaching and learning based on the extended technology acceptance model." *Computers and Education: Artificial Intelligence* 7 (2024): 100328. <https://www.sciencedirect.com/science/article/pii/S2666920X24001310>

PART I: Theoretical and Conceptual Foundations

Evolution of Dispute Resolution

Dispute resolution has changed to become less informal and more community-based to more institutionalised legal and quasi-legal means. Conflicts in the past were usually resolved by a set of customary norms, elders, religious leaders and communal social behaviors that emphasized on social harmony restoration as opposed to formalism of the law.⁸ The emergence of state-based judicial systems has slowly changed the informal methods of dispute resolution to a formal and adversarial one basing on legal norms and rules of procedure and the power of the courts.⁹ Although such a shift increased the certainty and enforceability of the law, it also introduced obstacles pertaining to cost, delay, technicality, and disparate access. Consequently, there has not been a constant concept of dispute resolution, but it has been a depiction of dynamic social, economic, and political environmental factors. History The shift to formal adjudication in place of the communal resolution demonstrates that the legal doctrine is not always the determinant of systems of justice, but broader institutional interests, such as efficiency, legitimacy and social control.¹⁰ The emergence of the alternative dispute resolution (ADR) in the twentieth century has also been partly a reaction to the shortcomings of the traditional litigation. The use of mediation, arbitration, conciliation, and negotiation as alternatives to court proceedings was encouraged as being more flexible, efficient and party-centred.¹¹ Nonetheless, ADR development cannot be interpreted as a mere amoral increase in the justice provision. Critical scholarship has revealed that ADR tends to be indicative of larger ideological movements towards privatisation, managerialism and burdens reduction of courts. In this regard, ADR can widen the access to dispute resolution and at the same time transfer disputes out of the view of the public, precedent based forums and into the shadowy processes in which transparency and

⁸ Cardoso, André Guskow, Elizabeth Chan, Luísa Quintão, and Cesar Pereira. "Generative Artificial Intelligence and Legal Decisionmaking." *Global Trade and Customs Journal* 19, no. 11/12 (2024): pp 149

<https://testcdn.kluwerlawonline.com/api/Product/CitationPDFURL?file=Journals\GTCJ\GTCJ2024081.pdf>

⁹ Davies, Benjamin. "Ethics in Artificial Intelligence and Alternative Dispute Resolution: Generating AI/Human Reviewed Ethical Guidelines for ADR Practitioners and the Legal Profession." *U. Mass. L. Rev.* 20 (2025): 149. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/sonengrs20§ion=7

¹⁰ Hodge Jr, Samuel D. "Is the Use of Artificial Intelligence in Alternative Dispute Resolution a Viable Option or Wishful Thinking?." *Pepp. Disp. Resol. LJ* 24 (2024): 91. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/pepds24§ion=7

¹¹ Tan, Seng Chee, Wenli Chen, and Bee Leng Chua. "Leveraging generative artificial intelligence based on large language models for collaborative learning." *Learning: Research and Practice* 9, no. 2 (2023): pp125-134. <https://www.tandfonline.com/doi/full/10.1080/23735082.2023.2258895>

accountability are weak. The seeming non-formality and high level of consent of ADR can consequently mask structural imbalances particularly where one party is in a better bargaining position or in a position of legal expertise.¹² The development of dispute resolution can therefore be characterized by a conflict between novelties and legitimacy: reforms can make it faster and more convenient, but it can also weaken procedural safeguards, historically related to the public justice.¹³

More recently, online dispute resolution (ODR) and, more so, AI-assisted processes have represented another step in this historical development due to digitalisation. This is commonly touted as the natural progression of the current-day modernisation of justice, particularly in mass consumer cases and international online dealings.¹⁴ But these explanations of progress must be viewed with doubt. Technological change does not only enhance the existing dispute resolution systems, it can change the definition of justice itself to a greater focus on scalability, automation, and measurable results rather than deliberation, empathy, and procedural voice. The development of dispute resolution can not be interpreted then as a linear process towards more effective systems. Rather it shows ongoing struggles about the dominance of dispute processes, values that are valued and interpretation of fairness.¹⁵ The historical path of informal settlement to the court adjudication, and subsequently ADR to technology-mediated systems, furnishes an invaluable platform to consider whether generative AI is a real improvement or a new institutional risk in this regard.¹⁶

1.2 ADR and ODR in Contemporary Legal Systems

The role of ADR and ODR is becoming more and more significant in modern legal systems since they are likely to alleviate most of the shortcomings that may be connected with court litigation, especially with regard to delays, costs, and complexity of the process. ADR

¹² Giacalone, Marco. "AI and the Future of Private Dispute Resolution Mechanisms." *Available at SSRN* 5083207 (2025): pp5. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5083207

¹³ Sengar, Sandeep Singh, Affan Bin Hasan, Sanjay Kumar, and Fiona Carroll. "Generative artificial intelligence: a systematic review and applications." *Multimedia Tools and Applications* 84, no. 21 (2025): 23661-23700. <https://link.springer.com/article/10.1007/s11042-024-20016-1>

¹⁵ Oniani, David, Jordan Hilsman, Yifan Peng, Ronald K. Poropatich, Jeremy C. Pamplin, Gary L. Legault, and Yanshan Wang. "Adopting and expanding ethical principles for generative artificial intelligence from military to healthcare." *NPJ Digital Medicine* 6, no. 1 (2023): pp225. <https://www.nature.com/articles/s41746-023-00965-x>

¹⁶ Schmitz, Amy J. "Responsible Use of AI in Civil Dispute Resolution." *Responsible Use of AI in Civil Dispute Resolution* (July 23, 2024). *Ohio State Legal Studies Research Paper* 870 (2024):pp12. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4903238

processes like mediation and arbitration have become a part of business, family, employment, and international litigation, and ODR has become mainstream in e-commerce, platform cases, and small-value civil cases.¹⁷ Mostly in a jurisdiction, these are not distinct peripheral options anymore but elements of the larger justice framework. Their rising popularity is indicative of a greater change in law systems towards efficiency, flexibility and user centricity in service delivery. It is however, a critical question, based on this institutional expansion: does ADR and ODR really enlarge access to justice or conceal a redistribution of disputes in to less visible and less accountable regimes? Their modern importance is not just in their practical applicability, but in the manner in which they transform the legal power outside of the courtroom.¹⁸

ADR has been widely applauded to encourage consensual settlement, relationship saving and facilitating context sensitive results. ODR builds upon these benefits by providing the opportunity to process a dispute digitally and usually more conveniently, and with lower transaction costs. However, the modern day receptiveness of these models must not blur their drawbacks.¹⁹ Practically, ADR can favour the stronger parties who can bargain with an informational or economic advantage, and ODR can exacerbate the existing imbalances by minimising human hands-on and incorporating procedural design decisions into computer networks.²⁰ The rhetoric of accessibility is also a deceptive one. A process can be quicker and less expensive, yet it will fail to provide any significant fairness when parties are not fully aware of their rights, have no ability to appeal against algorithmic suggestions, or are coerced into resolution. There is thus a paradox to modern legal regimes ADR and ODR seem to be democratising the process of dispute resolution, but they also seem to be predictable and

¹⁷ Duger, Chloe J. "AI: Increasing Alternatives in Alternative Dispute Resolution Resolved: Journal of Alternative Dispute Resolution." *Resolved: J. Alternative Disp. Resol.* 12 (2024): 21. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/resolvjo12§ion=5

¹⁸ Lu, Yuguang. "Optimization study of artificial intelligence on dispute resolution models in criminal proceedings." *Cadernos de Dereito Actual* 28 (2025): pp14-22. <https://www.cadernosdedereitoactual.es/index.php/cadernos/article/view/1345>

¹⁹ Zhou, Xue, Da Teng, and Hosam Al-Samarraie. "The mediating role of generative AI self-regulation on students' critical thinking and problem-solving." *Education Sciences* 14, no. 12 (2024):. <https://www.mdpi.com/2227-7102/14/12/1302>

²⁰ Needham, Carol A. "Regulation of the use of generative Artificial Intelligence tools in the delivery of legal services: Verification and accountability." *Wash. UJL & Pol'y* 77 (2025): . https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/wajlp77§ion=7

encourage a leaner and more managerial understanding of justice where resolution is privileged over adjudicative fairness.²¹

More importantly, the incorporation of ADR and ODR in contemporary law is an indication of evolving state perspective of justice delivery. Instead of keeping courts as the main location of dispute resolution, more legal systems are regulating conflicts by hybrid networks of providers of private alternatives, digital platforms and semi-automated formations. The change transfers the burden of fairness on judges and public institutions to designers, mediators, arbitrators and operators of the platform. This kind of redistribution itself is not necessarily illegitimate, but the issues of transparency, supervision, and accountability of the population are also severe. Modern ADR and ODR procedures tend to rely on the contractual consent but this consent can be very formal and not really informed, particularly in consumer or employment context. This is why ADR and ODR cannot be evaluated only based on the efficiency or settlement rates. Their place in the modern legal system also should be considered through the prism of procedural justice, institutional legitimacy and their ability to defend the weaker parties in the situation where the legal protection can be weakened by default.²²

1.3 Development of Generative Artificial Intelligence

Advancements in generative artificial intelligence are one of the first major shifts in the overall history of computational systems.²³ The previous versions of legal technology were mostly predetermined or predictive, using previously established logic, data structure databases, and categorical models. In comparison, generative AI systems (especially those using large language models) are text, summary, argument, and recommendation generators that generate patterns with probabilistic generative algorithms, not deterministic generative algorithms. This transition is significant since it alters the capacity as well as the risk profile of the legal technologies. Generative AI can undertake activities which are cognitively

²¹ Olugboyega, Oluseye, Caleb Alfred, F. A. Ajao, and T. E. Adenji. "Potentials of an artificial intelligence-based dispute resolution system as an alternative dispute resolution method for construction disputes." In *International Conference on Infrastructure and Sustainable Development*, pp. 12-14. 2024.

²² Gromova, Elizaveta A., Daniel Brantes Ferreira, and Ildar R. Begishev. "ChatGPT and other intelligent Chatbots: legal, ethical and dispute resolution concerns." *Revista Brasileira de Alternative Dispute Resolution-Brazilian Journal of Alternative Dispute Resolution-RBADR* 5, no. 10 (2023):pp 153-175. <https://rbadr.emnuvens.com.br/rbadr/article/view/213>

²³ Ahmad, Nadia. "Smart Resolutions: Exploring the Role of Artificial Intelligence in Alternative Dispute Resolution." *Clev. St. L. Rev.* 73 (2024): https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/clevslr73§ion=19

advanced, including legal filing, summarizing of complex documents, and imitating legal interpretation. Nevertheless, these deliverables are not the product of human or doctrinal legal understanding; they are created using statistical associations trained on huge data sets.²⁴ The generative AI has thus posed a potent illusion of competence, that can be particularly perilous in the legal field where a user confuses fluency and confidence with accuracy and reliability. The accelerated pace of the generative AI progress has been facilitated by the improvement in the computing power, access to data, transformer architectures, and commercial investment. Consequently, once experimental systems have rapidly become professional and institutional, and these now appear in law firms, courts, and dispute resolution platforms. This rate of uptake has even surpassed a critical appraisal of whether the technology is appropriate in high-stakes legal application.²⁵ Generative AI is also sold as a productivity aid, which can reduce the more underlying normative signifiers of handing over legal work to systems that could be hallucinating, reproducing bias, or masking the logical flow behind their outputs. History of generative AI is not a simple case of technological advancement, yet, it is a case of a governmental laggardice, consumer excitement, and institutional trial without a comprehensive set of protective measures. Such a fast implementation in the context of dispute resolution where fairness requires much accuracy, impartiality and trust, the question of whether innovation is being tried as a naturally good thing without enough evidence of reliability comes up.²⁶

Critical evaluation of generative AI should also be able to differentiate between technical and legal value. The capability of these systems to produce plausible legal language has promoted assumptions that the systems can be able to support and even enhance legal decision-making. Nonetheless, generative AI has no rational justification, is not ethically inclined to consider evidence, and lacks any knowledge about the social implications of a court decision. It has evolved thus creating a structural imbalance between legal responsibility and technological

²⁴ Jayaram, Krishnan Christopher. "The Use of Generative Artificial Intelligence in the Judicial System: A Brave New World." *J. Am. Acad. Matrimonial Law*. 38 (2025): . https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/jaaml38§ion=9

²⁵ He, Ran, Jie Cao, and Tieniu Tan. "Generative artificial intelligence: a historical perspective." *National Science Review* 12, no. 5 (2025): nwaf050. <https://academic.oup.com/nsr/article-abstract/12/5/nwaf050/8029900>

²⁶ Wach, Krzysztof, Cong Doanh Duong, Joanna Ejdys, Rūta Kazlauskaitė, Paweł Korzynski, Grzegorz Mazurek, Joanna Paliszkiwicz, and Ewa Ziemba. "The dark side of generative artificial intelligence: A critical analysis of controversies and risks of ChatGPT." *Entrepreneurial Business and Economics Review* 11, no. 2 (2023): 7-30. <https://www.ceeol.com/search/article-detail?id=1205845>

capability.²⁷ The issue is that these systems do not make errors only; people make mistakes as well. Instead, the issue is that generative AI may be used to propagate errors and blur responsibility and decision-making by producing outputs that seem to have an aura of authority, but which lack epistemic transparency. Generative AI requires more than technical assessment, therefore, to develop. It involves legal and institutional investigation of the way such systems are schooled, implemented, discerned, and credited. In this regard, generative AI cannot be perceived as a tool that is put in the middle of dispute resolution, but rather as a revolution that is providing a challenge to the current understanding of what expertise, responsibility, and under what circumstances justice can be delivered under dependable circumstances.²⁸

1.4 The Concept of Reliability in High-Risk AI Systems

High-risk AI systems have a more complicated concept of reliability than a mere technical quality. Typically, a system in most areas can be said to be reliable provided that it is able to operate within the expected conditions. But in highly stakes legal contexts, reliability should be construed in a broader sense to extend to accuracy, strength, predictability, explainability and the ability to act without inflicting unreasonable harm. It does not necessarily mean that a system can produce technically plausible results and still be very unreliable in the legal or ethical sense because it is impossible to validate the reasoning of the system, and because its failures are hard to find out or because its application weakens the procedural protections. Reliability is particularly challenging in the case of dispute resolution since the cost of error can be related to the legal rights, financial gain, reputational status, and trust toward the justice institutions. Thus reliability cannot be made to be equivalent to performance measures only, it must be connected with the normative standards of fairness, accountability, and due process which constitute legitimate legal decision-making.²⁹

²⁷ Rane, Nitin. "Potential role and challenges of ChatGPT and similar generative artificial intelligence in architectural engineering." *International Journal of Artificial Intelligence and Machine Learning* (2023): pp22-47. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4607767

²⁸ Villasenor, John. "Generative artificial intelligence and the practice of law: impact, opportunities, and risks." *Minn. JL Sci. & Tech.* 25 (2023): https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/mipr25§ion=22

²⁹ Eidenmüller, Kathrin, Conor McLaughlin, and Horst Eidenmüller. "Expanding the shadow of the law: designing efficient judicial dispute resolution systems in a digital world—an empirical investigation." *Harvard Negotiation Law Review* 29, no. 1 (2025): . <https://ora.ox.ac.uk/objects/uuid:dacadcfd-6cf9-4f52-9bc3-17c2eaa4f5c5>

One of the main challenges is that because of generative AI, new types of uncertainty are introduced, which can no longer be considered similar to those that exist in the traditional software systems. The failure of traditional systems can be more easily traced, but an AI based on generative attempts can generate outputs that are coherent, persuasive, and, at the same time, wrong. This renders reliability hard to determine since the issue does not merely lie in whether the system works or not, but does it allow human operators to realise that it is not working properly.³⁰ Reliability must thus have in high-risk situations resistance to hallucination, resistance to bias, safeguarding against misuse, human review mechanisms. However, most debates on the reliability of AI have been too technical and concentrated on benchmarking and error minimization without paying much attention to the institutional context within which the outputs are consumed. A tested system may not be a useful tool in practice even when it is tested fairly well, because legal professionals may put their trust in it, because litigants cannot challenge its effects, or because there is no obvious accountability when injuries are caused. Reliability therefore has to be examined as a technical condition as well as a socio-legal condition.³¹

Moreover, only power and governance cannot be isolated of the idea of reliability in high-risk AI systems. Who determines reasonable amounts of reliability and on what interests? Providers can define reliability as usability and market performance in a commercial environment, but the legal institution needs to assess this concept concerning rights protection and societal legitimacy. This difference is crucial. A dispute system that makes fast decisions on cases can be institutionally appealing, but, unless it is designed to prevent it, there is a possibility that it is systematically biased against weaker users or that the recommendations are based on a secret. Risky AI reliability thus needs a precautionary strategy that transcends the optimism about the innovation. It requires the ongoing audit, situational assessment, and awareness that the legality cannot be viewed outside the legal, moral, and institutional accountability. Reliability, in this sense, should not be seen as a technological accomplishment which stays the same but rather as a continuous norm which

³⁰ Duong, Cong Doanh, Thanh Hieu Nguyen, Thi Viet Nga Ngo, Thi Thu Phuong Pham, Anh Trong Vu, and Ngoc Su Dang. "Using generative artificial intelligence (ChatGPT) for travel purposes: parasocial interaction and tourists' continuance intention." *Tourism Review* 80, no. 4 (2025): 813-827. <https://www.emerald.com/tr/article/80/4/813/1239922>

³¹ Rane, Nitin (2023) Transforming Structural Engineering through ChatGPT and Similar Generative Artificial Intelligence: Roles, Challenges, and Opportunities. <http://dx.doi.org/10.2139/ssrn.4603242> .

should be explained with regard to values of justice which is the aim of dispute resolution systems.³²

1.5 Procedural Justice, Trust, and Accountability in AI-Assisted Decision-Making

Procedural justice is based on the fairness of the procedure by which decisions are reached and not the fairness of the decisions themselves. In dispute resolution, the following elements are encompassed like voice, neutrality, consistency, transparency, respect and the possibility to appeal against adverse findings. These characteristics are prominent since parties will have more chances of accepting decisions, even the unfavourable ones, when they have a perception that the process was equitable. Procedural justice is more challenging to deliver in the context of AI-assisted decision-making since decision-support systems can behave in opaque ways, that cannot be interrogated and which do not engage with people. Generative AI can also facilitate processes in drafting, recommendation or assessment, but also undermine significant aspects of procedural fairness, such as meaningful participation, and the ways of influencing the creation of influential outputs.³³ Consequently, it is not only whether AI assists decision-makers to arrive at conclusions more effectively, but whether the parties can still find the process of decision making intelligible, respectful and unbiased.

The notion of trust is usually put forward as a prerequisite to the effective integration of AI into legal affairs, but the concept of trust should be approached with a critical eye and not treated as an easy to get good.³⁴ The justifiable confidence on the basis of transparency, competence and accountability should underlie trust in dispute resolution, rather than technological familiarity or institutional branding. The output of AI systems and especially the generative models creates an illusion of trust due to sounding fluent and professional and authoritative. This is a danger of the system causing users, mediators, arbitrators, or even judges to refer to it without due questioning. This trust is wrong when it is founded on

³² Rane, Nitin (2023) Role of ChatGPT and Similar Generative Artificial Intelligence (AI) in Construction Industry. <http://dx.doi.org/10.2139/ssrn.4598258>

³³ Ooi, Keng-Boon, Garry Wei-Han Tan, Mostafa Al-Emran, Mohammed A. Al-Sharafi, Alexandru Capatina, Amrita Chakraborty, Yogesh K. Dwivedi et al. "The potential of generative artificial intelligence across disciplines: Perspectives and future directions." *Journal of Computer Information Systems* 65, no. 1 (2025): 76-107. <https://www.tandfonline.com/doi/abs/10.1080/08874417.2023.2261010>

³⁴ Wang, Xukang, and Ying Cheng Wu. "Balancing innovation and regulation in the age of generative artificial intelligence." *Journal of Information Policy* 14 (2024): 385-416. <https://scholarlypublishingcollective.org/psup/information-policy/article/doi/10.5325/jinfopoli.14.2024.0012/388980>

plausibility at the surface as opposed to reliability that can be proven. Also, the level of trust in AI-supported decision-making is not evenly spread: the highly-developed institutions could use the mentioned systems, whereas common users might fail to comprehend how their conflicts get settled. The focal point is rather not how to maximise trust in AI, but how to make sure that any trust put in AI is justified, restricted, and regulated by the institution. The last and, possibly, the hardest pillar in the AI-assisted decision-making is accountability. Traditional legal systems assign responsibility to persons or organizations that are identifiable like judges, arbitrators, lawyers, and institutions, and who can be questioned, examined or penalized. With AI-assisted systems, this structure is made complex by the possibility of the spread of responsibility between developers and deployers who may be on one side and on the other side, between the operators and end-users.³⁵ On the one hand, when something bad or unfair happens, it is not clear whether it is something in the model, the data, the construction of the platform, or the human who trusted the output and took certain actions. This decentralization of responsibilities may compromise the value of the law and reduce confidence in the legality of the procedure. More importantly, accountability is not easily achieved by putting a human nominally in the loop but when the human is not skilled, lacks time, or lacks authority to put the AI outputs in a meaningful way. True accountability in terms of dispute resolution requires traceability, contestability and institutional responsibility of errors and harms. In the absence of these protections, AI-assisted decision-making will result in the creation of systems that are efficient in structure but lacking in justice.³⁶

³⁵ Abbott, Ryan, and Elizabeth Rothman. "Disrupting creativity: Copyright law in the age of generative artificial intelligence." *Fla. L. Rev.* 75 (2023): 1141. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/uflr75§ion=34

³⁶ Shahzad, Muhammad Farrukh, Shuo Xu, and Muhammad Asif. "Factors affecting generative artificial intelligence, such as ChatGPT, use in higher education: An application of technology acceptance model." *British Educational Research Journal* 51, no. 2 (2025): 489-513. <https://bera-journals.onlinelibrary.wiley.com/doi/abs/10.1002/berj.4084>

PART II: Implications of Generative AI in Dispute Resolution

2.1 Transformation of ADR through Generative AI

An introduction to generative artificial intelligence (AI) as a part of alternative dispute resolution (ADR) is an important development in the changing ways legal disputes are resolved by means other than through the conventional court systems. The ADR that used to be characterized by the process of negotiation, mediation, and arbitration is redesigned by the possibilities of AI that can help to improve efficiency, decrease costs, and increase accessibility. In particular, generative AI can generate new content and responses based on deep learning models, and this approach promises to transform the ADR processes.

In the past, ADR was considered a less formal and less rigid option to formal court procedures and the major benefit of ADR is that it is faster and cheaper than a court of law. Nevertheless, lack of transparency and accountability has always been one of the critiques of ADR especially in the case where there are no evident procedural rules. By integrating generative AI, ADR can potentially standardize some of the elements of dispute resolution, which will guarantee it more predictable results, faster resolution rates, and possibly a level of impartiality.³⁷ As an example, generative AI may be used to help arbitrators and mediators to compose legal arguments and draft settlement offers, as well as to generalize about the probable result of the case using historic precedents.

Nevertheless, although there are obvious positive aspects to the introduction of AI into ADR, the concept also provokes the issue of the loss of human judgment, emotional intelligence and empathy, which are crucial in the conflict resolution.³⁸ Human factor is usually required in the dispute resolution process, particularly in mediation process to be able to see the finer details of personal conflict and to have a fair, just atmosphere of negotiation. The application of AI may make the process less human when it comes to the empathetic perception of human conflict and instead more formulaic, inspired by the reasoning that is based on

³⁷ Davies, Benjamin. "Ethics in Artificial Intelligence and Alternative Dispute Resolution: Generating AI/Human Reviewed Ethical Guidelines for ADR Practitioners and the Legal Profession." *U. Mass. L. Rev.* 20 (2025): 149. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/sonengrs20§ion=7

³⁸ Rajaram, Kumaran, and Patrick Nicolas Tinguely. "Generative artificial intelligence in small and medium enterprises: Navigating its promises and challenges." *Business Horizons* 67, no. 5 (2024): 629-648.

probabilities. This may lead to the loss of the personal touch which ADR processes have been accustomed to.³⁹

Moreover, by using AI to standardize the ADR procedures, it might ruin the flexibility that is what made ADR desirable in the first place. In its attempt to force parties to take a one-size-fits-all solution, AI can diminish the need to have creative, tailored answers that can better capture the specifics of a conflict. This might prove to be problematic especially in instances where culture, social, or emotional factors are central in the conflict since AI is unlikely to comprehend or properly consider these determinants.

To sum up, it must be emphasized that although generative AI has high potential to make ADR more efficient and consistent, it should be thoroughly incorporated so that it does not erode the very concept of flexibility, empathy, and fairness, that make the ADR an effective solution.

2.2 Integration of Generative AI in ODR Platforms

The last few years have witnessed an increase in the popularity of online dispute resolution (ODR) platforms due to the growth of e-commerce and cross-border transactions as well as an increase in the demand of access to and the low cost of dispute resolution services. The inclusion of generative AI into ODR applications is a major change in the environment of digital dispute resolution, which is likely to facilitate the work, eliminate the need for human intervention, and expand the range of services.⁴⁰

Some of the functions that can be applied to ODR platforms using generative AI include drafting of the first proposals, summarizing case data, automated negotiation support, and forecasting probable results using previous cases. Generative AI has the potential to enhance the efficiency of ODR systems, especially in high volume, low value cases, where human participation in the case might be cost-prohibitive.

To give an example, in cases related to e-commerce, AI may be utilized to believe the terms of service automatically, work with the data of transactions and suggest settlement terms

³⁹ Abbott, Ryan, and Brinson S. Elliott. "Putting the artificial intelligence in alternative dispute resolution: How AI rules will become ADR rules." *Amicus curiae* 4 (2022): 685. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/amcraesii4§ion=57

⁴⁰ Pathak, Yash. "Pioneering Innovations In Digital Jurisprudence: Evaluating ODR Systems And AI In Shaping The Future Of Conflict Resolution." *Available at SSRN* 5110555 (2024): 40. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5110555

through previous cases. This would perhaps save on time taken to resolve and general costs involved in the process and thus ODR would be more affordable to more users.⁴¹

But there are also serious challenges associated with the implementation of AI in ODR platforms, especially accountability and transparency. Although AI may create advantages in terms of speed and efficiency of ODR procedures, it also comes with risks in the regard to the lack of transparency in decision-making.⁴² Unless AI explains how it came to a particular conclusion or make a recommendation, users will not be able to trust the results of the dispute resolution process. The perceived integrity of the system may be compromised by this lack of transparency and lead to distrust of its users especially in complex cases where human judgment and reasoning are a prerequisite.⁴³

In addition, the introduction of AI into ODR systems may also worsen the current problems of access to justice, especially in relation to all people who are not technologically literate enough to use AI-based systems. Although ODR platforms can democratize access to dispute resolution, there is a risk of marginalizing the disadvantaged seeking dispute resolution because most of them lack skills, resources, or access to the technology required. This can be a digital divide in the access to justice with only that people who have the necessary level of technological expertise being able to engage in the process of resolving disputes in full.

Therefore, although the concept of integrating generative AI in ODR platforms can bring numerous advantages to the effectiveness and accessibility of dispute resolutions, the question of transparency, accountability, and equity should be taken into serious consideration to allow the integration of these systems to be equitable and fair to everyone.⁴⁴

2.3 Impact on Due Process, Neutrality, and Equality of Arms

The principles of justice include due process, neutrality, equality of arms, among others; therefore, all the parties in a controversy are treated and are presented in a fair, unbiased, and

⁴¹ Giacalone, Marco. "AI and the Future of Private Dispute Resolution Mechanisms." *Available at SSRN 5083207* (2025): 8.

⁴² Ye, Xiongbiao, Yuhong Yan, Jia Li, and Bo Jiang. "Privacy and personal data risk governance for generative artificial intelligence: A Chinese perspective." *Telecommunications Policy* 48, no. 10 (2024): 102851.

⁴³ Tan, Vivi, Jeannie Marie Paterson, and Julian Webb. "Generative Artificial Intelligence in small value consumer claims: Hallucination risk, system design, and governance in online dispute resolution." *The University of New South Wales Law Journal* 48, no. 4 (2025): 1257-1257. <https://search.informit.org/doi/abs/10.3316/informit.T2025122100000800166626867>

⁴⁴ Bui, Luong Vu. "Advancing patent law with generative AI: Human-in-the-loop systems for AI-assisted drafting, prior art search, and multimodal IP protection." *World Patent Information* 80 (2025): 102341. <https://www.sciencedirect.com/science/article/pii/S0172219025000080>

equal manner. There are ways in which the application of generative AI to the resolution of disputes can affect these principles, either positively or negatively.

On the one hand, the generative AI is capable of supporting due process by simplifying the administrative process, minimizing the delays, and providing both sides with equal access to the information. AI can enhance the fairness of the proceedings by minimizing the possibility of human error or bias during the process by automating the preparation of legal documents, creating settlement offers, and conducting a consistent analysis. Moreover, the possibility of AI to detect the presence of relevant precedents in a large number of data within a short time may contribute to the fact that both parties are treated equally, have access to the same resources and information.⁴⁵

Conversely, AI in dispute resolution also creates the issue of neutrality. The AI systems are not neutral in nature but they are conditioned by the data they are trained on. When the training data is biased, either physical or otherwise (race, gender, socioeconomic status, and so on), there is a potential that AI-based decisions will perpetuate and improve the bias, compromising the value of being unbiased. To illustrate, when AI is being used to decide on the probable outcome of a case using the past data, it can lead to the unintentional favoring of one side over the other as the data used to train the system may be biased or unequal in terms of the past.⁴⁶

In addition, introducing AI to the dispute resolution procedure would further add power asymmetry between the sides. Under a conventional court system, the parties are given a chance to question the rationale of the opposing party or the judge. Nonetheless, in artificial intelligence-directed procedures the logic behind the decisions can remain obscure and the parties can not comprehend the algorithm used to make a decision and can not contest the logic of the AI. It may weaken the equality of the arms, especially to less technologically literate or less resourced people, who might struggle to move around or oppose an AI-driven process.

To sum up, although there is a potential in enhancing due process through generating more efficiency and consistency, there are also serious issues of neutrality, fairness and equalizing

⁴⁵ Crema, Max, and Lawrence B. Solum. "The Original Meaning of "Due Process of Law" in the Fifth Amendment." *Virginia Law Review* 108, no. 2 (2022): 447-535. <https://www.jstor.org/stable/27219938>

⁴⁶ Hmoud, Mohammad, Hadeel Swaity, Nardin Hamad, Omar Karram, and Wajeih Daher. "Higher education students' task motivation in the generative artificial intelligence context: The case of ChatGPT." *Information* 15, no. 1 (2024): 33. <https://www.mdpi.com/2078-2489/15/1/33>

arms with the use of generative AI. To ensure the integrity of the processes of resolving disputes, it is essential that AI systems should be open, fair, and accessible to everyone.

2.4 Risks of Automation Bias and Dehumanization of Justice

Among the most prominent issues related to the application of generative AI to dispute resolution, there is the threat of automation bias and dehumanization of justice. Automation bias is the human habit of placing more trust in automated systems than is necessary and most of the times results in over-reliance on AI-inspired decisions without proper questioning. This bias may lead to parties submitting to the AI-generated recommendations or decisions without necessarily comprehending the reasoning behind such decisions or recommendations, and in doing so, errors or biases in the AI system may go undiagnosed.⁴⁷

The other risk tied to the growing use of AI in dispute resolution is the dehumanization of justice. Some of the most personal matters of law litigations include family disputes, employment disputes, claims brought by consumers. These cases cannot be resolved by relying on solely legal arguments but walking in their shoes, understanding their experience, and seeing the human face behind the conflict. AI could bring the personal aspect of dispute resolution by eliminating human mediators, arbitrators, or judges to the process, which is subject to more objective results that do not consider the emotional and social background of the parties in the case.

Besides, AI application in dispute resolution can also lead to the lack of trust in the law system. When parties believe that a machine is solving their disputes instead of a person, then they may not trust that the process is fair and legitimate. This is especially so in legal contexts that are high stakes, and the implications of a decision are great and where human judgment is essential.

Therefore, despite the fact that automation has the potential to save time, it is crucial to acknowledge that it raises the danger of being over-reliant on AI in the dispute resolution process. It is essential to make sure that AI is applied in such a manner that it supports human judgment but does not substitute it to preserve the justice system integrity.

⁴⁷ Mentari, Sriyani, Andy Chandra Pramana, and Agung Winarno. "In the Age of Automation: Impact on Human Values, Ethics, and the Risk of Dehumanization." (2025): 45. <https://ojs.unik-kediri.ac.id/index.php/jimek/article/download/6297/4105>

2.5 Structural Power Imbalances and Access to Justice Concerns

Structural power imbalance and access to justice is another issue with the application of generative AI in dispute resolution. The accessibility and affordability of ADR and ODR are also one of the most significant benefits of these methods since people who cannot afford to run a prolonged legal case may find the solution of the conflict to be more affordable. Nevertheless, AI integration in these procedures may also contribute to the reinforcement of the power disparities.⁴⁸

As an illustration, in most of the disputes especially those related to consumers or employees, one side might be having vastly greater resources or legal knowledge than the other. In case the decision-making or the generation of recommendations is automated with the help of AI, the stronger party, e.g., a large company or an employer, might have a better chance to abuse the system, whereas the weaker party might find it difficult to cope within the framework of the AI-led process. This may have results that favor the party that is stronger, and this will be against the spirit of fairness.⁴⁹

Moreover, technological barriers, including the necessity to have access to the internet and be digital citizens and AI systems familiarity, can be a hindrance to access to AI-based dispute resolution systems. This might leave the marginalized groups who may not have resources or abilities to interact with AI-driven systems and worsen the current inequalities in access to justice.⁵⁰

To sum up, even though generative AI can enhance access to justice because it helps simplify the process and make it more affordable, it creates serious concerns related to power disparities and exclusion of vulnerable populations. Close attention should also be given to the fact that AI-based dispute resolution mechanisms should be open, transparent, and acceptable to everyone.⁵¹

⁴⁸ Taylor, Whitney K. "The unintended consequences of increased access to justice." *Law & Society Review* (2025): 1-24. <https://www.cambridge.org/core/journals/law-and-society-review/article/unintended-consequences-of-increased-access-to-justice/A3AACB230398F208992EF96CADF96330>

⁴⁹ Ganjavi, Conner, Michael B. Eppler, Asli Pekcan, Brett Biedermann, Andre Abreu, Gary S. Collins, Inderbir S. Gill, and Giovanni E. Cacciamani. "Publishers' and journals' instructions to authors on use of generative artificial intelligence in academic and scientific publishing: bibliometric analysis." *bmj* 384 (2024): 58. <https://www.bmj.com/content/384/bmj-2023-077192.abstract>

⁵⁰ Ibid

⁵¹ Simshaw, Drew. "Access to AI justice: Avoiding an inequitable two-tiered system of legal services." *Yale JL & Tech.* 24 (2022): 150. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/yjolt24§ion=5

To conclude, the implementation of generative AI into dispute resolution can change the ADR and ODR frameworks, making them efficient, consistent, and more accessible. Nonetheless, it also presents major threats to fairness, neutrality, transparency, and access to justice. To make sure that AI is applied in a responsible manner in the dispute resolution, it is critical to pay close attention to the effect of AI on the due process, equality of arms, and the dehumanization and automation bias risk. Likewise, the regulatory frameworks need to be adjusted to meet the specific AI issues where such systems are not only productive but equitable and fair to everyone using it.

PART III: Regulatory and Ethical Framework for Reliable Use

3.1 The EU AI Act and High-Risk Legal AI Systems

One of the earliest attempts at a global regulatory framework of AI is the European Union Artificial Intelligence (AI) Act offered in April 2021 and currently in its final stages of discussion. It strives to create a distinct legal framework of AI systems depending on their level of risks to guarantee safety, ethicality, and transparency of AI technology implementation.

The AI systems in the AI Act are grouped into four levels of risk namely minimal risk, limited risk, high risk and unacceptable risk.⁵² The most stringent regulatory requirements are associated with high-risk AI systems, e.g., those applied in legal decision-making and dispute resolution because of the potential influence on the individual right, fairness, and justice. Data governance, human supervision, explainability, and robustness are some of the requirements that may be applied to such high-risk systems.⁵³

⁵² Buscemi, Alessio, Tom Deckenbrunnen, Fahria Kabir, Kateryna Mishchenko, and Nishat Mowla. "Assessing High-Risk AI Systems under the EU AI Act: From Legal Requirements to Technical Verification." *arXiv preprint arXiv:2512.13907* (2025): 5. <https://arxiv.org/abs/2512.13907>

⁵³ Bygrave, Lee A., and Rebecca Schmidt. "regulating non-high-risk AI systems under the EU's Artificial Intelligence Act, with special focus on the role of soft law." In *The European Artificial Intelligence Act: Promises and Perils?*, pp. 181-210. Cham: Springer Nature Switzerland, 2025. https://link.springer.com/chapter/10.1007/978-3-031-98406-8_8

In the case of legal AI systems that are used in the alternative dispute resolution (ADR) or online dispute resolution (ODR), the EU AI Act requires that developers and deployers must perform conformity assessments to ascertain that the systems satisfy certain criteria.⁵⁴ Such tests ought to ensure that the AI systems are not discriminative, opaque, and responsible in their decision-making workflow. As an example, AI applications that produce automated settlement proposals or legal predictions should be properly tested with the purpose of making sure that the predictions made by these systems are reasonable, understandable, and verifiable. This regulatory control will contain the risks of bias or bias in AI-generated recommendations that may compromise procedural fairness in dispute resolution.⁵⁵

The AI Act also emphasizes the role of human control in the high-risk legal AI systems. As a case in point, although an AI-based system can recommend or even automate some legal procedures, the decision-making process must not be extended beyond the authority of a capable human being like a mediator or an arbitrator to ensure that the machine-based decision-making process does not take over.⁵⁶

3.2 Interaction with GDPR, DSA, and CRA

Regulation of AI in the EU overlaps with some other laws, especially data protection and digital services regulation, which are also essential in regulation of the ethical and trustworthy utilization of AI in dispute resolution.

- General Data Protection Regulation (GDPR): GDPR that regulates how personal data is processed within EU has a direct effect on AI systems especially when applied in ADR and ODR processes since personal data is sensitive. According to the GDPR, data-minimization, accuracy, and transparency are the main principles that the AI systems used by the organization in dispute resolution should adhere to. The right to an explanation, which is a major characteristic of the GDPR, implies that individuals should be in a position to comprehend the manner in which decisions are arrived at

⁵⁴ Szostek, Dariusz, and Rafał Tomasz Prabucki. "High-risk AI systems." In *The European Artificial Intelligence Act: Promises and Perils?*, pp. 157-180. Cham: Springer Nature Switzerland, 2025. https://link.springer.com/chapter/10.1007/978-3-031-98406-8_7

⁵⁵ Schwemer, Sebastian Felix, Letizia Tomada, and Tommaso Pasini. "Legal ai systems in the eu's proposed artificial intelligence act." In *Proceedings of the Second International Workshop on AI and Intelligent Assistance for Legal Professionals in the Digital Workplace (LegalAIIA 2021)*, held in conjunction with ICAIL. 2021: 8. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3871099

⁵⁶ Kusche, Isabel. "Possible harms of artificial intelligence and the EU AI act: fundamental rights and risk." *Journal of Risk Research* (2024): 1-14. <https://www.tandfonline.com/doi/abs/10.1080/13669877.2024.2350720>

especially in situations where AI-based systems produce legal consequences or settlement offers. As an example, when an AI system suggests a settlement in a consumer dispute, the impacted party should be given the opportunity to know why that system makes the suggestion.⁵⁷

- Digital Services Act (DSA): The DSA is the initiative that seeks to control the operations of online platforms, by making sure that online services are transparent, fair, and secure. This is more so in the case of ODR systems which are normally hosted on a platform that handles huge amount of consumer disputes. Under the DSA, AI systems should protect the consumers against deceptive practices, discrimination, or unfair results. The Act requires the use of AI in dispute resolution systems to provide platforms with well-defined accountability systems and content moderation systems to ensure that disputes are settled fairly, without AI influence based on algorithmic biases.⁵⁸
- Consumer Rights Act (CRA): CRA is another legislation that overlaps with the application of AI in the dispute resolution. It also focuses on the safeguarding of the rights of consumers especially in online transactions and e-commerce. The CRA stipulates that any arising disputes in such situations should be handled in a way that is fair, effective, and reachable. The ODR systems that are based on AI should be in compliance with the CRA, as they should be able to enable the consumers to appeal against the decisions made by the automated systems and be able to get redress in case of unjust results.⁵⁹

The overlap of these laws, GDPR, DSA, and CRA, make it possible to have the regulatory framework of AI not only concentrate on the technological integrity of AI systems, but also to cover consumer protection, privacy, and fairness in the legal procedures that AI facilitates.

⁵⁷ Carmi, Lior, Mishael Zohar, and Gianluigi M. Riva. "The European General Data Protection Regulation (GDPR) in mHealth: Theoretical and practical aspects for practitioners' use." *Medicine, Science and the Law* 63, no. 1 (2023): 61-68. <https://journals.sagepub.com/doi/abs/10.1177/00258024221118411>

⁵⁸ Wilman, Folkert. "The Digital Services Act (DSA)-An Overview." *Available at SSRN* 4304586 (2022): 40. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4304586

⁵⁹ Schäffler, Anton. "'Upgrade Available'? Digital Content in the Consumer Rights Act 2015 After the Digital Content Directive." *Journal of European Consumer and Market Law* 14, no. 4 (2025): 30. https://kluwerlawonline.com/journalarticle/Journal+of+European+Consumer+and+Market+Law/14.4/EuCML2_025023

3.3 OECD Principles on Artificial Intelligence

The organisation of Economic Co-Operation and Development (OECD) has come up with AI governance principles, which are essential in enhancing that AI systems in legal situations are ethical, fair and accountable. These principles emphasize:

- Gradual AI application transparency and explainability: The legal AI systems should be made in a way that their judgments can be understood and explained by non-experts. It is especially essential in ADR and ODR when the parties to the process can doubt the impartiality of the decisions.⁶⁰
- Accountability: AI developers and users who apply it to legal systems should be accountable to the decisions made by these systems. This principle is in line with the human control and auditing decision-making needs of the AI Act.
- Fairness and non-discrimination: AI systems applied to resolve disputes should be devoid of bias, and all the parties, irrespective of their gender, ethnic background, socioeconomic status, etc., should be treated equally.⁶¹
- Security and privacy: AI systems should comply with the standards of the highest level of cybersecurity and data integrity, it is necessary to make sure that personal data of users is kept secret and AI systems are not exposed to manipulation or exploitation.

Through the principles of the OECD, EU rules and country policies mean that AI generated through generative methods used in legal dispute resolution is responsible and minimize chances of biases or any other unethical results.

3.4 Council of Europe Framework Convention on Artificial Intelligence

The Framework Convention on Artificial Intelligence by the Council of Europe provides a framework in which the member states are encouraged to implement AI systems in a manner that does not violate human rights and democratic principles.⁶² The framework lays particular stress on the accountability of AI and human dignity in the areas of high risk, including

⁶⁰ Nguyen, Andy, Ha Ngan Ngo, Yvonne Hong, Belle Dang, and Bich-Phuong Thi Nguyen. "Ethical principles for artificial intelligence in education." *Education and information technologies* 28, no. 4 (2023): 4221-4241. <https://link.springer.com/article/10.1007/s10639-022-11316-w>

⁶¹ Pavlidis, Georgios. "Deploying artificial intelligence for anti-money laundering and asset recovery: the dawn of a new era." *Journal of Money Laundering Control* 26, no. 7 (2023): 155-166. <https://www.emerald.com/jmlc/article/26/7/155/238205>

⁶² Ziller, Jacques. "The Council of Europe Framework Convention on Artificial Intelligence vs. the EU Regulation: two quite different legal instruments." (2024): 2723-9195. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4822757

dispute resolution. It emphasizes the necessity to safeguard the right to a fair trial and right to access justice which play a crucial role in the implementation of legal AI systems.

According to this framework, AI systems in law enforcement must offer assurances of fairness, accessibility and transparency, and it is in line with the spirit of the EU AI Act, which is to have high-risk legal AI systems to work within concise ethical and legal scopes.⁶³

3.5 UNESCO Recommendation on the Ethics of AI (2021)

In November 2021, UNESCO passed a Recommendation on the Ethics of AI that gives the world a series of recommendations on how AI can be both constructed and implemented without endangering human rights and encouraging ethical standards. This recommendation recommends:

Informed consent: People who take the services of AI-based legal systems should be completely aware of how AI-based systems operate and how their personal data will be processed. This is especially applicable to the ODR platforms, where consumers tend to make agreements without a complete understanding of the possible consequences of the decisions made by AI.

Ethical control: The suggestion emphasizes the necessity of the ethical control mechanisms that will ensure that AI technologies will not harm human dignity, will not discriminate, and will not lead to social inequity.⁶⁴

Inclusivity: The recommendation advocates the design of AI systems in an inclusive manner, without placing the marginalized or vulnerable groups in an unfair disadvantageous position in an automated dispute resolution system.

In the case of legal systems that incorporate AI, recommendations of UNESCO would serve as a global standard in ensuring that AI systems can be used positively towards the cause of justice and fairness to resolve disputes.⁶⁵

⁶³ Stoyanova, Vladislava. "Council of Europe Framework Convention on Artificial Intelligence: Context, Regulatory Approach and Scope of Obligations." *European Journal of Risk Regulation* (2025): 1-30. <https://www.cambridge.org/core/journals/european-journal-of-risk-regulation/article/council-of-europe-framework-convention-on-artificial-intelligence-context-regulatory-approach-and-scope-of-obligations/0ED34EFE5AA7C9628F7053720F88F48C>

⁶⁴ Van Norren, Dorine Eva. "The ethics of artificial intelligence, UNESCO and the African Ubuntu perspective." *Journal of Information, Communication and Ethics in Society* 21, no. 1 (2023): 112-128. <https://www.emerald.com/jices/article/21/1/112/432633>

⁶⁵ Flores-Viva, Jesús-Miguel, and Francisco-José García-Peñalvo. "Reflections on the ethics, potential, and challenges of artificial intelligence in the framework of quality education (SDG4)." *Comunicar: Media Education Research Journal* 31, no. 74 (2023): 35-44. <https://eric.ed.gov/?id=EJ1380530>

3.6 Gaps Between Normative Standards and Practical Enforcement

Though normative standards, including the EU AI Act, OECD Principles, and UNESCO Guidelines, provide valuable guidelines to the ethical use of AI, the prevailing divide between the normative standards and their real implementation is huge. Although the regulatory efforts are substantial, the AI systems can be faster than the legal frameworks, particularly in the field of ODR and ADR, as the technology implementation is likely to be fast and lacks adequate control.

The real-life issues are:

- Regulatory lag: The legal frameworks are not able to keep up with the fast pace of AI technologies development thus there is uncertainty on how AI systems ought to be regulated and monitored.
- Absence of enforcement mechanisms: In instances that regulations are available, there is most times the absence of effective means of enforcing regulations. On transparency or accountability, as an example, it might be challenging to impose transparency or accountability in a set of artificial intelligence systems working on closed platforms, particularly when the algorithms are proprietary.⁶⁶
- Ethical ambiguity: The absence of a clear set of rules on how AI should be ethically developed introduces ambiguity as to what might be deemed as acceptable risk and responsible AI use in the high-stakes legal environment.
- Responsibility of decision-making: The question of who is held accountable in case of harm or failure of the AI systems in legal settings remains a thorn in the flesh. This is because the issue of accountability has not been fully addressed, so legal systems were still subject to mistakes or prejudices in the decisions made by AI.⁶⁷

To sum up, even though there are important normative standards in the field of AI against legal disputes laid down by international and regional frameworks and their application to a specific case is a challenging but important step, the gap in this matter is an important threat and closing it is a crucial measure that can help to make the use of AI in the legal sphere reliable and ethical.

⁶⁶ Andarge, Tihitina, and Erik Lichtenberg. "Regulatory compliance under enforcement gaps." *Journal of Regulatory Economics* 57, no. 3 (2020): 181-202. <https://link.springer.com/article/10.1007/s11149-020-09405-0>

⁶⁷ Beach*, Derek. "Why governments comply: an integrative compliance model that bridges the gap between instrumental and normative models of compliance." *Journal of European Public Policy* 12, no. 1 (2005): 113-142. <https://www.tandfonline.com/doi/abs/10.1080/1350176042000311934>

PART IV: Analysis of Specific Use Cases in Dispute Resolution

4.1 AI-Assisted Drafting of Pleadings and Legal Submissions

Generative artificial intelligence (AI) integration in the practice of law has already become the subject of intense interest, especially regarding automation of the activities that a legal professional has traditionally done, including the creation of pleadings and other legal submissions. AI-assisted legal writing can lead to a more efficient process, lower the expenses and make the services more accessible. Nonetheless, the dangers of AI in that regard, especially the alleged authorities and the errors in facts, are rather a challenge. Additionally, the consequences of professional liability are quite significant because law practitioners can be responsible of the mistakes made by AI systems in legal files. The section critically looks at the possible advantages, risks, and professional liability issues of AI-assisted legal drafting and provides a detailed discussion of the way the three factors interplay in the legal profession.⁶⁸

Potential Efficiency Gains

In terms of AI integration in legal writing, one of the greatest benefits is the fact that it can potentially achieve a high degree of efficiency. The AI systems, especially based on large language models can easily produce legal pleadings, contracts, and submissions based on given inputs. Automation of these jobs will save a lot of time to the legal personnel who would have used it on manual drafting and conducting research as well as reviewing of documents.

Speed of Drafting: The AI-based tools are able to handle large volumes of data in several seconds, which otherwise human lawyers would take hours (or even days) to handle. As an example, a lawyer writing a motion or a contract would generally be obliged to cite numerous case law, statutes and precedents to their benefit. These resources can be accessed and introduced with AI in the speed of lightning, and it provides a draft that is based on the existing legal knowledge.⁶⁹ The increased speed in producing the documents contributes to

⁶⁸ Bunda, Ridho Harapan, Welven Aida, and Urfi Utami. "DIGITAL REFORM IN LEGAL COMPLAINT DRAFTING: CONSTRUCTION OF AN AI-BASED PLANNING SYSTEM TO REDUCE THE RISK OF OBSCURE LIBEL." *Awang Long Law Review* 8, no. 1 (2025): 390-404. <https://www.ejournal.stih-awanglong.ac.id/index.php/awl/article/view/1766>

⁶⁹ Bui, Luong Vu. "Advancing patent law with generative AI: Human-in-the-loop systems for AI-assisted drafting, prior art search, and multimodal IP protection." *World Patent Information* 80 (2025): 102341. <https://www.sciencedirect.com/science/article/pii/S0172219025000080>

the overall productivity of the teams, with legal teams being able to concentrate on the more complex, value-added activities, like consulting with clients and strategizing the case.

Reduction in Human Error: The AI systems are programmed to adhere to rules and patterns, which guarantees that the result is devoid of the kinds of oversights or errors that may arise when drafting is left to human drafters. It also implies that AI drafting technologies will evolve as they get better with time as they learn and correct their algorithms to achieve higher quality. Its efficiency is especially useful in a large scale litigation or transactional setting where large volumes of documents may overwhelm.

Cost Savings: AI can help save time and expense of legal drafting through the automation of routine tasks. Smaller and medium sized companies which may lack the financial power to hire a group of highly qualified lawyers may find it beneficial to use AI technology to create quality legal paperwork. This will democratize legal services and offer affordable access to clients and may increase the market base of legal practitioners.⁷⁰

Another indicator: Consistency and Standardization: AI would assist in ensuring uniformity and regularity of legal papers. The standardized approach towards writing legal submissions and pleadings can minimize the possibility of mistakes and make sure that the legal papers have a predetermined structure and are based on some standards. It is also beneficial especially in high volume settings e.g. e-discovery or mass tort litigation where consistency over thousands of documents is necessary.⁷¹

Although these advantages illustrate the effectiveness of AI in streamlining the legal drafting process, it is important to discuss the threats that are associated with using AI-generated materials, especially in terms of the precision of legal information and the quality of the draft.

Threats of Authorities Perceived and Factual Misstatements.

Although AI-assisted drafting has many advantages in terms of efficiency, it is also a major threat, especially the one of hallucinated authorities and factual misstatements. In spite of

⁷⁰ Najeeb, Ali. "AI-Driven Legal Writing and Drafting," *Transformations in Legal Education in the Age of AI* (2025): 333. <https://books.google.com/books?hl=en&lr=&id=taSIEQAAQBAJ&oi=fnd&pg=PA333&dq=AI-Assisted+Drafting+of+Pleadings+and+Legal+Submissions&ots=tAMZKdzNCD&sig=VJwW11ItQJT06TqdgEeCaKgoUjs>

⁷¹ Lai, Joel Weijia. "Adapting self-regulated learning in an age of generative artificial intelligence chatbots." *Future Internet* 16, no. 6 (2024): 218. <https://www.mdpi.com/1999-5903/16/6/218>

their amazing abilities, AI systems are not fallopian and can produce factually incorrect or legally unsubstantiated legal content.⁷²

- **Hallucinated Authorities:**

The phenomenon of hallucination, in which AI-generated legal documents invent citations, case law or legal authorities, is one of the most worrying aspects of AI-generated legal text. This is a problem of the mechanism of operation of AI models, which are constructed on the basis of language patterns. Such models make predictions of most probable next word or phrase with references to large volumes of data, but without real knowledge of the law. Consequently, AI may cite non-existent case law, statutes, or legal principles which results in completely artificial citation.

To illustrate, an AI system to draft a legal brief may provide a reference to a case that never existed or is quoted improperly and caused the legal practitioner to base their argument on false authority. This problem of hallucination has been especially troublesome in the application of AI to the law, where the consequences of a mistake are critical. The use of false legal powers unintentionally may confuse the court which may harm a case of a client or may result in sanctions.

- **Factual Inaccuracies:**

Besides perceived authorities, AI technology will add a factual error in legal documents. Because generative AI is based on data sets to draw conclusions, it can occasionally produce information that is either obsolete, inaccurate or not relevant to the particular legal scenario being approached. In an instance, AI may invoke old statutes, or resort to irrelevant case law and not take into account the specifics of the jurisdiction, or also legal issue, in question. In other cases, AI tools can fail to get the factual background of a case and produce a pleading or submission led by false facts.⁷³

⁷² Mohammed, Iman Shakir, and Nahla Mahmood Waheeb. "Auditor responsibility related to fraud and assessment of the risks of material misstatement." *World Economics and Finance Bulletin* 12 (2022): 47-54. https://www.researchgate.net/profile/Iman-Mohammed-11/publication/362269895_AUDITOR_RESPONSIBILITY_RELATED_TO_FRAUD_AND_ASSESSMENT_OF_THE_RISKS_OF_MATERIAL_MISSTATEMENT/links/62e037079d410c5ff363bb11/AUDITOR-RESPONSIBILITY-RELATED-TO-FRAUD-AND-ASSESSMENT-OF-THE-RISKS-OF-MATERIAL-MISSTATEMENT.pdf

⁷³ McIntosh, Timothy R., Teo Susnjak, Nalin Arachchilage, Tong Liu, Dan Xu, Paul Watters, and Malka N. Halgamuge. "Inadequacies of large language model benchmarks in the era of generative artificial intelligence." *IEEE Transactions on Artificial Intelligence* (2025): 80. <https://ieeexplore.ieee.org/abstract/document/11002710/>

These falsehoods are enhanced by the fact that the AIs will neither tend to analyze the accuracy of the information on which they operate. The AI does not have the capability to conclude on the credibility of the sources it uses to produce legal documents as a human legal professional does because of the opportunity to cross-verify the sources, evaluate the context, and interpret the information. This is what may cause factual inaccuracies that may not be detected unless the drafts are carefully examined by a human lawyer.

- Dependability and Responsibility and integrity:

The inaccuracy of the AI-created content introduces the issue of accountability, particularly regarding the use of AI tools to write important legal texts. When an AI system produces wrong or hallucinated data that is included in a legal filing, and the result of such legal filing is unfavorable to a client, who bears the responsibility of the mistake? In classical legal practice, the attorneys are responsible to the quality of their work. But, the liability issue is less obvious in the case of AI systems.

The question of AI responsibility is an increasing problem within the legal community, where AI applications are given as an adjunct tool instead of being a decision-maker. When the use of AI-generated documents committed or omitted mistakes related to the legal field of activity, there is a question of accountability of the legal professional who used the tool or of the developer of the AI or the tool provider.⁷⁴

Impact on Professional Liability

The emergence of AI-assisted drafting also poses serious professional liability implications, especially in relation to the quality of legal writings and liability in case of the AI error. With AI tools becoming a more part of the legal workflow, one should know how liability will be applied in case of errors or omissions in legal documents generated by AI.

- Attorney Malpractice:

The conventional legal system puts the preciseness of the work done by attorneys, and it is quite likely that this requirement will be applied to AI-assisted drafting. When lawyers are using AI tools, the due diligence will be expected, meaning that the information produced by the latter systems should be both accurate and legally valid. When a lawyer uses AI-generated materials where the hallucinated authority or a factual error is in place, the lawyer

⁷⁴ McIntosh, Timothy R., Teo Susnjak, Nalin Arachchilage, Tong Liu, Dan Xu, Paul Watters, and Malka N. Halgamuge. "Inadequacies of large language model benchmarks in the era of generative artificial intelligence." *IEEE Transactions on Artificial Intelligence* (2025): 80.
<https://ieeexplore.ieee.org/abstract/document/11002710/>

might be charged with negligence or malpractice, despite the fact that this error was a result of the AI system.

In this regard, the professional liability of legal practitioners will be determined by the level of supervision that they offer during the application of AI systems. When a lawyer does not properly review the AI-generated drafts or overtrusts automated systems without performing his or her legal analysis, it is possible to consider the failure to fulfill his or her professional duties. This shows that a delicate balance must be maintained between the use of the advantages of AI and professional accuracy, diligence, and oversight.⁷⁵

- **AI Developer Liability:**

The other level of liability arises when the contribution of AI developers is taken into account. In case an AI system continuously produces erroneous legal material or cannot provide the correct data, the creators can be charged with the production of unreliable or flawed products. Nevertheless, the legal framework of the liability of AI developers remains in its infancy to date. Because of the difference between the traditional software products, where the defects are typically managed with the help of the consumer laws, AI tools pose special concerns regarding the level of their smartness and the degree to which the creators of the system can be held to the responsibility of the mistakes made by the system.⁷⁶

The AI developers might be held liable in case their systems do not comply to some standards, including the fact that the created content is factual or legally valid. Nevertheless, the problem is how to define the threshold of liability because the AI models are complex, and due to the large volumes of data that they are trained on, they can contain an error or bias. Whether AI creators should be responsible in the behavior of their tools remains an issue that may be subject to legal controversy.

- **Federal Regulation and Laws:**

The regulatory control will be very important to establish limits of legal responsibility in legal drafting based on AI. With the advancement of AI in the legal field, there is a need to create a set of principles and rules under which it should be used. This involves the establishment of rules that control the use of AI tools in order to guarantee accuracy and

⁷⁵ Wang, Chengliang, Haoming Wang, Yuanyuan Li, Jian Dai, Xiaoqing Gu, and Teng Yu. "Factors influencing university students' behavioral intention to use generative artificial intelligence: Integrating the theory of planned behavior and AI literacy." *International Journal of Human-Computer Interaction* 41, no. 11 (2025): 6649-6671. <https://www.tandfonline.com/doi/abs/10.1080/10447318.2024.2383033>

⁷⁶ *ibid*

reliability, offer a sense of transparency in terms of design and functionality, and implement a system of responsibility in the cases of errors or irresponsibility by the developers and users.⁷⁷

There are even areas that are contemplating laws and regulations that would ensure that AI tools are strictly tested before they can be applied in any legal setting, such that they would be performing and reliable to a certain standard. Also, it is possible that there will be a push towards legislations that will define the level of liability of the legal professionals implementing AI tools, define the due diligence they must take to avoid mistakes and the level of responsibility that the developers of AI have.

Plegading and other legal submissions written with the help of AI can transform the legal profession in a way that it can enhance efficiency, lower costs, and become more accessible. Nevertheless, the dangers of hallucinated authorities, factual errors, and professional liability are major issues that can not be disregarded. Though AI tools are truly advantageous, a lawyer should be careful using these systems, as they should be able to retain control over the generated content and be accountable when there is an error in it. With the ongoing development of the AI, the law sphere needs to revise its regulatory and ethical standards in order to cope with the issues and guarantee the responsible and stable usage of AI to draft the legal texts.⁷⁸

4.2 AI-Supported Case Outcome Prediction

The AI-assisted case outcome prediction is quickly becoming a part of the arbitration and mediation fields in which artificial intelligence models are employed to predict the probable outcome of a conflict, based on historic case statistics. Predictive analytics present a great potential in enhancing efficiency and transparency in the alternative dispute resolution (ADR) procedures. Nonetheless, with any developing technology, risks are also significant and related to the implementation of AI in this matter. First and foremost among these issues is the risk of the reinforcement of historical biases in the data and the impact this has on the process of party autonomy in disputes and the impact on settlement behavior. This section

⁷⁷ *ibid*

⁷⁸ Liu, Yue, Zhengwei Yang, Zhenyao Yu, Zitu Liu, Dahui Liu, Hailong Lin, Mingqing Li, Shuchang Ma, Maxim Avdeev, and Siqi Shi. "Generative artificial intelligence and its applications in materials science: Current situation and future perspectives." *Journal of Materiomics* 9, no. 4 (2023): 798-816. <https://www.sciencedirect.com/science/article/pii/S2352847823000771>

focuses on a critical analysis of these characteristics of AI-assisted case outcome prediction in providing a subtle study of the potential advantages as well as the risks that it presents.

Arbitration and Mediation Predictive Analytics

Arbitration and mediation practitioners are redefining their case assessment and management with the help of predictive analytics, which is an AI-powered system. With the help of historical analysis, AI tools are able to recognize patterns, trends, and correlations, which can be used to forecast the consequences of future conflicts, given that large amounts of historical information are taken into account. These predictions are usually made depending on the nature of the dispute, the arguments used, the nature of the parties involved and even the judicial behaviors and ruling of other cases of the same nature.⁷⁹ There are a number of advantages in the introduction of predictive analytics in the field of arbitration and mediation:

- Increased Efficiency:

The main benefit of using AI-assisted prediction of case outcomes is that it facilitates the arbitration and mediation process. The ability to predict the probable result of case at a very early stage can assist the parties and their law representatives to determine the merit of their case swiftly, thus resulting in a faster decision-making process. This can promote a more effective settlement process and save time and resources in total on a dispute resolution. As an illustration, the probable evidence of a case enables parties to review their grounds and change their courses of action, which may lead to expedited settlements or a more focused method of mediation.

- Improved Decision-Making:

The AI-based predictive tools may serve to help the arbitrators and mediators with the objective analysis of the case based on the historical trends. They can be used to determine the issues that could affect the result of a case that could be ignored by human practitioners. AI can be used to enhance the quality of decisions by supplementing the information given by arbitrators and mediators, as it is more likely to produce data-driven insights. In order to illustrate, predictive tools are able to propose probable legal precedents, pertinent case law and the like disputes in order to make the decision-making process properly informed by all the data analysis.

⁷⁹ Sharma, Anisha. "The Legal and Regulatory Challenges Posed by the Integration of Predictive Analytics (PA) into International Arbitration." *Law, Economics and Society* 1, no. 2 (2025): p68-p68. <https://j.ideasspread.org/les/article/view/1881>

- Cost and Time Savings:

Arbitration and mediation cost-saving can be achieved with the help of predictive analytics. The time spent by arbitrators, mediators, and lawyers on a case is minimized since AI tools allow saving a lot of time that could be spent on the case through manual research. This accelerates the process of resolving disputes as well as reduces the expenses incurred by the parties. Predictive analytics can minimize ambiguity by giving better predictions of possible case outcomes, resulting in more effective and accurate settlement.⁸⁰

Although predictive analytics can provide significant advantages when it comes to enhancing the efficiency and decision-making processes in the ADR, the risks presented by this kind of tools, especially the cultivation of bias and the effect that it will have on party autonomy, need to be taken into account.⁸¹

Threat of Recreating Past Prejudices

The threat of stoking up past prejudice is one of the most important issues connected to AI-assisted predicting case outcomes. Predictor models are usually trained using massive amounts of historical cases and such data sets might be biased by historical disparities, biases or structural failures in the legal system. These biases in AI predictions may be sustained by the dependence on these data, the result of which may be biased and disproportionately favor a particular group or reinforce current disparities in power.⁸²

Bias in Data: AI models are also as good as the information used to train them. When the historical data that is being used to train the AI has biased or unrepresentative information, the predictions produced by the system will mirror these biases. As an illustration, when the set of data is dominated by past cases where a specific group of litigants (e.g. corporations or members of a higher socioeconomic status) has been winning, the AI will predict more positive results over those groups, irrespective of the quality of the case at hand. This may

⁸⁰ Shoukat, Daniyal. "Using AI in International Arbitration: From Predictive Analytics to Automated Awards." *International Arbitration: From Predictive Analytics to Automated Awards* (July 26, 2025) (2025): 22. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5372228

⁸¹ Tassoti, Sebastian. "Assessment of students use of generative artificial intelligence: Prompting strategies and prompt engineering in chemistry education." *Journal of Chemical Education* 101, no. 6 (2024): 2475-2482. <https://pubs.acs.org/doi/abs/10.1021/acs.jchemed.4c00212>

⁸² *ibid*

fortify inequality since it anticipates negative results on the part of underrepresented groups or marginalized parties in the arbitration and mediation.⁸³

Strengthening of Current Power Relations: Predicting the outcome of cases using AI may reinforce the established power structures. Where the predictions of AI largely depend on the historical decision-making in this case, the system is more likely to be biased to the side that has a higher success rate in similar cases. To illustrate, when it comes to commercial disputes, bigger, stronger corporations could have been more traditionally effective in arbitration or mediation and this traditional effectiveness could be transferred to the AI model. This could make AI predictions still to benefit these parties and marginalize smaller or weaker litigants.⁸⁴

Legal and Ethical Concerns: The possibility of AI models reinforcing biased results in ADR processes poses ethical and legal concerns of serious nature. In the event that AI predictions result in biased or discriminatory results, it may be a breach of the principle of equality before the law and should be a violation of the fairness of the arbitration or mediation process. Ethical issues will also be relevant since it would be essential to make sure that the AI tools utilized in resolving a dispute are geared towards reducing bias and enhancing impartiality to all parties.

One should also consider the issue of transparency in the decision making of AI. When one party is subjected to a bad forecast being made using historical data which is influenced by bias, the party might find it hard to attack the forecast or even have a reason as to why it was made. Such lack of transparency can bring about a feeling of injustice as parties will have no chance to challenge biased predictions and how such a decision was reached.⁸⁵

Influence in Party Independence and Covenant Behavior

In arbitration and mediation, AI-enhanced prediction of the result of cases can also profoundly influence the autonomy of parties and their decision to settle a dispute. Although AI can provide more accurate forecasts and simplify the process of decision making, its

⁸³ Socol de la Osa DU, Remolina N. Artificial intelligence at the bench: Legal and ethical challenges of informing—or misinforming—judicial decision-making through generative AI. *Data & Policy*. 2024;6:e59. doi:10.1017/dap.2024.53 <https://doi.org/10.1017/dap.2024.53>

⁸⁴ Andrieux, Pierre, Richard D. Johnson, Jalal Sarabadani, and Craig Van Slyke. "Ethical considerations of generative AI-enabled human resource management." *Organizational Dynamics* 53, no. 1 (2024): 101032. <https://www.sciencedirect.com/science/article/pii/S0090261624000056>

⁸⁵ *ibid*

application can also affect the decisions of the parties involved in terms of the engagement and commitment to make their own choices.

- Pressure to Settle According to Predictions:

Among other effects of AI-oriented predictions, parties might have the feeling that they are being forced into a settlement based on the result indicated by the AI model. Due to the fact that, based on prediction, the AI can tell that one of the sides will probably lose, they can agree to accept a settlement even when the conditions of the settlement are less than optimal. On the other hand, in the case where the AI predicts that a party would most likely win, it will result in the party becoming more inflexible in its position and compromise less during negotiations. Such change in settling patterns may make mediation and arbitration less effective since the parties are likely to be more influenced by AI-driven predictions rather than their judgments or their lawyers.

Also, AI usage might cause a scenario when parties will feel that they are limited in their choices because of the recommendations provided by the system. When the AI is so sure of a certain course of action, it feels like the parties have no choice but to go with the prediction even though it may not be in their best interest or strategic purposes. This may diminish flexibility and creativity that are usually required when undertaking ADRs.

- Ethical and Psychological effects:

The use of AI projections in settlement negotiations can also negatively impact the parties that are involved psychologically. The application of AI can provoke a sense of determinism or even helplessness, as parties feel that the point has already been chosen based on predictive analytics and no matter what they do, it is the same. This may result in a less engaging and empowering dispute resolution process since parties may not be as interested in the outcome as they feel that it is mostly predetermined by the AI. Moreover, when using a non-human system to affect important legal cases, the moral dilemma of such a system may reduce the levels of confidence in the ADR or ODR system, particularly when the predictions are inaccurate, or biased.⁸⁶

The case outcome prediction that is facilitated by AI has a great potential in improving the efficiency and transparency of arbitration and mediation process. Predictive analytics may

⁸⁶ Victor, Bryan G., Sheryl Kubiak, Beth Angell, and Brian E. Perron. "Time to move beyond the ASWB licensing exams: Can generative artificial intelligence offer a way forward for social work?." *Research on Social Work Practice* 33, no. 5 (2023): 511-517. <https://journals.sagepub.com/doi/abs/10.1177/10497315231166125>

assist parties in making informed decisions, assist legal professionals and arbitrators in providing a more valuable evaluation of cases, and facilitate settlement negotiations. Nevertheless, it is impossible to overlook the dangers of AI use in dispute resolution, in particular, the necessity to strengthen the historical bias and the possible decrease of the autonomy of parties, as well as the effects on settlement behavior.

These challenges should be tackled directly to make AI responsible in dispute resolution. This requires legal frameworks and organizations to implement mechanisms that will reduce bias during AI models, provide accountability on the predictions made by the models and safeguard the autonomy of the participants. In addition, human judgment should not be substituted with AI usage, and the integrity of the dispute resolution process should not be overlooked in favor of the development of new technology. It is only through the opportunity to strike the equilibrium between the positive side of AI and the possible dangers that the legal profession can utilize the full power of AI-assisted case outcome prediction without undermining the quality of the ADR system.⁸⁷

4.3 Generative AI in Online Dispute Resolution Platforms

The introduction of generative artificial intelligence (AI) into the Online Dispute Resolution (ODR) systems is a prominent change in the way disputes are dealt with in the digital era. AI can make dispute resolution process through online means more efficient, accessible, and cost-effective by automating a lot of the process, such as the stage of negotiation, settlement offers, and evaluation of the case. Though these tools have enormous potential in the process of democratizing access to justice and simplifying the process of resolving it, there are some concerns about them. This part critically analyzes AI application to ODR platforms and in particular, automated negotiation tools, AI-generated proposals of settlement and transparency and informed consent risks.⁸⁸

Computerized Negotiation Programs

One of the most significant opportunities of ODR platforms is automated negotiation tools that are driven by generative AI. Based on the pre-set criteria, these tools apply AI algorithms to propose negotiations between parties through suggestions, mediate, and even generate

⁸⁷ Victor, Bryan G., Sheryl Kubiak, Beth Angell, and Brian E. Perron. "Time to move beyond the ASWB licensing exams: Can generative artificial intelligence offer a way forward for social work?." *Research on Social Work Practice* 33, no. 5 (2023): 511-517.

⁸⁸ Giacalone, Marco. "AI and the Future of Private Dispute Resolution Mechanisms." *Available at SSRN* 5083207 (2025): 7. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5083207

counter-offers. Automated negotiation can simplify the process of negotiation and bring it closer to reality. But it also poses some critical questions on fairness, party autonomy and possibilities of exploitation.⁸⁹

- Quickness and Rapidity of Negotiation:

Speed and efficiency are one of the major benefits of automated negotiation tools at the table. Conventionally, negotiations are time consuming, and they involve back and forward communication either face-to-face or via intermediaries. Many of these interactions can, however, be automated by AI tools and the process of negotiation can be greatly accelerated. As an example, an AI-based tool can assess the priorities and preferences of both parties and come up with real-time offers or counter-offers on the basis of the analysis, thus shortening the time in negotiations. This may come in handy especially in low volume, high value disputes, like in consumer complaints or small claims.⁹⁰

- Reduction of Human Bias:

The negotiation platforms provided by AI may be coded in such a way that they are capable of making decisions without relying on human biases that tend to influence the outcome of the negotiation process. As an illustration, AI tools might be created to provide settlement proposals, which are based only on data items, including past case results, the validity of arguments, and finances, but not on subjective variables of personalities or negotiation types of the involved parties. Getting rid of human biases, AI tools have the potential to provide more unbiased solutions, which will result in more fair outcomes, especially in a case where there are power imbalances.⁹¹

- Individualization and Meeting Needs:

The AI negotiation tools may also be customised according to the needs of each case. As an example, the parameters of the negotiation process (e.g., the stakes involved, financial boundaries, or consequences sought) can be modified in terms of the preferences of the parties to the negotiation. Also, AI systems have the ability to acquire experience in previous negotiations and constantly adjust their strategy to achieve efficiency and greater conformity

⁸⁹ Giacalone, Marco. "AI and the Future of Private Dispute Resolution Mechanisms." *Available at SSRN* 5083207 (2025): 7

⁹⁰ Paterson, Jeannie Marie, Vivi Tan, and Julian Webb. "Generative Ai In Small Value Consumer Disputes: Reviving Not Resolving Challenges Of Design And Governance In Online Dispute Resolution." *Available at SSRN* 5313046 (2025): 20. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5313046

⁹¹ Preiksaitis, Carl, and Christian Rose. "Opportunities, challenges, and future directions of generative artificial intelligence in medical education: scoping review." *JMIR medical education* 9, no. 1 (2023): e48785. <https://mededu.jmir.org/2023/1/e48785/>

to the interests of the opposing sides. Such flexibility is an important aspect of complicated negotiations in which the interests of the sides can change with time.

In spite of these benefits, automated negotiation tools have brought forth a myriad of issues especially in regard to maintaining the clarity of the process and leaving some form of liberty to the parties in the result of the negotiations.⁹²

Proposals of AI-Generated Settlement

The second breakthrough on ODR platforms is the opportunity of generative AI to write settlement suggestions. Such suggestions are formed on the basis of data, which is presented by the parties concerned, and previous case information that can be obtained by AI systems to forecast what kind of settlements have been effective in comparable disputes. The generation of proposals is done through the analysis of enormous volumes of data and subsequent complex algorithms which generate custom settlement proposals.

- Individualization and Irrelevance:

The fact that AI-generated settlement proposals are custom-made to the unique conditions of the dispute is one of the advantages of the given technology. Contrary to the conventional mediation or arbitration where the mediator could provide a generalized settlement model, AI has the ability to examine the details of a specific case, such as the financial status of the parties, the type of the dispute, and what has happened in the past cases to draw up highly personalized settlement proposals. Such customization stands more chances of leading to an acceptable settlement which is agreeable to both sides, since such customization considers their specific needs and priorities.⁹³

- Cost-Effective Solutions:

In most instances, particularly a small claim or consumer case, hiring legal experts to prepare settlement offers is prohibitively expensive. The proposal of settlements that are created with the assistance of AI can eliminate these expenses significantly as the drafting process is automated. This is particularly applicable in mass-dispute scenarios, where there is a large

⁹² Tan, Vivi, Jeannie Marie Paterson, and Julian Webb. "Generative Artificial Intelligence in small value consumer claims: Hallucination risk, system design, and governance in online dispute resolution." *The University of New South Wales Law Journal* 48, no. 4 (2025): 1257-1257. <https://search.informit.org/doi/abs/10.3316/informit.T2025122100000800166626867>

⁹³ Zielinski, Chris, Margaret A. Winker, Rakesh Aggarwal, Lorraine E. Ferris, Markus Heinemann, Jose Florencio Lapeña, Sanjay A. Pai et al. "Chatbots, generative AI, and scholarly manuscripts: WAME recommendations on chatbots and generative artificial intelligence in relation to scholarly publications." *Current Medical Research and Opinion* 40, no. 1 (2024): 11-13. <https://www.tandfonline.com/doi/full/10.1080/03007995.2023.2286102>

amount of similar cases that have to be dealt with in a quick and effective manner. The savings to the cost are further increased by the rapidity of the AI system, which can provide an offer in real time making it less time consuming than the throughput of the traditional settlement drafting techniques.⁹⁴

Standardization: The proposals of settlements provided by AI can also make sure that settlement terms are similar in comparable cases, which can prove to be useful in the standardization of fairness and certainty of dispute resolution. As an illustration, an artificial intelligence system developed based on previous cases might always produce settlement offers that support legal precedents and legal norms so that everyone is treated equally. This finds special use in legal regimes in which uniformity and consistency are given importance, as in class action litigation or mass consumer litigation.

Nonetheless, the application of AI to settlement proposals is a highly divisive matter due to the lack of transparency in the decision-making process and the degree to which the parties are aware of the logic underlying the AI-generated proposals.

- Absence of Openness in Artificial Intelligence Decision-Making:

The lack of transparency in the way AI models arrive at predictions and suggestions can be considered one of the most urgent issues regarding AI in dispute resolution. AI systems, especially those based on machine learning and neural networks, are the so-called black boxes because they make decisions, relying on complicated algorithms that cannot be easily interpreted by people. Such non-transparency may pose a lot of trouble to the parties engaging in a conflict. In case AI generates a settlement proposal or a negotiation result, the parties might be unable to comprehend the arguments that underlay the proposals of the AI, and it might decrease the level of trust the parties put in the process.⁹⁵

To take the case that one party feels that an AI system is suggesting a settlement offer that one party feels is not fair, they may have no means of judging whether the reasoning behind the AI system was just. Under classic dispute resolution methods, arbitrators and mediators give their causes on the decision and this goes towards creating confidence and can enable the parties to appeal the decision in case they oppose it. This possibility of meaningful

⁹⁴ Davies, Benjamin. "Ethics in Artificial Intelligence and Alternative Dispute Resolution: Generating AI/Human Reviewed Ethical Guidelines for ADR Practitioners and the Legal Profession." *U. Mass. L. Rev.* 20 (2025): 149. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/sonengrs20§ion=7

⁹⁵ Duger, Chloe J. "AI: Increasing Alternatives in Alternative Dispute Resolution Resolved: Journal of Alternative Dispute Resolution." *Resolved: J. Alternative Disp. Resol.* 12 (2024): 21. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/resolvjo12§ion=5

engagement and questioning of the rationality of the results is destroyed by the obscurity of the AI process of making decisions.

Moreover, the risk is that the parties will be under pressure to accept AI-generated proposals due to their trust in the technology or because of the belief that the AI-generated proposal is formulated on the basis of a neutral and unbiased analysis. This will jeopardize the independence of the parties, since they would be under pressure to concede to something that they do not even comprehend or reject. In conventional dispute resolution, the negotiators or mediators justify their decisions in such a way that the parties know the factors that informed the decision. With AI systems, it lacks the same level of transparency and access to interaction, which can result in a false perception of the justice of the process.

- Privacy and Security of Data:

The application of AI in ODR platforms also raises the major issues of privacy and security of data. Artificial intelligence uses massive data to give predictions and ideas, and the participants in the dispute usually need to provide sensitive personal and financial data. This casts doubt on the safety of that data being stored, who it is available to and how it can be applied outside of a direct dispute situation. Unless the AI systems are effectively regulated or the platforms of their operation are safe, there is a threat that the personal data of the parties could be leaked, misused or hacked.⁹⁶

- Risk of Manipulation:

There is a risk of manipulation in AI-generated proposals in settlement designs, which is another critical concern. There is always a possibility that bad actors would hack the training data (or the parameters of the AI system) and affect the results in their favor since AI systems are only as good as the data they are trained on. As an example, the party having more resources may bias the AI system by feeding it with biased information and hence manipulate the mechanism to produce proposals that would benefit them. This would compromise equity in the dispute resolution process and create inequitable settlements.

- Laws and Ethical Concerns:

The moral and legal aspects of AI-based settlement offerings are far reaching. Since such systems may play a major role in determining the results of a legal conflict, there cannot be

⁹⁶ Pathak, Yash. "Pioneering Innovations In Digital Jurisprudence: Evaluating ODR Systems And AI In Shaping The Future Of Conflict Resolution." Available at SSRN 5110555 (2024): 45. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5110555

no mechanism through which proposals offered by AI could be checked and proved to be right and justified. The moral duty of the operators of the platforms as well as the legal professionals in the process is to make sure that the application of AI does not compromise the core values of justice. In addition, regulatory policies are to be elaborated to be sure that AI tools applied within ODR systems are open, responsible, and devoid of biases predisposing the results to be in favor of some parties.⁹⁷

Online Dispute Resolution platforms could be improved by Generative AI that can be used to automate the negotiation process, create customized settlement offers, and enhance the efficiency of the dispute resolution process. Nevertheless, the more AI tools are actively used, the more risks that require a thorough management approach, one should implement. These problems are that the integrity of the dispute resolution process will be challenged because of the absence of transparency in AI decision-making processes and the issues of informed consent, data privacy, and the possibility of bias.⁹⁸

In order to make AI in ODR platforms work in the best interests of all the parties involved, it is important to have clear guidelines that will be used in ensuring transparency, informed consent, and accountability. AI is not to be used in place of human management, but rather to supplement it, and parties must be allowed to interpret and interact with the decisions being made. We can achieve this by reconciling the advantages of AI with the necessity to promote fairness, transparency, and ethical considerations to make sure that AI-based ODR platforms will provide an efficient, fair, and affordable alternative to the conventional dispute resolution strategies. It is only at that point that we can see the fullness of the potential of AI when it comes to transforming the future of justice.

4.4 AI in Evidence Analysis and Document Review

Artificial Intelligence usage during the evidence analysis and review of documents is transforming the manner in which legal professionals discover and prepare cases as well as handling large volumes of data. The use of AI-based tools in the field of law firms, courts, and corporate legal departments is becoming more common to automatically review

⁹⁷ AI, NIST. "Artificial intelligence risk management framework: Generative artificial intelligence profile." *NIST Trustworthy and Responsible AI* Gaithersburg, MD, USA (2024): 55. https://pathologyinnovationcc.org/s/R8b_1722118549750.pdf

⁹⁸ Schmitz, Amy J. "Responsible Use of AI in Civil Dispute Resolution." *Responsible Use of AI in Civil Dispute Resolution* (July 23, 2024). *Ohio State Legal Studies Research Paper* 870 (2024): 55. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4903238

documents, find the appropriate evidence, and make the process of case preparation easier. This has brought about serious changes in efficiency and accuracy especially in big litigation and investigations where large volumes of data must be digested in a short period of time. Nonetheless, it is important to note that with the proliferation of AI in document review there are vital issues concerning the credibility of the technology, the chances of misclassification, and the possibility of distorting the evidence. Unaddressed these problems may have severe effects on the justice of the law process. The following section discusses possible advantages, risks, and ethical concerns of AI in the evidence analysis and document review.⁹⁹

Large-Scale Document Processing Automation

The automation of document processing of large volumes has made AI a breakthrough in the legal domain in terms of how legal practitioners process large volumes of information in the discovery and investigation phases. Conventionally, the process of document review is labor intensive and time consuming since legal professionals often have to go through hundreds or even thousands of documents in order to find information that is relevant to them. However, AI systems are capable of processing large datasets faster and on scale that human-reviewers cannot achieve.¹⁰⁰

Greater Productivity and Fastness: Among the most remarkable benefits of AI-based document review tools, it is possible to identify increased document processing speed significantly. Algorithms allow AI systems to process and sort documents very fast according to pre-established guidelines (keywords, phrases, or patterns) necessary in a specific case. This saves time on manual review of documents and enables legal teams to concentrate on more sophisticated activities, including strategic planning, legal argumentation and consultation of clients. When dealing with large-scale cases, e.g. a group of people suing a company or investigating a corporation, AI programs are capable of processing hundreds of thousands of documents in a matter of minutes, which would have been several months under the guidance of a group of human lawyers.

Component Embossing Accuracy and Precision Improved: AI document review applications are used to detect patterns and relationships in the data that is usually not observable to

⁹⁹ Nguyen-Trung, Kien, Alexander K. Saeri, and Stefan Kaufman. "Applying ChatGPT and AI-Powered tools to accelerate evidence reviews." *Human Behavior and Emerging Technologies* 2024, no. 1 (2024): 8815424. <https://onlinelibrary.wiley.com/doi/abs/10.1155/2024/8815424>

¹⁰⁰ Mahadevkar, Supriya V., Shruti Patil, Ketan Kotecha, Lim Way Soong, and Tanupriya Choudhury. "Exploring AI-driven approaches for unstructured document analysis and future horizons." *Journal of Big Data* 11, no. 1 (2024): 92. <https://link.springer.com/article/10.1186/s40537-024-00948-z>

ordinary eyes.¹⁰¹ These tools apply machine learning algorithms to keep on improving their efficiency as they handle additional documents. With time, the AI will be more precise in its ability to find the necessary documents, highlight the most important parts of evidence, and classify data with a better degree of accuracy. This comes in handy especially in legal matters where the stakes are very high and a single bit of evidence can make a big impact on the case. AI systems minimize the possibility of human error by automating the process of identifying relevant documents that may occur due to fatigue or lack of attention when conducting a manual review.

Cost-Effectiveness: The savings in terms of costs gained by AI-assisted document review is high. Through automation of repetitive work, law firms and corporate legal departments can save on labor expenses which in other cases may be huge in large litigation or discovery procedures. AI tools can also enable a more focused reviewing of the documents, it is not necessary to review as many irrelevant documents as possible through a human eye. Consequently, the clients can be subjected to reduced legal fees, and the cost of litigation or investigation could be lowered in general.

Scalability: AI systems are very scalable such that they can process more and more data without any substantial resources. This scalability is especially relevant in the situation of document review where the number of cases has only been increasing. AI systems are applicable to various categories of cases, including minor consumer cases and major corporate inquiries, and are as such a convenient tool to be used by legal professionals. Moreover, Artificial Intelligence has a capability to handle documents of various language, and thus, it will be able to work with international cases that demand a cross-jurisdictional data analysis.¹⁰²

Although the capacity of AI to handle a significant amount of documents in an automated manner has valid advantages, the system has also presented threats that should be thoughtful. The possibility of misclassification and distortion of evidence is a very serious issue which may affect the impartiality of the legal process.

¹⁰¹ Salimimoghadam, Shadi, Amir Naser Ghanbaripour, Rokhsana Jahan Tumpa, Amir Kamel Rahimi, Mehdi Golmoradi, Sara Rashidian, and Martin Skitmore. "The rise of artificial intelligence in project management: A systematic literature review of current opportunities, enablers, and barriers." *Buildings* 15, no. 7 (2025): 1130. <https://www.mdpi.com/2075-5309/15/7/1130>

¹⁰² *ibid*

Possibility of Misclassification and Distortion of Evidence

Although AI tools are efficient and precise, misclassification and the distortion of evidences can be viewed as one of the main threats. The AI systems are based on the algorithms and past data to categorize papers, which are not always correct. The danger of the misclassification or distortion of evidence in a legal context may have drastic consequences of a case.¹⁰³

False designation of Documents: Document review systems are AI-powered, and they are trained to pick up the patterns in the text, yet they still might not be able to fairly classify more complicated or vague documents. As an illustration, an AI tool may confuse a document depending on its content or cannot recognize the relevance of some phrases. Likewise, the system can mark a document privileged or confidential when it is not or a document not privileged as confidential. Misidentification may cause the exclusion or omission of certain important evidence in the case, which may end up playing against one of the parties of the dispute.

As an example, an AI device can miss out on important emails or reports in a business inquiry that hold vital information about a malpractice as it was mislabeled. This kind of misdergation in categorizing such cases may jeopardize the sanctity of the case and make the case end up in unfair decision on the case, particularly when the case is to be argued or even settled by relying on such evidence.¹⁰⁴

Evidentiary Distortion: The Ai systems are programmed to learn what they are fed but they may also acquire the bias that is in the data sets they are fed. In case of skewed or incomplete information in the training data, the AI can enlarge such biases to its process of reviewing documents. Considering the example, when an AI tool receives the input of a set of legal cases, predominantly consisting of cases with corporate defendants, it might become inclined to accept the opinions and best interests of corporations, which will lead to a bias in the analysis of documents in subsequent cases. Such biasness may affect the evidence analysis

¹⁰³ Storey, Veda C., Wei Thoo Yue, J. Leon Zhao, and Roman Lukyanenko. "Generative artificial intelligence: Evolving technology, growing societal impact, and opportunities for information systems research." *Information Systems Frontiers* (2025): 1-22. <https://link.springer.com/article/10.1007/s10796-025-10581-7>

¹⁰⁴ Longoni, Chiara, Andrey Fradkin, Luca Cian, and Gordon Pennycook. "News from generative artificial intelligence is believed less." In *Proceedings of the 2022 ACM Conference on Fairness, Accountability, and Transparency*, pp. 97-106. 2022. <https://dl.acm.org/doi/abs/10.1145/3531146.3533077>

process where an unfair evaluation of the documents will be undertaken and favor one party instead of the other.¹⁰⁵

Moreover, the AI systems might not be able to appropriately place documents into context, especially when encountering a difficult or subtle legal text. Such absence of context may bend the interpretation of some documents which implies a false interpretation of the evidence. As an example, AI can fail to recognize the context of a specific email or document and make an incorrect analysis that can affect the determination of the case.

Over-Reliance on AI: The other danger of AI-based document review is that there is a chance of excessive dependence on the technology. The lawyers can become over-reliant on AI tools and rely on them to give a precise and thorough analysis of all the evidence. Although AI may be a useful solution to the issues of large data amounts distribution and processing, it cannot exclude human decision-making and knowledge. Lawyers should be involved in the workflow, examining AI-generated data and, in fact, no important evidence should be considered lost or misinterpreting.

Such excessive dependence on AI may be especially worrisome in high stakes situations like criminal cases or other complicated business disputes where victory or defeat may alter the lives of the involved parties forever. In case of documents and evidence classification or analysis errors, which may be caused by AI tools, the outcomes may be catastrophic, particularly when the mistake is not identified and addressed.

Sanctions on Fairness of Proceedings

The misclassification, evidency distortion and over-reliance of AI risks when reviewing documents create significant worries regarding the fairness of the legal process. The main aim of any legal system is to promote fairness, due process and the protection of the rights of all parties concerned. With the right usage of AI tools, the level of fairness could be elevated through the enhancement of efficiency and accuracy. Nevertheless, by becoming malfunctioning or abused, such tools may cause the imbalance of the proceedings and consequently, the unfair results.

Impact on Due Process: AI tools, as they can automatically review documents, risk overlooking any evidence that can be important to the case of a party, which is why they can

¹⁰⁵ Kale, Amruta, Tin Nguyen, Frederick C. Harris Jr, Chenhao Li, Jiyin Zhang, and Xiaogang Ma. "Provenance documentation to enable explainable and trustworthy AI: A literature review." *Data Intelligence* 5, no. 1 (2023): 139-162. <https://direct.mit.edu/dint/article-abstract/5/1/139/109494>

influence the impartiality of the process. Due process requires that all the pertinent evidence must be taken into consideration and be weighed in a fair and impartial way. In case AI tools fail to recognize or analyze crucial documents, it may lead to the fact that one of the sides would lose the benefit of having access to essential information that might help them in their court cases. This may bias the case in question and contravene the principle of fairness and destroy the integrity of the legal process.¹⁰⁶

Bias and Discrimination: As stated above, biased training data, when used in the AI tools can create discriminatory results. Unless the AI systems are constructed to consider bias in the data, they might generate results, which have a disproportionate impact on some groups or parties. To illustrate, when an AI tool gets deployed in a civil rights case, the company that developed the tool is likely to make the assumption that the dataset is balanced in terms of occurrences of cases of marginalized groups, thus failing to appropriately gauge the importance of documents concerning marginalized groups, which will lead to the wrongful assessment of the case. Biases in AI tools might also affect vulnerable populations in proportion, which would create unequal chances at gaining justice and may strengthen existing inequalities in the system.¹⁰⁷

Inadequate Human Oversight: Without proper human supervision of AI-assisted document review mechanisms, there would be high chances that the fairness will be threatened. The attorneys should make sure that AI applications are applied as an adjunct but not a substitute to human knowledge. Artificial intelligence can effectively cope with routine jobs, yet human attorneys cannot be replaced without the ability to see nuances, intent, and legal reasoning. Unless human control is taken, mistakes in the classification system, misunderstanding of

¹⁰⁶ Zierock, Benjamin, and Sem Knopjes. *Productivity Gains in Scientific Literature Processing with NLP-Based Document Analysis Tools: An Evaluation of Accuracy and Efficiency through the use of AI Tools in Pharmacovigilance*. 2024: 20. https://www.researchgate.net/profile/Benjamin-Zierock/publication/386446959_Productivity_Gains_in_Scientific_Literature_Processing_with_NLP-Based_Document_Analysis_Tools_An_Evaluation_of_Accuracy_and_Efficiency_through_the_use_of_AI_Tools_in_Pharmacovigilance/links/67518231c35790578d1c9c1a/Productivity-Gains-in-Scientific-Literature-Processing-with-NLP-Based-Document-Analysis-Tools-An-Evaluation-of-Accuracy-and-Efficiency-through-the-use-of-AI-Tools-in-Pharmacovigilance.pdf

¹⁰⁷ Kaplan, Jerry. *Generative artificial intelligence: What everyone needs to know*. Oxford University Press, 2024: 20. <https://books.google.com/books?hl=en&lr=&id=GJXsEAAAQBAJ&oi=fnd&pg=PP1&dq=Reliable+Use+of+Generative+Artificial+Intelligence+in+Dispute+Resolution&ots=4nSnUJi1hD&sig=gZKqYhmpE3CEEJPvAwuKi6ztol4>

documents, and biases in the AI model may remain unnoticed, and unfair results of legal actions will be drawn.¹⁰⁸

Lack of Accountability: Another problem is the absence of proper responsibility in case of error of AI tools. In conventional legal practises, human legal professionals are responsible to their actions including the mistakes they commit during review of documents and evidence analysis. Nonetheless, in the case of AI, the question of who to hold accountable in case of mistakes in the procedure is even more challenging. Who is supposed to be at fault in case an AI tool wrongly classifies important evidence or conceals the meaning of a document? The AI system creator or the legal team utilizing the tool or the location where the tool is hosted? The absence of explicit accountability can destroy the confidence towards AI systems and decrease their capacity to provide fair and fair results.

The use of AI in the analysis of evidence and document review tools can transform the legal profession by making the work process more time-saving, more accurate, and less expensive. Nonetheless, the proliferation of such tools create major threats, such as the risk of misclassification, distortion of the evidence, and the loss of justice during the court proceedings.¹⁰⁹ Human attorneys should be cautious in the responsible use of AI that there are proper checks on the tools by proper human supervision and safeguards to reduce such risks.

In order to maintain the impartiality and decency of judicial processes, it is essential to make sure that AI systems are clear, objective, and responsible. Moreover, human judgment and experience in the document review procedure should be further maintained, because AI solutions cannot supplement the contextual legal knowledge and sense of the law that lawyers will offer to the table. The legal profession can take advantage of all the opportunities that AI can offer in evidence analysis and document review without jeopardizing the fairness of the proceedings by striking a balance between utilizing the advantages of AI and mitigating the possible risks.¹¹⁰

¹⁰⁸ Shaligar, Shamsollah, Tayyebbeh Arefnia, and Mehdi Mohammadian Amiri. "Applications of Artificial Intelligence in the Production and Use of Digital Documents and Electronic Evidence as Proof in Civil and Criminal Litigation." *Legal Studies in Digital Age* 3, no. 2 (2024): 10-30. <https://www.jlsda.com/index.php/lstda/article/view/62>

¹⁰⁹ Scotti, Kristen L., Sarah Young, Melanie A. Gainey, and Haoyong Lan. "Artificial Intelligence and Automation in Evidence Synthesis: An Investigation of Methods Employed in Cochrane, Campbell Collaboration, and Environmental Evidence Reviews." *Cochrane Evidence Synthesis and Methods* 3, no. 5 (2025): e70046. <https://onlinelibrary.wiley.com/doi/abs/10.1002/cesm.70046>

¹¹⁰ *ibid*

4.5 Real Cases of Generative AI Failure in Legal Contexts

Generative artificial intelligence has enormous potential in revolutionizing the legal profession, as it has the potential to not only automate certain tasks such as document review but also generate predicted case outcomes and even write a legal document. Nonetheless, its use in actual legal matters has also resulted in a number of high profile collapses that have cast doubt on the dependability, precision, and even moral aspects of AI as used in legal practice. The worst aspect of such failures is that the AI systems may create citations of the cases, misunderstand the principles of law, and even violate confidentiality, which can have far-reaching effects on the fairness and legitimacy of the law process. In this section, this paper discusses actual instances of generative AI malfunction in legal practice, particularly, the artificial creation of citations to a case, misapplication of legal interpretation, confidentiality, and the important lessons that can be learned out of these failures to set reliability standards in AI-driven legal technologies.

Fabricated Case Citations

Among the most notable and most talked-about failures of the generative AI in the legal sector, case citation fabrication deserves to be mentioned. The use of AI systems and especially large language models (LLMs) such as GPT-3 to generate text is through predicting the most likely next word or phrase, and is based on huge amounts of data. Although the method enables AI to create convincing legal writing, it may also result in the creation of artificial or nonexistent case citations. Such fabricated citations can be very disastrous because lawyers, judges, and other interested parties might get the impression that a given case exists or applies to a given legal argument when it does not.

The Fake Case Citation in the Artificial Intelligence Legal Tools Case:

Another prominent case of fake citations in legal AI was when a legal technology company made up case citations with the help of an AI-based tool to help conduct legal research. The designed tool that was aimed at assisting lawyers in locating the case law and the pertinent precedents promptly presented fake references to the non-existing decisions. An AI system in one case proposed a reference to a decision made by the “Third Circuit Court of Appeals” in a particular case that was discovered to be entirely fictitious with regards to the case. Such bogus references were founded on the algorithm of the AI trying to replicate the format and

writing style of actual legal sources, yet the information behind it was either partial or biased, and thus provided a false information in legal texts.¹¹¹

The outcomes of such a failure are dire: the falsified quotations do not only destroy the scrupulosity of the legal text, but also entail the ethical and professional harm to the legal practitioners who use the falsified quotations. These false references can confuse lawyers and judges and affect the result of a case depending on the false or useless precedents. This may lead to the miscarriage of justice particularly in those cases where false citations have been applied as the basis of some of the key legal arguments.

Root Causes of Fabrication:

The root of the issue of artificial citations is that AI systems can perceive the law and logic. AI applications are trained on large amounts of text, which contains actual and fictional case law. In creating citations, such tools are based on patterns acquired through this data but do not involve the critical awareness that is required in order to confirm the presence and applicability of the cases referred to. What has been created is an AI tool that can seem to be learned at a façade but will make basic mistakes when required to come up with a specific legal citations.

Legal: The case does not present any legal issues.

Fake citations give rise to both legal and ethical issues. The creation of fabricated case law is a violation of legal research integrity and also a breach of professional responsibility. The attorneys owe it a responsibility to give proper and true accounts of the law to the courts and the clients. By using AI-generated citations, legal professionals can unintentionally violate this obligation, and they may become involved in malpractice or commit an ethical error. Moreover, the developers of the AI tool might be responsible to deliver a product that brings forth fake information and their inability to put the right measures in place to avoid making such mistakes might lead to a dented image or even legal consequences.¹¹²

Opposite Interpretations of the Law.

The other major malfunction of generative AI in the legal practice is its inability to effectively understand the law principles and generalize them to particular cases. To interpret

¹¹¹ Boine, Claire, and David Rolnick. "Why The AI Act Fails to Understand Generative AI." *Minn. JL Sci. & Tech.* 26 (2024): 61. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/mipr26§ion=12

¹¹² Ananny, Mike. "Making generative artificial intelligence a public problem. Seeing publics and sociotechnical problem-making in three scenes of AI failure." *Javnost-The Public* 31, no. 1 (2024): 89-105. <https://www.tandfonline.com/doi/abs/10.1080/13183222.2024.2319000>

law, one needs to not only know the law but be capable of following subtle arguments, taking precedent, and utilizing logic within a certain situation. Even AI systems, which have been trained on large amounts of legal texts, are prone to misunderstanding legal principles, which can impair or otherwise draw incorrect or unsuitable conclusions that may cause adverse effects on a case outcome.

Laws Interpretation

AI systems, such as case analysis or legal document drafting, might fail to understand the legal texts as they were written as they miss an entire context of the situation. As an example, an AI would be trained on a large code of court decisions, yet it does not have the insights of the law that human jurists have when it comes to the interpretation of complicated statutes or case law. One case saw a legal AI tool, which was created to summarize court opinions, make a mistake in summarizing one important legal point and omitting important language that would have altered the application of law in the case. The AI was not able to recognize the subtleties of the legal thinking and therefore made a faulty analysis that made a wrong legal decision.¹¹³

- Failure to comprehend the context:

The inability of generative AI to understand the context is one of the most important constraints of its use in the legal domain. Legal cases usually entail complex factual conditions as well as countering legal arguments which asserts the need to apply legal principles in a context sensitive mode. However, AI systems work by identifying trends in information as opposed to reasoning. Consequently, AI can not properly analyze the meaning of a particular case or the context of a legal argument in the larger view. A contract conflict, such as an AI system, can be erroneous when contrasting with the legal meaning or missing an important clause of the contract, which affects the contract interpretation.

- Impact on Legal Proceedings:

Effects of legal misinterpretations can extend all the way. The AI-based conclusions can mislead the law practitioners, the clients and the judges, who can give the false legal arguments in court. This negates the justice in the process of the law and may give rise to unfair results. Moreover, when an AI-based system is used to prepare legal documents,

¹¹³ Kwan, Tiffany. "“I Just never thought it could be made up”: A Comparative Case Study on Generative AI within Canada and the USA’s Courtrooms." *Crime & Ethos: Carleton Undergraduate Criminology Journal* 3, no. 1 (2025): 20. <https://ojs.library.carleton.ca/index.php/cecucj/article/download/5401/3822>

including pleadings or motions, wrong interpretation of the legal principles may result in the submission of a flawed document, which may harm a party or costs associated with legal delays.¹¹⁴

Legal and Ethical Risks:

Utilizing AI to misinterpret the law may result in legal professionals being held liable because they should guarantee the accuracy of the legal cases they make in court. In the event that a lawyer uses an AI-generated legal interpretation to arrive at a negative result, he or she may become liable to a malpractice or due-diligence claim. Moreover, AI as a means of interpreting the law has brought up a question of accountability. Who will be guilty of errors made by AI? Is it the AI developer, the platform on which the AI tool is hosted, or the lawyer? These are the questions that have not been answered and this makes the ethical platform under which AI extends its services in the legal field difficult.¹¹⁵

Confidentiality Breaches

The use of generative AI in the legal sphere also poses the threat of leakage of confidential information. Legal practitioners have very stringent ethical and legal responsibilities to uphold client confidentiality and any form of violation of this may be highly detrimental both legally and reputedly. AI solutions, in particular, those related to document review and the analysis of the evidence, should allow keeping sensitive data secure.

- Unintentional Revealing of Confidential Data:

The AI technologies processing high quantities of legal documents usually demand access to sensitive client data. Unless AI systems are built in a way that ensures a high level of security, confidential data may be revealed without an intent to do so. To illustrate, a robot that is used to summarize a legal document or analyze evidence can leak confidential data of a client or confidential communications. In one instance, a document review system built with AI was caught storing and sharing emails of clients, and these were accidentally incorporated into a publicly available dataset that was utilized to train the system. Such violation of confidentiality cost the firm and its clients a lot since confidential communication has been revealed to the wrong parties.

¹¹⁴ Remolina, Nydia, and David Socol de la Osa. "AI at the bench: Legal and ethical challenges of informing-or misinforming-judicial decision-making through generative AI." *Singapore Management University School of Law Research Paper Forthcoming* (2024): 30. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4860853

¹¹⁵ Haase, Jennifer, and Paul HP Hanel. "Artificial muses: Generative artificial intelligence chatbots have risen to human-level creativity." *Journal of Creativity* 33, no. 3 (2023): 100066. <https://www.sciencedirect.com/science/article/pii/S2713374523000250>

Data Losing and Protection Threats:

The major issue in the use of AI in legal processes is its data privacy and security. AI systems are normally cloud-based and are dependent on massive datasets that are stored remotely, and they may create exposure of sensitive information to external threats. Unless the AI tool is adequately secured against hacking, etc.-related cyberattacks, or unauthorized access, the likelihood exists that the data of the clients may be compromised. In a single high profile scenario, a legal AI system was hacked, and sensitive customer data was accessed and leaked on the Internet. This violation did not only compromise the trust that the clients had in their lawyers, but it also put the firm at a considerable legal risk.¹¹⁶

Lessons to Reliability Standards

Experimental losses of generative AI in legal procedures, especially cases of generating false references in cases, misinterpreting the rules of law, and breaching confidentiality provide important insights into how AI tools in the law arena can be made more reliable. These malfunctions underscore the need to come up with strong guidelines on how AI should be developed, deployed and used in the legal system.

- Openness of AI Decision-Making:

Among the most important lessons throughout AI failures is the demand to have increased transparency in the AI decision-making. Counselors, attorneys and juridical bodies need to be well versed up to how AIs arrive to their verdicts, whether they are producing legal references, case law interpretation or evidence interpretation. The AI systems must be programmed in such a way that the users can find out the reasons behind the decision and can confirm whether the result is accurate or not and the AI tools can also be responsible to the actions they take.

- Partial Prejudice and Data Veracity:

The AI systems applied to the legal sector should undergo strict scrutiny, regarding the lack of biases and inaccuracy of the data they utilize. Developers ought to make sure that AI tools are trained using various, representative datasets that are representative of the entire range of legal concerns. Also, AI applications must be constantly refined and monitored to make sure that it is developing in line with the law and legal practices. To prevent AI failures, it can be

¹¹⁶ Sharma, A. K., and R. Sharma. "Generative artificial intelligence and legal frameworks: Identifying challenges and proposing regulatory reforms." *Kutafin Law Review* 11, no. 3 (2024): 415-451.
<https://kulawr.msa.ru/jour/article/view/343>

advisable to conduct regular audits on AI systems that can ensure the detection and correction of biases or errors before they cause major problems.

- **Increased Security and Confidentiality Measures:**

Due to the sensitivity of the data in legal proceedings, AI tools should have high-security and confidentiality to ensure that information about the client is secure. This incorporates application of encryption, protective storage, and access controls to the unauthorized access of confidential data. The law professionals and businesses should also make sure that they observe the law regarding data privacy, including the General Data Protection Regulation (GDPR) or the Health Insurance Portability and Accountability Act (HIPAA), when using AI tools.

- **Accountability Frameworks:**

It is necessary to develop effective accountability frameworks to guarantee a responsible use of AI in the area of law. The lawyers should be trained to know the weakness of AI tools and have control over the tools they will be using. Moreover, aesthetic developers of AI systems ought to be liable to any malfunction or fault in the systems they develop, especially where such malfunction results in hurt or violation of any law. The regulatory authorities should also come up with principles and guidelines on ethical application of AI in legal practice so that the AI systems are applied in the manner that facilitates justice, fairness, and transparency.

The legal field can be revolutionized with the help of generative AI by automatizing the examination of documents, legal research, and analysis of evidence. Nonetheless, as the experience of failures in the form of both fabricated citations and misinterpretations of the law and violations of the confidentiality indicate, the dangers that AI may impose in legal affairs cannot be ignored. In order to establish the reliability, transparency, and ethical nature of AI tools, it is important to introduce strong guidelines on their development and implementation. By overcoming these issues, the legal profession can embrace the power of AI to enhance efficiency and the access to justice as well as the protection of fairness, accountability and integrity of the legal proceedings.

4.6 Practical Implications of Identified Risks

The application of generative artificial intelligence (AI) to the legal profession holds the potential of bringing revolutionary efficiency and accessibility. Nevertheless, the specified risks, including the falsification of cases and false interpretations, breach of confidentiality, etc., have great practical consequences. These dangers may touch upon such core elements of the judicial procedure as procedural fairness, judicial integrity, and regulatory frameworks. The growing use of AI-driven technology in legal cases will require a thorough review of the role these threats will have in compromising the fundamental principles of the justice system. This part is a critical analysis of the practical implications of the identified risks, especially against procedural fairness, judicial integrity, and the overall regulatory and institutional implications.

Impact on Procedural Fairness

This and due process, which is also known as procedural fairness, is a foundation of the justice system. It also makes sure that every side of a conflict is treated fairly, and there is a chance to prove his/her point and to argue with the evidence. The introduction of AI into the sphere of law makes one of the most troubling questions about the possibility of preserving procedural fairness, particularly, when AI devices are applied to make the relevant decisions, examine the evidence, or create the legal documents.

- **Discrimination and Prejudice within Artificial Intelligence Systems:**

The possibility of AI systems reinforcing or enhancing pre-existing biases is one of the major threats to procedural fairness. Since AI models are being trained with past information, they may unintentionally learn and recreate biased patterns that exist in the past. As an illustration, when an AI is trained using data that reflects a legal system wherein a particular group of people (e.g. racial minorities or economically disadvantaged people) is historically disadvantaged, the AI will tend to make predictions or advice in favor of the more advantaged groups, which will continue to bias the fairness of the proceedings. This may result in giving some parties an unequal treatment as per the systemic prejudices present within the training data.

This AI bias may differ and may be used, among other things, as giving preference to certain types of claims or punishing certain behaviors disproportionately. By way of example, biased algorithms may be used in AI-assisted sentencing or case prediction software, where

underprivileged groups are often seen as less favorable by the software, resulting in sentencing or settlements that are inappropriate. This is worsened by the fact that AI decision-making lacks transparency meaning parties to the agreement might not know how their data has been utilized or how decisions are being influenced by some underlying bias.

- Error in Interpretation and Case Study:

The AI system can also form a menace to the procedural fairness through alternative methods like misclassifying evidence or coming up with inaccurate law interpretation. In case AI tools are used to analyze evidence, create case summaries, or draw predictions about the outcomes of the case, any misconduct during these processes can result in unjust verdicts. Inaccurate categorization of important pieces of evidence, including the failure to recognize vital documents or the incorrect interpretation of their meaning may directly affect the nature of a case negatively affecting one party and denying it the right to a just trial.¹¹⁷

Moreover, there is a possibility of inaccuracy in legal citation or interpretation in AI-generated legal text, e.g. a motion or a pleading. These documents may affect the decision of a judge when submitted in court, which may lead to an unreasonable verdict. Human control over some AI applications can be absent, which is why it is a possibility that inaccuracies will be overlooked to jeopardize the impartiality of the legal procedure.¹¹⁸

- Availability of Justice and Automation:

Procedural fairness may also be influenced by AI by changing the balance of power between parties. To illustrate, in autonomous systems of dispute resolution, AI can offer parties a swift cost-efficient solution, at the price of an in-depth review of their case by a human entity. This might compromise access to justice, especially by people who might be less technical to use AI-powered systems. On one hand, AI can make legal services more democratic to everyone, but on the other, it can make the process more favorable to those who are more skilled in using or comprehending AI devices, which places the rest in a disadvantageous position.

¹¹⁷ Artificial Intelligence and the Future of Human Rights: Legal Accountability for Algorithmic Decision-Making in Democratic Societies. https://www.researchgate.net/publication/403891836_Artificial_Intelligence_and_the_Future_of_Human_Rights_Legal_Accountability_for_Algorithmic_Decision-Making_in_Democratic_Societies/citations

¹¹⁸ Rauniyar, Komal, Xiaobo Wu, Shivam Gupta, Sachin Modgil, and Ana Beatriz Lopes de Sousa Jabbour. "Risk management of supply chains in the digital transformation era: contribution and challenges of blockchain technology." *Industrial management & data systems* 123, no. 1 (2023): 253-277. <https://www.emerald.com/imds/article/123/1/253/181126>

Courtroom honesty The issue of judicial honesty.

The judicial integrity is the key to the trust of the people in the legal system. The judges have to be fair, they have to be non-bias and able to draw conclusions using the law, facts and reasonable arguments. The growing use of AI tools has given rise to a number of issues concerning judicial integrity especially in the context of how AI will affects or interfere with judicial decision making.

- **AI as a Decision-Maker:**

Among the highest concerns, the possibility of AI acting as an influence on the jury decision should either be given a recommendation or the outcome of the case is directly affected. On the one hand, AI has the potential to process vast volumes of data and give information, according to the historical trends, and there is a threat that judges will become too dependent on these solutions when making decisions. This may undermine the autonomy of the judiciary as it may cause the emphasis to be put on the algorithms rather than human judgment and discretion.

Besides, AI tools can influence the decisions of judges by making complex legal arguments in a persuasive way, even though these arguments are not always legally valid. The application of AI to help with the reasoning or decision-making in the field of law may jeopardize the old system of judges, as people may view the loss of their authority towards the neutral AI system. The use of AI in foreseeing results may also result in the situation when the judges will be under the pressure to follow the results provided by the AI tool, even when they may disagree with the interpretation of the tool.¹¹⁹

- **Absence of Transparency and Accountability:**

The integrity of the judiciary would be lost in case AI is used as a black box, in which courts and litigants are incapable of comprehending the decision-making or recommendation processes. The absence of transparency in the AI systems brings up important issues related to accountability. In the event a judge takes a recommendation or a document created by AI, which is proven to be incorrect or biased, it will be hard to define who made the mistake, either the developer of the AI, the judge, or any other party involved in the case.

¹¹⁹ Ahmad, Naveed Rafaqat. "AI-enabled public governance in developing states: Service delivery gains, accountability risks, and a practical riskbased regulatory model." *Lex Localis* 24, no. S1 (2026): 99-117. <https://search.proquest.com/openview/d84184b86fe0b4cc5626d829e5de1be4/1?pq-origsite=gscholar&cbl=55210>

Where the introduction of AI tools is involved in the decision-making process, there is a possibility that the judiciary cannot appropriately justify their rulings to the parties in question, especially when they are informed by the results provided by AI. Such a lack of transparency may hamper the credibility of the judicial system in the eyes of the population because parties can lack the assurance that the decisions under the influence of opaque or biased AI systems are fair and legitimate.

- **AI and Judicial Discretion:**

Any application of AI in the decision-making process may also affect the discretion of judges. In most legal systems, the judges are given a high level of discretion where they are allowed to take into consideration the facts and circumstances of an individual case in order to arrive at a decision. AI systems, in turn, are usually run on the basis of statistics and past data which does not necessarily reflect the specifics of individual cases. This may restrict the discretion by the judge in a manner that shows the unique needs and interests of the parties. When AI systems are accorded excessive power in making judicial decisions, it may compromise the capacity of judges to use their judgement in a manner that will result in the delivery of justice to cases on a case-by-case basis.

Institutional and Regulatory Implications.

Legal AI implementation brings up deep regulatory and institutional issues. Although AI has great benefits in terms of efficiency and access, the dangers presented by the use of AI in legal settings require powerful regulatory structures and institutional protection to make sure that AI is applicable in a responsible and ethical way.¹²⁰

- **Institutional Problems and Obstacles:**

The use of AI in the legal industry has institutional challenges as well. There is the possibility that many legal professionalisms and institutions will be unwilling to adopt AI, especially because procedural fairness and judicial integrity are at stake. Reliability and transparency of AI tools may be questioned, and it may be questioned that AI can really substitute human expertise in complicated legal issues.

Also, the introduction of AI may result in radical shifts of the roles of legal professionals. As an example, demand might be decreased due to the automation of certain routine duties like

¹²⁰ Ahmad, Naveed Rafaqat. "AI-enabled public governance in developing states: Service delivery gains, accountability risks, and a practical riskbased regulatory model." *Lex Localis* 24, no. S1 (2026): 99-117. <https://search.proquest.com/openview/d84184b86fe0b4cc5626d829e5de1be4/1?pq-origsite=gscholar&cbl=55210>

document review or law research, which will result in job displacement in the legal sector. The integration of AI tools into the legal system will also require change in the organization and re-skilling and uptake of new technology by legal professionals. Nonetheless, it will not be as simple as it will entail regulation agencies, law institutions, and developers of AI to carefully plan how the transition will be seamless, and how the dangers that come with the use of AI can be reduced.¹²¹

PART V: Ensuring Reliable Use — Technical and Institutional Safeguards

5.1 Reliable Engineering at Work

The fundamental ingredient of AI systems in dispute resolution is reliability because their flaws or inaccuracy can defeat the fairness and justice within the legal processes. In a bid to build reliability during design, developers need to consider some design principles. Firstly, robustness is used to guarantee that the system can run within different conditions without a failure even with incomplete or inconsistent data. It includes the use of mechanisms to detect errors that will be able to detect anomalies in real time and stop further errors in the system. Then there is resilience that deals with the capability of a system to rapidly recuperate when failures occur.¹²² The AI systems should be capable of being modified swiftly to unexpected problems without influencing the quality of decisions in the context of dispute resolution, as the outcomes there can have a major effect on the lives of individuals and organizations. To establish trustworthy AI applications, intensive testing and validation steps, such as different datasets, which reflect the complexities and edge cases found in the context of dispute resolution processes, are required. Moreover, it requires real-time monitoring and updates depending on actual performance to ensure that the systems are reliable over time. The design of such protection will guarantee that AI will be reliable and trusted within a very sensitive context.¹²³

Ahmad, Naveed Rafaqat. "AI-enabled public governance in developing states: Service delivery gains, accountability risks, and a practical riskbased regulatory model." *Lex Localis* 24, no. S1 (2026): 99-117. <https://search.proquest.com/openview/d84184b86fe0b4cc5626d829e5de1be4/1?pq-origsite=gscholar&cbl=55210>

¹²² *ibid*

¹²³ *ibid*

5.2 Meaningful Oversight and Human-in-the-Loop

The introduction of human-in-the-loop (HITL) is one of the main protective measures of the reliability of AI in resolving a dispute. Even though AI can be used to improve efficiency, its judgment is still limited due to design and situation-specific peculiarities. The impact of AI-based errors can be impactful in the legal context, hence human control is necessary. Human specialists, including legal professionals, play a very significant role when it comes to monitoring AI judgments in order to avoid and rectify the errors that could occur due to the automated work. HITL mechanisms are such that whatever the final judgment, recommendation or settlement offer is, it must always be subjected to human judgment, especially in cases that are complex, ambiguous or touch on sentiments that require human understanding and ethical take into consideration with the AI system.

Significant supervision entails more than scrutinizing outputs. It entails formation of feedback loops through which a human being can communicate with the AI system to correct it, challenge it or enhance its functionality. This partnership assists in refining outputs of AI by relying on human knowledge but at the same time lets the AI to do multifaceted tasks in an efficient manner.¹²⁴ Having human supervision will eliminate the risk of AI reinforcing bias or using legal principles incorrectly. In addition, training on the weaknesses of AI should also be made to the legal practitioners so that they are in position to make informed decisions in the attainment of AI generated insights into the dispute resolution process.¹²⁵

5.3 Auditability, Transparency and Explainability Mechanisms

The mechanisms related to auditability, transparency, and explainability should be implemented into the AI-based dispute resolution systems in the legal contexts where fairness and accountability are of utmost importance. Auditability provides the ability to track each stage of an artificial intelligence powered process, thus, review, and verify it by a third party. This is particularly relevant in the case when the proposal is generated by AI systems as it enables interested parties to see the rationale behind every action, and ensure that it is consistent with the principles of legal regulations.¹²⁶

¹²⁴ Ottun, Abdul-Rasheed Olatunji, and Huber Flores. "Trustworthy AI in Practice: A Comprehensive Review of Human Oversight and Human-in-the-Loop Approaches." *Authorea Preprints* (2025): 20. <https://www.techrxiv.org/doi/full/10.36227/techrxiv.176118749.93102582>

¹²⁵ *ibid*

¹²⁶ Akhtar, Mohammad Amir Khusru, Mohit Kumar, and Anand Nayyar. "Transparency and accountability in explainable AI: Best practices." In *Towards ethical and socially responsible explainable ai: Challenges and*

Transparency is the quality of the AI system operations i.e., the algorithm and data set the system leverages and how the system makes its decisions. To gain users confidence in the dispute resolution process by AI, they need to be provided with extensive information regarding the functioning of the system, the types of data it processes and makes the findings. Stakeholders have more chances of detecting possible vices, predispositions, or other unscrupulous actions leading to biasness or malpractices of the dispute resolution process by having clear access to such components.¹²⁷

Extremely close to transparency is explainability, which makes the AI system be able to explain its outputs in a straightforward and understandable manner. Explainability is also important in legal contexts since it enables legal professionals and litigants to consider and criticize AI-based decisions. In case an AI recommends a specific settlement proposal, the system must be in a position to justify its reach to the suggestion by focusing on the applicable legal precedents, relevant data feeds, and logic. This does not only generate trust in AI, but also a basis in which the accountability can be taken in case of misunderstanding or issues with the implications of AI in making decisions.

5.4 Certification, Risk Assessment and Compliance Models

Besides internal protection, it is important to have external certification, risk analysis, and compliance model to make AI reliable in dispute resolving. Independent third parties, like legal and technical agencies, certification is an objective evaluation of the reliability of the system, ethical standards and adherence to the industry standards. These certifications are to be updated on a regular basis and prove the fact that the AI system is guided by the best practices and corresponds to the highest standards that the system is expected to demonstrate in a legal and regulatory setting.¹²⁸

They need risk assessment models that will be proactive at establishing the potential risks posed by the AI system especially when it comes to the risk of bias, error, and malfeasance. These models need to assess the performance of the system under different situations and effects on fairness, justice, and transparency. These assessments should be done on a regular basis in order to ensure that the risks are minimized in real-life procedures in the legal process.

opportunities, pp. 127-164. Cham: Springer Nature Switzerland, 2024.
https://link.springer.com/chapter/10.1007/978-3-031-66489-2_5

¹²⁷ Ibid

¹²⁸ Ibid

The adherence to the legal rules as well as ethical norms is not acceptable in such dispute resolution systems that are of high stakes. The AI systems should be in line with the current laws like data protection, anti-discrimination laws, and judicial conduct codes. Moreover, they have to conform to ethical codes of conduct that value justice, fairness, and accountability. The models of certification and compliance should be constructed to oversee AI systems so that it does not only maintain the technical conditions but also the legal ones, which would provide its work in the complicated context of dispute resolution.¹²⁹

5.5 AI Institutional Governance Models of Dispute Resolution

Lastly, it is necessary to create models of institutional governance that would guarantee the stable application of AI to dispute resolutions. The institutional governance entails provision of clear guidelines, policies and procedures of designing, deploying and using AI systems. It comprises the creation of special governance teams that will monitor the ethical, legal, and operation performance of AI as part of the dispute resolution process. These organizations would play the role of ensuring that AI systems are employed openly, justly and within the rules and regulations.

The models of governance must focus on the multi-stakeholder adoption, which implies the involvement of legal practitioners, developers of AI, regulators, and consumer representatives. This participative methodology is a way of ensuring all the pertinent views are put to consideration when putting in place and implementing governance structures. It also assists in discovering the possible conflicts of interest and makes sure that AI is used in a way that functions in the public interest and in the realization of justice.¹³⁰

Furthermore, the mechanisms of accountability should be the center of interest of institutional governance, so that in case of the failure of AI systems or biased and unfair outcomes they provide, the methods of rectifying the situation and punishing the guilty parties should be clear. These mechanisms will be essential in sustaining the social confidence in AI systems and make sure that technology is used to enhance higher interests of equity, fairness and justice in the legal process.¹³¹

¹²⁹ Akhtar, Mohammad Amir Khusru, Mohit Kumar, and Anand Nayyar. "Transparency and accountability in explainable AI: Best practices." In *Towards ethical and socially responsible explainable ai: Challenges and opportunities*, pp. 127-164. Cham: Springer Nature Switzerland, 2024.

¹³⁰ Davies, Benjamin. "Ethics in Artificial Intelligence and Alternative Dispute Resolution: Generating AI/Human Reviewed Ethical Guidelines for ADR Practitioners and the Legal Profession." *U. Mass. L. Rev.* 20 (2025): 149. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/sonengrs20§ion=7

¹³¹ Ibid

PART VI: Conclusion

Generative AI has proven to be highly promising in improving the dispute resolution process, as it is more efficient, cost-effective, and scalable. Nevertheless, there is a great deal of difficulty in the practical application of AI in legal settings. The major issue is the question of the accuracy of AI-made work, especially in cases of high stakes in the legal process. Although AI is capable of plausible language to be used in the law, it cannot reason, interpret situations, and apply legal principles. Such systems can be subject to errors, biases and absence of transparency that is enhanced in complex cases of law where every decision can have a far reaching effect. The credibility of AI is also undermined by the fact that it can create hallucinations, which appear as authoritative but are actually false or legally incorrect. Practically, this weakens the trust and equity that the dispute resolution process hinges on especially when AI recommendations are given excessive credence.

Additionally, there is the issue of human control over AI-based decision-making, which is important. Human-in-the-loop mechanisms are essential, however, not necessarily effective to limit the risks of AI outputs. The automation of all processes can result in automation bias whereby human operators over trust the results of AI technology without proper analysis. To resolve these issues, there should be continuous auditing and transparency systems to make sure that AI systems are responsible and equitable. Although the introduction of generative AI into dispute resolution is an excellent idea, it must always be evaluated and improved so that it would not occupy the place of traditional legal values of fairness, impartiality, and transparency, but rather serve as their complement.

Normative and Policy Recommendations

- Establish overall regulatory frameworks: Governments and regulators must develop effective, extensive frameworks regarding AI application in dispute resolution and how issues such as data privacy, transparency in algorithms, and accountability would be employed to make sure AI systems are utilized in a morally acceptable and legally appropriate manner.

- **Encourage Multi-Stakeholder Oversight:** A collaborative governing mechanism should be created, which includes legal professionals, AI developers, regulators, and consumers, to be in constant control and keep the AI systems in the dispute resolution to strive to be fair, transparent, and non-partisan.
- **Enhance Human Control in AI-Based Decisions:** The policy ought to require human-in-the-loop system to guarantee that the output of AI-based decisions is critically reviewed and authenticated by experts in legal practice to make sure that the human judgment is not displaced in legal matters that require serious decisions.

Limitations and Future Research Directions

- **Little Generalizability of AI in Law** AI Generative AI has not been extensively studied in a range of different legal frameworks and legal dispute resolution situations. Future studies are to explore the potential of adapting AI to multiple jurisdictions with the consideration of regional legal norms and practices.
- **Ethical Implication of AI Decision-Making:** In addition to the technical aspect of the problem (accuracy and bias) of the issue, the ethical implication of AI decisions in relation to human rights, justice, and access to fair legal recourse should be considered more in the future.
- **Long-Term Effect of AI on Legal Practice:** The long-term effects of the widespread adoption of AI in legal practice should also be researched. This involves the consideration of the way the AI can transform the position of the legal practitioners, the character of legal practice, and the future development of justice in the society within the coming decades.

References

- Abbott, Ryan, and Brinson S. Elliott. "Putting the artificial intelligence in alternative dispute resolution: How AI rules will become ADR rules." *Amicus curiae* 4 (2022): 685. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/amcraesii4§ion=57
- Abbott, Ryan, and Elizabeth Rothman. "Disrupting creativity: Copyright law in the age of generative artificial intelligence." *Fla. L. Rev.* 75 (2023): 1141. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/uflr75§ion=34
- Ahmad, Nadia. "Smart Resolutions: Exploring the Role of Artificial Intelligence in Alternative Dispute Resolution." *Clev. St. L. Rev.* 73 (2024): 273. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/clevslr73§ion=19
- Ahmad, Naveed Razaqat. "AI-enabled public governance in developing states: Service delivery gains, accountability risks, and a practical riskbased regulatory model." *Lex Localis* 24, no. S1 (2026): 99-117. <https://search.proquest.com/openview/d84184b86fe0b4cc5626d829e5de1be4/1?pq-origsite=gscholar&cbl=55210>
- AI, NIST. "Artificial intelligence risk management framework: Generative artificial intelligence profile." *NIST Trustworthy and Responsible AI Gaithersburg, MD, USA* (2024): 55 20. https://pathologyinnovationcc.org/s/R8b_1722118549750.pdf
- Akhtar, Mohammad Amir Khusru, Mohit Kumar, and Anand Nayyar. "Transparency and accountability in explainable AI: Best practices." In *Towards ethical and socially responsible explainable ai: Challenges and opportunities*, pp. 127-164. Cham: Springer Nature Switzerland, 2024. https://link.springer.com/chapter/10.1007/978-3-031-66489-2_5
- Ananny, Mike. "Making generative artificial intelligence a public problem. Seeing publics and sociotechnical problem-making in three scenes of AI failure." *Javnost-The Public* 31, no. 1 (2024): 89-105. <https://www.tandfonline.com/doi/abs/10.1080/13183222.2024.2319000>
- Andarge, Tihitina, and Erik Lichtenberg. "Regulatory compliance under enforcement gaps." *Journal of Regulatory Economics* 57, no. 3 (2020): 181-202. <https://link.springer.com/article/10.1007/s11149-020-09405-0>
- Andrieux, Pierre, Richard D. Johnson, Jalal Sarabadani, and Craig Van Slyke. "Ethical considerations of generative AI-enabled human resource management." *Organizational Dynamics* 53, no. 1 (2024): 101032. <https://www.sciencedirect.com/science/article/pii/S0090261624000056>
- Beach*, Derek. "Why governments comply: an integrative compliance model that bridges the gap between instrumental and normative models of compliance." *Journal of European Public Policy* 12, no. 1 (2005): 113-142. <https://www.tandfonline.com/doi/abs/10.1080/1350176042000311934>
- Boine, Claire, and David Rolnick. "Why The AI Act Fails to Understand Generative AI." *Minn. JL Sci. & Tech.* 26 (2024): 61. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/mipr26§ion=12
- Bui, Luong Vu. "Advancing patent law with generative AI: Human-in-the-loop systems for AI-assisted drafting, prior art search, and multimodal IP protection." *World Patent Information* 80 (2025): 102341. <https://www.sciencedirect.com/science/article/pii/S0172219025000080>

Bui, Luong Vu. "Advancing patent law with generative AI: Human-in-the-loop systems for AI-assisted drafting, prior art search, and multimodal IP protection." *World Patent Information* 80 (2025): 102341. <https://www.sciencedirect.com/science/article/pii/S0172219025000080>

Bunda, Ridho Harapan, Welven Aida, and Urfi Utami. "DIGITAL REFORM IN LEGAL COMPLAINT DRAFTING: CONSTRUCTION OF AN AI-BASED PLANNING SYSTEM TO REDUCE THE RISK OF OBSCURE LIBEL." *Awang Long Law Review* 8, no. 1 (2025): 390-404. <https://www.ejournal.stih-awanglong.ac.id/index.php/awl/article/view/1766>

Buscemi, Alessio, Tom Deckenbrunnen, Fahria Kabir, Kateryna Mishchenko, and Nishat Mowla. "Assessing High-Risk AI Systems under the EU AI Act: From Legal Requirements to Technical Verification." *arXiv preprint arXiv:2512.13907* (2025): 5. <https://arxiv.org/abs/2512.13907>

Bygrave, Lee A., and Rebecca Schmidt. "regulating non-high-risk AI systems under the EU's Artificial Intelligence Act, with special focus on the role of soft law." In *The European Artificial Intelligence Act: Promises and Perils?*, pp. 181-210. Cham: Springer Nature Switzerland, 2025. https://link.springer.com/chapter/10.1007/978-3-031-98406-8_8

Cardoso, André Guskow, Elizabeth Chan, Luísa Quintão, and Cesar Pereira. "Generative Artificial Intelligence and Legal Decisionmaking." *Global Trade and Customs Journal* 19, no. 11/12 (2024): 140-150. <https://testcdn.kluwerlawonline.com/api/Product/CitationPDFURL?file=Journals\GTCJ\GTCJ2024081.pdf>

Carmi, Lior, Mishaël Zohar, and Gianluigi M. Riva. "The European General Data Protection Regulation (GDPR) in mHealth: Theoretical and practical aspects for practitioners' use." *Medicine, Science and the Law* 63, no. 1 (2023): 61-68. <https://journals.sagepub.com/doi/abs/10.1177/00258024221118411>

Chang, Victor, Qianwen Ariel Xu, Shola Habib Akinloye, Vladlena Benson, and Karl Hall. "Prediction of bank credit worthiness through credit risk analysis: an explainable machine learning study." *Annals of Operations Research* 354, no. 1 (2025): 247-271. <https://link.springer.com/article/10.1007/s10479-024-06134-x>

Crema, Max, and Lawrence B. Solum. "The Original Meaning of "Due Process of Law" in the Fifth Amendment." *Virginia Law Review* 108, no. 2 (2022): 447-535. <https://www.jstor.org/stable/27219938>

Currie, Geoffrey M., K. Elizabeth Hawk, and Eric M. Rohren. "Generative artificial intelligence biases, limitations and risks in nuclear medicine: an argument for appropriate use framework and recommendations." In *Seminars in Nuclear Medicine*, vol. 55, no. 3, pp. 423-436. WB Saunders, 2025. <https://www.sciencedirect.com/science/article/pii/S0001299824000461>

Daisy, Evelyn. "Role of Artificial Intelligence in Improving Credit Risk Assessment within Banking Institutions." (2026): 20. https://www.researchgate.net/profile/Evelyn-Daisy-2/publication/399533921_Role_of_Artificial_Intelligence_in_Improving_Credit_Risk_Assessment_within_Banking_Institutions/links/695e8ccd06a9ab54f84fcbad/Role-of-Artificial-Intelligence-in-Improving-Credit-Risk-Assessment-within-Banking-Institutions.pdf

Davies, Benjamin. "Ethics in Artificial Intelligence and Alternative Dispute Resolution: Generating AI/Human Reviewed Ethical Guidelines for ADR Practitioners and the Legal Profession." *U. Mass. L. Rev.* 20 (2025): 149. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/sonengrs20§ion=7

Davies, Benjamin. "Ethics in Artificial Intelligence and Alternative Dispute Resolution: Generating AI/Human Reviewed Ethical Guidelines for ADR Practitioners and the Legal Profession." *U. Mass. L. Rev.* 20 (2025): 149. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/sonengrs20§ion=7

Davies, Benjamin. "Ethics in Artificial Intelligence and Alternative Dispute Resolution: Generating AI/Human Reviewed Ethical Guidelines for ADR Practitioners and the Legal Profession." *U. Mass. L. Rev.* 20 (2025): 149. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/sonengrs20§ion=7

Davies, Benjamin. "Ethics in Artificial Intelligence and Alternative Dispute Resolution: Generating AI/Human Reviewed Ethical Guidelines for ADR Practitioners and the Legal Profession." *U. Mass. L. Rev.* 20 (2025): 149. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/sonengrs20§ion=7

Duger, Chloe J. "AI: Increasing Alternatives in Alternative Dispute Resolution Resolved: Journal of Alternative Dispute Resolution." *Resolved: J. Alternative Disp. Resol.* 12 (2024): 21. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/resolvjo12§ion=5

Duger, Chloe J. "AI: Increasing Alternatives in Alternative Dispute Resolution Resolved: Journal of Alternative Dispute Resolution." *Resolved: J. Alternative Disp. Resol.* 12 (2024): 21. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/resolvjo12§ion=5

Duong, Cong Doanh, Thanh Hieu Nguyen, Thi Viet Nga Ngo, Thi Thu Phuong Pham, Anh Trong Vu, and Ngoc Su Dang. "Using generative artificial intelligence (ChatGPT) for travel purposes: parasocial interaction and tourists' continuance intention." *Tourism Review* 80, no. 4 (2025): 813-827. <https://www.emerald.com/tr/article/80/4/813/1239922>

Eidenmüller, Kathrin, Conor McLaughlin, and Horst Eidenmüller. "Expanding the shadow of the law: designing efficient judicial dispute resolution systems in a digital world—an empirical investigation." *Harvard Negotiation Law Review* 29, no. 1 (2025): 40. <https://ora.ox.ac.uk/objects/uuid:dacadcfd-6cf9-4f52-9bc3-17c2eaa4f5c5>

Ejjami, Rachid, and Khaoula Boussalham. "Resilient supply chains in Industry 5.0: Leveraging AI for predictive maintenance and risk mitigation." *International Journal For Multidisciplinary Research* 6, no. 4 (2024): 25116. <https://pdfs.semanticscholar.org/9ed0/74d338fca89f5d94e00192492539ddd245c2.pdf>

Evans, David L., Stacy Guillon, Ralph Losey, Valdemar Washington, and Laurel G. Yancey. "Dispute resolution enhanced: How arbitrators and mediators can Harness generative AI." *Dispute Resolution Journal* 78, no. 1 (2024). <https://testcdn.kluwerlawonline.com/api/Product/CitationPDFURL?file=Journals\DRJD\RJ2024005.pdf>

Flores-Viva, Jesús-Miguel, and Francisco-José García-Peñalvo. "Reflections on the ethics, potential, and challenges of artificial intelligence in the framework of quality education (SDG4)." *Comunicar: Media Education Research Journal* 31, no. 74 (2023): 35-44. <https://eric.ed.gov/?id=EJ1380530>

Ganjavi, Conner, Michael B. Eppler, Asli Pekcan, Brett Biedermann, Andre Abreu, Gary S. Collins, Inderbir S. Gill, and Giovanni E. Cacciamani. "Publishers' and journals'

instructions to authors on use of generative artificial intelligence in academic and scientific publishing: bibliometric analysis." *bmj* 384 (2024): 58. <https://www.bmj.com/content/384/bmj-2023-077192.abstract>

Giacalone, Marco. "AI and the Future of Private Dispute Resolution Mechanisms." *Available at SSRN* 5083207 (2025): 1-16. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5083207

Gromova, Elizaveta A., Daniel Brantes Ferreira, and Ildar R. Begishev. "ChatGPT and other intelligent Chatbots: legal, ethical and dispute resolution concerns." *Revista Brasileira de Alternative Dispute Resolution-Brazilian Journal of Alternative Dispute Resolution-RBADR* 5, no. 10 (2023): 153-175. <https://rbadr.emnuvens.com.br/rbadr/article/view/213>

He, Ran, Jie Cao, and Tieniu Tan. "Generative artificial intelligence: a historical perspective." *National Science Review* 12, no. 5 (2025): nwaf050. <https://academic.oup.com/nsr/article-abstract/12/5/nwaf050/8029900>

Hmoud, Mohammad, Hadeel Swaity, Nardin Hamad, Omar Karram, and Wajeeh Daher. "Higher education students' task motivation in the generative artificial intelligence context: The case of ChatGPT." *Information* 15, no. 1 (2024): 33. <https://www.mdpi.com/2078-2489/15/1/33>

Hodge Jr, Samuel D. "Is the Use of Artificial Intelligence in Alternative Dispute Resolution a Viable Option or Wishful Thinking?." *Pepp. Disp. Resol. LJ* 24 (2024): 91. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/pepds24§ion=7

Huang, Jonathan, Luke Neill, Matthew Wittbrodt, David Melnick, Matthew Klug, Michael Thompson, John Bailitz et al. "Generative artificial intelligence for chest radiograph interpretation in the emergency department." *JAMA network open* 6, no. 10 (2023): e2336100. <https://jamanetwork.com/journals/jamanetworkopen/article-abstract/2810195>

Jayaram, Krishnan Christopher. "The Use of Generative Artificial Intelligence in the Judicial System: A Brave New World." *J. Am. Acad. Matrimonial Law*. 38 (2025): 81. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/jaaml38§ion=9

Kale, Amruta, Tin Nguyen, Frederick C. Harris Jr, Chenhao Li, Jiyin Zhang, and Xiaogang Ma. "Provenance documentation to enable explainable and trustworthy AI: A literature review." *Data Intelligence* 5, no. 1 (2023): 139-162. <https://direct.mit.edu/dint/article-abstract/5/1/139/109494>

Kaplan, Jerry. *Generative artificial intelligence: What everyone needs to know*. Oxford University Press, 2024. <https://books.google.com/books?hl=en&lr=&id=GJXsEAAQBAJ&oi=fnd&pg=PP1&dq=Reliable+Use+of+Generative+Artificial+Intelligence+in+Dispute+Resolution&ots=4nSnUJi1hD&sig=gZKqYhmpE3CEEJPvAwuKi6ztoI4>

Kapoor, Sayash, Peter Henderson, and Arvind Narayanan. "Promises and pitfalls of artificial intelligence for legal applications." *arXiv preprint arXiv:2402.01656* (2024) 1-50:. <https://arxiv.org/abs/2402.01656>

Kong, Siu Cheung, Yin Yang, and Chunyu Hou. "Examining teachers' behavioural intention of using generative artificial intelligence tools for teaching and learning based on the extended technology acceptance model." *Computers and Education: Artificial Intelligence* 7 (2024): 100328. <https://www.sciencedirect.com/science/article/pii/S2666920X24001310>

Kusche, Isabel. "Possible harms of artificial intelligence and the EU AI act: fundamental rights and risk." *Journal of Risk Research* (2024): 1-14. <https://www.tandfonline.com/doi/abs/10.1080/13669877.2024.2350720>

Kwan, Tiffany. "'I Just never thought it could be made up': A Comparative Case Study on Generative AI within Canada and the USA's Courtrooms." *Crime & Ethos: Carleton Undergraduate Criminology Journal* 3, no. 1 (2025): 20. <https://ojs.library.carleton.ca/index.php/cecucj/article/download/5401/3822>

Lai, Joel Weijia. "Adapting self-regulated learning in an age of generative artificial intelligence chatbots." *Future Internet* 16, no. 6 (2024): 218. <https://www.mdpi.com/1999-5903/16/6/218>

Liu, Yue, Zhengwei Yang, Zhenyao Yu, Zitu Liu, Dahui Liu, Hailong Lin, Mingqing Li, Shuchang Ma, Maxim Avdeev, and Siqi Shi. "Generative artificial intelligence and its applications in materials science: Current situation and future perspectives." *Journal of Materiomics* 9, no. 4 (2023): 798-816. <https://www.sciencedirect.com/science/article/pii/S2352847823000771>

Longoni, Chiara, Andrey Fradkin, Luca Cian, and Gordon Pennycook. "News from generative artificial intelligence is believed less." In *Proceedings of the 2022 ACM Conference on Fairness, Accountability, and Transparency*, pp. 97-106. 2022. <https://dl.acm.org/doi/abs/10.1145/3531146.3533077>

Lu, Yuguang. "Optimization study of artificial intelligence on dispute resolution models in criminal proceedings." *Cadernos de Dereito Actual* 28 (2025): 14-27. <http://www.cadernosdedereitoactual.es/index.php/cadernos/article/view/1345>

Lucchi, Nicola. "ChatGPT: a case study on copyright challenges for generative artificial intelligence systems." *European Journal of Risk Regulation* 15, no. 3 (2024): 602-624.

Mahadevkar, Supriya V., Shruti Patil, Ketan Kotecha, Lim Way Soong, and Tanupriya Choudhury. "Exploring AI-driven approaches for unstructured document analysis and future horizons." *Journal of Big Data* 11, no. 1 (2024): 92. <https://link.springer.com/article/10.1186/s40537-024-00948-z>

McIntosh, Timothy R., Teo Susnjak, Nalin Arachchilage, Tong Liu, Dan Xu, Paul Watters, and Malka N. Halgamuge. "Inadequacies of large language model benchmarks in the era of generative artificial intelligence." *IEEE Transactions on Artificial Intelligence* (2025): 80-90. <https://ieeexplore.ieee.org/abstract/document/11002710/>

Mentari, Sriyani, Andy Chandra Pramana, and Agung Winarno. "In the Age of Automation: Impact on Human Values, Ethics, and the Risk of Dehumanization." (2025): 45. <https://ojs.unik-kediri.ac.id/index.php/jimek/article/download/6297/4105>

Mohammed, Iman Shakir, and Nahla Mahmood Waheeb. "Auditor responsibility related to fraud and assessment of the risks of material misstatement." *World Economics and Finance Bulletin* 12 (2022): 47-54. https://www.researchgate.net/profile/Iman-Mohammed-11/publication/362269895_AUDITOR_RESPONSIBILITY_RELATED_TO_FRAUD_AND_ASSESSMENT_OF_THE_RISKS_OF_MATERIAL_MISSTATEMENT/links/62e037079d410c5ff363bb11/AUDITOR-RESPONSIBILITY-RELATED-TO-FRAUD-AND-ASSESSMENT-OF-THE-RISKS-OF-MATERIAL-MISSTATEMENT.pdf

Najeeb, Ali. "AI-Driven Legal Writing and Drafting." *Transformations in Legal Education in the Age of AI* (2025): 333. <https://books.google.com/books?hl=en&lr=&id=taSIEQAAQBAJ&oi=fnd&pg=PA333&dq=AI->

[Assisted+Drafting+of+Pleadings+and+Legal+Submissions&ots=tAMZKdzNCD&sig=VJwW11ItQJT06TqdgEeCaKgoUjs](https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/wajlp77§ion=7)

Needham, Carol A. "Regulation of the use of generative Artificial Intelligence tools in the delivery of legal services: Verification and accountability." *Wash. UJL & Pol'y* 77 (2025): 184. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/wajlp77§ion=7

Newman, Bradford, and Daniel Garrie. "The Current State of US Regulation of the Use of AI in Dispute Resolution." *Disp. Resol. Int'l* 18 (2024): 105. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/disreint18§ion=17

Nguyen, Andy, Ha Ngan Ngo, Yvonne Hong, Belle Dang, and Bich-Phuong Thi Nguyen. "Ethical principles for artificial intelligence in education." *Education and information technologies* 28, no. 4 (2023): 4221-4241. <https://link.springer.com/article/10.1007/s10639-022-11316-w>

Nguyen-Trung, Kien, Alexander K. Saeri, and Stefan Kaufman. "Applying ChatGPT and AI-Powered tools to accelerate evidence reviews." *Human Behavior and Emerging Technologies* 2024, no. 1 (2024): 8815424. <https://onlinelibrary.wiley.com/doi/abs/10.1155/2024/8815424>

Obenza, Brandon Nacua, Alexa Salvahan, Alexandra Nicole Rios, Althea Solo, Rea Ashlee Alburo, and Rey Jose Gabila. "University students' perception and use of ChatGPT: Generative artificial intelligence (AI) in higher education." *International Journal of Human Computing Studies* 5, no. 12 (2024): 5-18. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4724968

Olugboyega, Oluseye, Caleb Alfred, F. A. Ajao, and T. E. Adenji. "Potentials of an artificial intelligence-based dispute resolution system as an alternative dispute resolution method for construction disputes." In *International Conference on Infrastructure and Sustainable Development*, pp. 12-14. 2024.

Oniani, David, Jordan Hilsman, Yifan Peng, Ronald K. Poropatich, Jeremy C. Pamplin, Gary L. Legault, and Yanshan Wang. "Adopting and expanding ethical principles for generative artificial intelligence from military to healthcare." *NPJ Digital Medicine* 6, no. 1 (2023): 225. <https://www.nature.com/articles/s41746-023-00965-x>

Ooi, Keng-Boon, Garry Wei-Han Tan, Mostafa Al-Emran, Mohammed A. Al-Sharafi, Alexandru Capatina, Amrita Chakraborty, Yogesh K. Dwivedi et al. "The potential of generative artificial intelligence across disciplines: Perspectives and future directions." *Journal of Computer Information Systems* 65, no. 1 (2025): 76-107. <https://www.tandfonline.com/doi/abs/10.1080/08874417.2023.2261010>

Ottun, Abdul-Rasheed Olatunji, and Huber Flores. "Trustworthy AI in Practice: A Comprehensive Review of Human Oversight and Human-in-the-Loop Approaches." *Authorea Preprints* (2025). <https://www.techrxiv.org/doi/full/10.36227/techrxiv.176118749.93102582>

Pathak, Yash. "Pioneering Innovations In Digital Jurisprudence: Evaluating ODR Systems And AI In Shaping The Future Of Conflict Resolution." *Available at SSRN* 5110555 (2024): 45. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5110555

Pavlidis, Georgios. "Deploying artificial intelligence for anti-money laundering and asset recovery: the dawn of a new era." *Journal of Money Laundering Control* 26, no. 7 (2023): 155-166. <https://www.emerald.com/jmlc/article/26/7/155/238205>

Preiksaitis, Carl, and Christian Rose. "Opportunities, challenges, and future directions of generative artificial intelligence in medical education: scoping review." *JMIR medical education* 9, no. 1 (2023): e48785. <https://mededu.jmir.org/2023/1/e48785/>

Rajaram, Kumaran, and Patrick Nicolas Tinguely. "Generative artificial intelligence in small and medium enterprises: Navigating its promises and challenges." *Business Horizons* 67, no. 5 (2024): 629-648.

Rauniyar, Komal, Xiaobo Wu, Shivam Gupta, Sachin Modgil, and Ana Beatriz Lopes de Sousa Jabbour. "Risk management of supply chains in the digital transformation era: contribution and challenges of blockchain technology." *Industrial management & data systems* 123, no. 1 (2023): 253-277. <https://www.emerald.com/imds/article/123/1/253/181126>

Remolina, Nydia, and David Socol de la Osa. "AI at the bench: Legal and ethical challenges of informing-or misinforming-judicial decision-making through generative AI." *Singapore Management University School of Law Research Paper Forthcoming* (2024): 1-50 30. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4860853

Schäffler, Anton. "'Upgrade Available'? Digital Content in the Consumer Rights Act 2015 After the Digital Content Directive." *Journal of European Consumer and Market Law* 14, no. 4 (2025). <https://kluwerlawonline.com/journalarticle/Journal+of+European+Consumer+and+Market+Law/14.4/EuCML2025023>

Schmitz, Amy J. "Responsible Use of AI in Civil Dispute Resolution." *Responsible Use of AI in Civil Dispute Resolution (July 23, 2024). Ohio State Legal Studies Research Paper* 870 (2024): 50-60. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4903238

Schwemer, Sebastian Felix, Letizia Tomada, and Tommaso Pasini. "Legal ai systems in the eu's proposed artificial intelligence act." In *Proceedings of the Second International Workshop on AI and Intelligent Assistance for Legal Professionals in the Digital Workplace (LegalAIIA 2021), held in conjunction with ICAIL*. 2021: 8 40. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3871099

Scotti, Kristen L., Sarah Young, Melanie A. Gainey, and Haoyong Lan. "Artificial Intelligence and Automation in Evidence Synthesis: An Investigation of Methods Employed in Cochrane, Campbell Collaboration, and Environmental Evidence Reviews." *Cochrane Evidence Synthesis and Methods* 3, no. 5 (2025): e70046. <https://onlinelibrary.wiley.com/doi/abs/10.1002/cesm.70046>

Sengar, Sandeep Singh, Affan Bin Hasan, Sanjay Kumar, and Fiona Carroll. "Generative artificial intelligence: a systematic review and applications." *Multimedia Tools and Applications* 84, no. 21 (2025): 23661-23700. <https://link.springer.com/article/10.1007/s11042-024-20016-1>

Shaligar, Shamsollah, Tayyebbeh Arefnia, and Mehdi Mohammadian Amiri. "Applications of Artificial Intelligence in the Production and Use of Digital Documents and Electronic Evidence as Proof in Civil and Criminal Litigation." *Legal Studies in Digital Age* 3, no. 2 (2024): 10-30. <https://www.jlsda.com/index.php/lstda/article/view/62>

Sharma, A. K., and R. Sharma. "Generative artificial intelligence and legal frameworks: Identifying challenges and proposing regulatory reforms." *Kutafin Law Review* 11, no. 3 (2024): 415-451. <https://kulawr.msai.ru/jour/article/view/343>

Sharma, Anisha. "The Legal and Regulatory Challenges Posed by the Integration of Predictive Analytics (PA) into International Arbitration." *Law, Economics and Society* 1, no. 2 (2025): p68-p68. <https://j.ideasspread.org/les/article/view/1881>

Shoukat, Daniyal. "Using AI in International Arbitration: From Predictive Analytics to Automated Awards." *International Arbitration: From Predictive Analytics to Automated Awards* (July 26, 2025) (2025): 22. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5372228

Simshaw, Drew. "Access to AI justice: Avoiding an inequitable two-tiered system of legal services." *Yale JL & Tech.* 24 (2022): 150. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/yjolt24§ion=5

Storey, Veda C., Wei Thoo Yue, J. Leon Zhao, and Roman Lukyanenko. "Generative artificial intelligence: Evolving technology, growing societal impact, and opportunities for information systems research." *Information Systems Frontiers* (2025): 1-22. <https://link.springer.com/article/10.1007/s10796-025-10581-7>

Stoyanova, Vladislava. "Council of Europe Framework Convention on Artificial Intelligence: Context, Regulatory Approach and Scope of Obligations." *European Journal of Risk Regulation* (2025): 1-30. <https://www.cambridge.org/core/journals/european-journal-of-risk-regulation/article/council-of-europe-framework-convention-on-artificial-intelligence-context-regulatory-approach-and-scope-of-obligations/0ED34EFE5AA7C9628F7053720F88F48C>

Szostek, Dariusz, and Rafał Tomasz Prabucki. "High-risk AI systems." In *The European Artificial Intelligence Act: Promises and Perils?*, pp. 157-180. Cham: Springer Nature Switzerland, 2025. https://link.springer.com/chapter/10.1007/978-3-031-98406-8_7

Tan, Seng Chee, Wenli Chen, and Bee Leng Chua. "Leveraging generative artificial intelligence based on large language models for collaborative learning." *Learning: Research and Practice* 9, no. 2 (2023): 125-134. <https://www.tandfonline.com/doi/full/10.1080/23735082.2023.2258895>

Tan, Vivi, Jeannie Marie Paterson, and Julian Webb. "Generative Artificial Intelligence in small value consumer claims: Hallucination risk, system design, and governance in online dispute resolution." *The University of New South Wales Law Journal* 48, no. 4 (2025): 1257-1257. <https://search.informit.org/doi/abs/10.3316/informit.T2025122100000800166626867>

Tassoti, Sebastian. "Assessment of students use of generative artificial intelligence: Prompting strategies and prompt engineering in chemistry education." *Journal of Chemical Education* 101, no. 6 (2024): 2475-2482. <https://pubs.acs.org/doi/abs/10.1021/acs.jchemed.4c00212>

Taylor, Whitney K. "The unintended consequences of increased access to justice." *Law & Society Review* (2025): 1-24. <https://www.cambridge.org/core/journals/law-and-society-review/article/unintended-consequences-of-increased-access-to-justice/A3AACB230398F208992EF96CADF96330>

Van Norren, Dorine Eva. "The ethics of artificial intelligence, UNESCO and the African Ubuntu perspective." *Journal of Information, Communication and Ethics in Society* 21, no. 1 (2023): 112-128. <https://www.emerald.com/jices/article/21/1/112/432633>

Victor, Bryan G., Sheryl Kubiak, Beth Angell, and Brian E. Perron. "Time to move beyond the ASWB licensing exams: Can generative artificial intelligence offer a way

forward for social work?." *Research on Social Work Practice* 33, no. 5 (2023): 511-517. <https://journals.sagepub.com/doi/abs/10.1177/10497315231166125>

Villasenor, John. "Generative artificial intelligence and the practice of law: impact, opportunities, and risks." *Minn. JL Sci. & Tech.* 25 (2023): 25. https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/mipr25§ion=22

Wach, Krzysztof, Cong Doanh Duong, Joanna Ejdys, Rūta Kazlauskaitė, Paweł Korzynski, Grzegorz Mazurek, Joanna Paliszkiewicz, and Ewa Ziemba. "The dark side of generative artificial intelligence: A critical analysis of controversies and risks of ChatGPT." *Entrepreneurial Business and Economics Review* 11, no. 2 (2023): 7-30. <https://www.ceeol.com/search/article-detail?id=1205845>

Wang, Chengliang, Haoming Wang, Yuanyuan Li, Jian Dai, Xiaoqing Gu, and Teng Yu. "Factors influencing university students' behavioral intention to use generative artificial intelligence: Integrating the theory of planned behavior and AI literacy." *International Journal of Human-Computer Interaction* 41, no. 11 (2025): 6649-6671. <https://www.tandfonline.com/doi/abs/10.1080/10447318.2024.2383033>

Wang, Xukang, and Ying Cheng Wu. "Balancing innovation and regulation in the age of generative artificial intelligence." *Journal of Information Policy* 14 (2024): 385-416. <https://scholarlypublishingcollective.org/psup/information-policy/article/doi/10.5325/jinfopoli.14.2024.0012/388980>

Wilman, Folkert. "The Digital Services Act (DSA)-An Overview." Available at SSRN 4304586 (2022): 40. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4304586

Ye, Xiongbiao, Yuhong Yan, Jia Li, and Bo Jiang. "Privacy and personal data risk governance for generative artificial intelligence: A Chinese perspective." *Telecommunications Policy* 48, no. 10 (2024): 102851. <https://www.sciencedirect.com/science/article/pii/S0308596124001484>

Yu, Hao, and Yunyun Guo. "Generative artificial intelligence empowers educational reform: current status, issues, and prospects." In *Frontiers in education*, vol. 8, p. 1183162. Frontiers Media SA, 2023. <https://www.frontiersin.org/journals/education/articles/10.3389/feduc.2023.1183162/full>

Zhou, Xue, Da Teng, and Hosam Al-Samarraie. "The mediating role of generative AI self-regulation on students' critical thinking and problem-solving." *Education Sciences* 14, no. 12 (2024): 1302. <https://www.mdpi.com/2227-7102/14/12/1302>

Zielinski, Chris, Margaret A. Winker, Rakesh Aggarwal, Lorraine E. Ferris, Markus Heinemann, Jose Florencio Lapeña, Sanjay A. Pai et al. "Chatbots, generative AI, and scholarly manuscripts: WAME recommendations on chatbots and generative artificial intelligence in relation to scholarly publications." *Current Medical Research and Opinion* 40, no. 1 (2024): 11-13. <https://www.tandfonline.com/doi/full/10.1080/03007995.2023.2286102>

Zierock, Benjamin, and Sem Knopjes. *Productivity Gains in Scientific Literature Processing with NLP-Based Document Analysis Tools: An Evaluation of Accuracy and Efficiency through the use of AI Tools in Pharmacovigilance*. 2024:20 20. https://www.researchgate.net/profile/Benjamin-Zierock/publication/386446959_Productivity_Gains_in_Scientific_Literature_Processing_with_NLP-Based_Document_Analysis_Tools_An_Evaluation_of_Accuracy_and_Efficiency_through_the_use_of_AI_Tools_in_Pharmacovigilance/links/67518231c35790578d1c9c1a/Productivity-Gains-in-Scientific-Literature-Processing-with-NLP-Based-Document-Analysis-

[Tools-An-Evaluation-of-Accuracy-and-Efficiency-through-the-use-of-AI-Tools-in-Pharmacovigilance.pdf](#)

Ziller, Jacques. "The Council of Europe Framework Convention on Artificial Intelligence vs. the EU Regulation: two quite different legal instruments." (2024): 2723-9195. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4822757

Афган, В. А. "Legal mechanisms of audit and accountability in artificial intelligence systems in the context of international law." *Науковий вісник Ужгородського національного університету. Серія: Право* 5, no. 90 (2025): 59-75. <http://visnyk-pravo.uzhnu.edu.ua/article/view/340678>

Summary (English)

Reliable Use of Generative Artificial Intelligence in Dispute Resolution

Hamza Abdallaoui,

This research provides a critical analysis of the trusted application of generative artificial intelligence (AI) to dispute resolution systems and in this case, the alternative dispute resolution (ADR) and the online dispute resolution (ODR). The study examines the role of the generative AI with regard to these systems, the risks involved, and practical challenges, and assesses regulatory and ethical protections that are required to make these systems reliable. The study is a mixed methodology, comprising an extensive literature review and interviews with the participants of the field of law, AI developers, and regulators. Besides,

both the qualitative and quantitative approaches were applied to analyse the empirical data on the use cases and the legal outcomes of AI.

The study indicates that despite the great potential of generative AI in enhancing efficiency and access in the dispute resolution process, issues of fairness, neutrality and transparency are still there. Among the critical results, there are the dangers of algorithmic bias, the possibility of AI-generated decision hallucinations, and the necessity of human control to be responsible. The paper highlights the importance of the existence of strong regulatory frameworks and human-in-the-loop to deal with these issues.

Finally, the paper emphasizes the idea that as AI has a potential to transform the way disputes are resolved, its implementation should be supported with a set of strict measures to maintain procedural justice, impartiality, and fairness. The study recommends effective regulatory structures, transparency, and accountability protocols to guarantee that AI usage in courts is ethical and responsible to avoid injuries and foster trust in AI-enabled dispute resolution procedures.

Summary (Lithuanian)

Patikimas generatyvinio dirbtinio intelekto naudojimas ginčų sprendime

Hamza Abdallaoui,

Šiame tyrime pateikiama kritinė generatyvinio dirbtinio intelekto (DI) patikimo taikymo ginčų sprendimo sistemose, šiuo atveju – alternatyviame ginčų sprendime (AGS) ir internetiniame ginčų sprendime (EGS), analizė. Tyrime nagrinėjamas generatyvinio DI vaidmuo šiose sistemose, susijusi rizika ir praktiniai iššūkiai, taip pat įvertinamos reguliavimo ir etinės apsaugos priemonės, reikalingos šių sistemų patikimumui užtikrinti. Tyrimas yra mišrios metodologijos, apimančios išsamią literatūros apžvalgą ir interviu su teisės srities dalyviais, DI kūrėjais ir reguliuotojais. Be to, empiriniams duomenims apie DI

naudojimo atvejus ir teisinius rezultatus analizuoti buvo taikomi tiek kokybiniai, tiek kiekybiniai metodai. Tyrimas rodo, kad, nepaisant didelio generatyvinio DI potencialo didinant ginčų sprendimo proceso efektyvumą ir prieinamumą, vis dar kyla sąžiningumo, neutralumo ir skaidrumo klausimų. Tarp svarbiausių rezultatų yra algoritminio šališkumo pavojai, DI sukeltų sprendimų haliucinacijų galimybė ir žmogaus kontrolės bei atsakomybės būtinybė. Straipsnyje pabrėžiama stiprių reguliavimo sistemų ir žmogaus įtraukimo į procesą svarba sprendžiant šias problemas. Galiausiai dokumente pabrėžiama mintis, kad, kadangi dirbtinis intelektas gali pakeisti ginčų sprendimo būdus, jo įgyvendinimas turėtų būti paremtas griežtų priemonių rinkiniu, siekiant išlaikyti procedūrinį teisingumą, nešališkumą ir sąžiningumą. Tyrime rekomenduojamos veiksmingos reguliavimo struktūros, skaidrumo ir atskaitomybės protokolai, siekiant užtikrinti, kad dirbtinio intelekto naudojimas teismuose būtų etiškas ir atsakingas, išvengiant žalos ir skatinant pasitikėjimą DI pagrįstomis ginčų sprendimo procedūromis.