DAWN OF ARTIFICIAL INTELLIGENCE IN ALTERNATIVE DISPUTE RESOLUTION; EXPANDING ACCESS TO JUSTICE THROUGH TECHNOLOGY

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ABSTRACT

Kenya has long been plagued by inefficient law enforcement. The judicial system, albeit regrettably, is characterised by a backlog of cases that amounts to a denial of justice. The judiciary has attempted to alleviate this by encouraging the use of Alternative Dispute Resolution mechanisms, as provided for in Article 159(2) (c) of the Constitution. These mechanisms facilitate the useful dissemination of justice because they are relatively fast, flexible, and business-friendly. Parties that subject their disputes to ADR also feel that they can control the whole process as they are directly involved; so the customer satisfaction rate is higher compared to court cases. However, in the wake of the Covid-19 virus, justice systems have been forced to be even more innovative to ensure justice and rule of law are upheld. Inevitably, they have turned to the once-dreaded technological sphere to address such issues. In particular, the use of Artificial Intelligence (hereinafter AI). This paper postulates that the incorporation of Artificial Intelligence into the legal system; especially in Alternative Dispute Resolution mechanisms will facilitate expanded access to justice in line with SDG 16; Peace, Justice and Strong Institutions. The use of Artificial Intelligence has many advantages in addition to its ability to expedite justice. It can also be used when individuals do not wish to share sensitive information with their human counterparts. Besides, AI has proven to be more efficient compared to other methods as an AI system is in a position to sift through numerous legal documents quickly, which helps both in conducting due diligence and determining the optimal solution for the parties. This paper attempts to explain these benefits and debunk some myths that may have deterred certain legal actors from incorporating AI. It also seeks to address some issues that may arise when using AI in ADR and give recommendations on how to circumvent the same.

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1.0 INTRODUCTION

Demystifying Artificial Intelligence

As many definitions have been attributed to the phrase artificial intelligence as there are stars in the deep night sky. It is usually characterized as a computer or robot's competence to do tasks associated with intelligent individuals[87] or a replica of human intelligence in machines that allows machines to think and simulate human actions when executing given tasks.[88] It is intriguing to note that none of these proposed definitions truly capture the underlying nature of AI. This is due to some factors, chief among which is the lack of an established definition among professionals.[89] The difficulty of defining AI has also been substantially impacted by the heritage of science fiction literature, including books and films.[90] The fundamental meaning of AI is often misunderstood as a result of this material. Furthermore, what appears simple to humans may be extraordinarily difficult for AI, and the opposite is also true.[91] An example of this is a robot trying to move its arm. For humans, this is an automatic reaction that doesn't need any effort, however, this poses a problem for AI.[92] Thus, clearly defining what AI is and what it encompasses has proven to be an uphill battle for most.

It might be helpful to describe AI in terms of its properties to better understand it. One of these qualities is autonomy;[93]this is the capacity to work alone on challenging tasks.[94] Additionally, AI systems are adaptable with the capacity to continuously enhance performance over time.[95] The best example of this is a self-driving automobile; to determine the best routes, make decisions when there is uncertainty, and recognize impediments, self-driving cars use a variety of AI algorithms.[96]

AI has been applied to a variety of areas of our lives, including businesses, entertainment, health, and other areas.[97] The Justice System has not lagged in its efforts to incorporate

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[87]B. J Copeland, 'Artificial Intelligence' (*Britannica*, 24 August 2022) <https://www.britannica.com/technology/artificial-intelligence> accessed 12 October 2022.

[88] Jake Frankenfield, 'Artificial Intelligence: What It Is and How It Is Used' (*Investopedia*, 6 July 2022) <https://www.investopedia.com/terms/a/artificial-intelligence-ai.asp> accessed 12 October 2022.

[89] University of Helsinki, "Elements of AI" <https://course.elementsofai.com/1/1> accessed 12 October 2022.

[90] Ibid.

[91] Ibid.

[92] Ibid.

[93] Ibid.

[94] Ibid.

[95] University of Helsinki, "Elements of AI" <https://course.elementsofai.com/1/1> accessed 12 October 2022.

[96] Ibid.

[97] Sudhir Allam, 'Artificial Intelligence and its Applications' (2016) 2(6) IEJRD <file:///D:/OTHER/My%20Personal%20Research%20activities/AI%20AND%20ADR/AI%20AND%20ITS%20APPLICATIONS.pdf> accessed 11 October 2022.

AI into traditional legal systems. By virtue of using technology to sift through mounds of legal documents and create smart contracts, it is now usual practice to automate judicial processes by subjecting them to online video conferencing.[98] Alternative Dispute Resolution (ADR) mechanisms have not been overlooked. ADR has been used in multiple cases by different jurisdictions to promote prompt delivery of justice to move closer to the Sustainable Development Goals proposed by the United Nations and endorsed by all UN member states in 2015.[99] ADR is specifically mentioned in Kenya's constitution's Article 159 (2).[100] A striking statistic from the Department of Justice shows that 75% of voluntary ADR procedures have been successfully concluded in the United States in 2017.[101] The same is true in Kenya where a success rate of 70% implies that ADR may continue handling tax-related cases.[102] Additionally, statistics demonstrate a 31% increase in tax-related cases subjected to ADR.[103] The key aspects of Alternative Dispute Resolution (ADR) that speed up the justice process are that there are fewer formalities to follow, it is less expensive than litigation, it takes less time, and it results in higher client satisfaction because parties deal with each other face-to-face.[104]

Despite the numerous benefits afforded to a party who submits their case to ADR, there are some areas that must be addressed to guarantee that justice is served properly. Integration of AI is essential in making this happen. Initially, AI was commonly utilized to determine cases involving parties from different jurisdictions, but has since been broadened to include local situations.[105] Statistics also show that using AI and technological systems is more common in alternative dispute resolution (ADR) than in traditional litigation because ADR methods are not subject to the procurement and execution processes that burden the judicial system.[106] AI systems have not only proven

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[98] Putera, N. S. F. M. S., Saripan, H., Hassan, R. A., & Abdullah, S. M. 'Artificial Intelligence for Construction Dispute Resolution: Justice of the Future' (2021) 11(11) IJARBSS, 139–151.

[99] Transforming our world: the 2030 Agenda for Sustainable Development, (adopted on 21 October 2015), UNGA A/RES/70/1, <https://www.refworld.org/docid/57b6e3e44.html> accessed 11 October 2022.

[100] Constitution of Kenya 2010, art 159 (2).

[101] The United States Department of Justice Archives, *Use and Benefits of ADR by the Department of Justice Fiscal Year 2017 Overview*, (Fiscal Year 2017 Report, 2020) 1,<https://www.justice.gov/archives/olp/alternative-dispute-resolution-department-justice> accessed 11 October 2022.

[102] Rachel Chepkemoi Biomndo Ngetich, Effectiveness of Alternative Dispute Resolution Mechanism (ADR) in Case Backlog Management in Kenyan Judicial System: Focus on Milimani High Court Commercial Division, (LLM thesis, University of Nairobi 2019), 70.

[103] Kenya Revenue Authority, 'KRA records a 31% increase in the number of tax disputes resolved through Alternative Dispute Resolution' (2022) <https://www.kra.go.ke/news-center/press-release/1635-kra-records-a-31-increase-in-the-number-of-tax-disputes-resolved-through-alternative-dispute-resolution> accessed 11 October 2022.

[104] Miriam R. Arfin, 'The Benefits of Alternative Dispute Resolution in Intellectual Property Disputes' (1995) 17 Hastings Comm. & Ent. L.J. 893.

[105] Arbitration and Conciliation Act, Cap 18, LFN 2004, Section 57.

[106] Tyrone L. Holt, 'Whither Arbitration – What Can be Done to Improve Arbitration and Keep out Litigation's Ill Effects' (2008) 7 DePaul Bus & Comm LJ, 455<https://via.library.depaul.edu/cgi/viewcontent.cgi?article=1120&context=bclj> accessed 11 October 2022.

to be quick, efficient, and error-free, but also, parties may prefer to have a non-human party handling their disputes rather than their human counterparts.[107]

This paper posits that the continued use of AI in ADR mechanisms will serve to facilitate justice based on the numerous advantages it has demonstrated so far. However, there is a need for legal practitioners as well as other stakeholders to gain an understanding of what AI is. Such is the purpose of this paper. Consequently, this paper will be segmented as follows: Part II will deal with how AI is used in ADR and in particular, the mechanics of Online Dispute Resolution. Part III will focus on the merits of AI in ADR, other than the ones expressly mentioned above. Part IV will delve into the challenges encountered when incorporating AI into ADR as well as critique its use so far. Part V is reserved for recommendations while Part VI will be the conclusion.

2.0 AI AND ADR: AN OVERVIEW OF ONLINE DISPUTE RESOLUTION MECHANISMS

ADR incorporates Artificial Intelligence in two fundamental ways. Initially, AI could be used as a neutral instrument.[108] AI systems are used in this case to examine documents and assist with basic drafting.[109] In addition, the system can be used to suggest a possible solution to cases, detect lies, and calculate the amount of damages.[110] Moreover, AI can be used as a neutral in and of itself. In this case, AI offers an optimal solution to the parties based on the best offers they have made under various agreements.[111] Using AI as a neutral encourages parties to make rational offers for the system to choose that offer over their adversaries'.[112] However, because AI systems are focused on algorithmic spheres, they do not yet recognize subjective questions which can be a major drawback.[113]

AI can also be used in ADR mechanisms to ensure diversity in the appointment of mediators, arbiters, and negotiators.[114] To achieve this, reports that address a decision

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[107] Law Times, 'AI may help with alternative dispute resolution' (*Law Times*, 3 June 2019) <https://www.lawtimesnews.com/practice-areas/adr/ai-may-help-with-alternative-dispute-resolution/263579> accessed 12 October 2022.
[108] Megha Shawani, 'Alternate Dispute Resolution and Artificial Intelligence; Boom or Bane?' (2020) 2(1) LexForti Legal Journal, 2.
[109] Ibid.
[110] Ibid.
[111] Ibid.
[112] Megha Shawani, 'Alternate Dispute Resolution and Artificial Intelligence; Boom or Bane?' (2020) 2(1) LexForti Legal Journal, 3.
[113] Ibid.
[114] Kariuki Muigua and JeffahOmbati, 'Achieving expeditious Justice: Harnessing Technology for Cost Effective International Commercial Arbitral Proceedings' (2018) 7(1) Alternative Dispute Resolution, 11.

maker's propensity to decide at particular stages of the dispute resolution process as well as tracing their experience on various issues are generated.[115] It also serves as a watchdog by identifying corrupt arbiters during arbitral proceedings.[116] AI is crucial in evaluating arbitral awards and arbitrating smart contracts, which have gained popularity in recent years.[117] As Artificial Intelligence advances at a rapid pace, it is expected to be used in technical arbitration disputes where augmented reality may be used.[118] Furthermore, in cases where the proceedings are between individuals from different jurisdictions and who speak different languages, AI systems may provide instant translation services.[119]

For this paper, the author wishes to limit the use of AI in ADR to Online Dispute Resolution (hereinafter ODR). ODR is defined as a mechanism for resolving disputes via electronic communication, made possible by information communication and technology features.[120] The incorporation of Technology as a fourth party in Alternative Dispute Mechanisms is a distinguishing feature of ODR.[121] To that end, AI is being used to propel ODR in two ways. For starters, it can be used as a support system.[122] Surprisingly, this is the most common application in ODR.[123] In this case, the third party may supplement his work with AI.[124] AI can also be used as a substitute, with the system acting as a third party in making decisions and inquiries.[125] Under the first limb, supportive AI systems can be further classified based on the nature of the assistance provided.[126] Consequently, they can be split up into the following sections.

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[115] Aditya Singh Chauhan, 'Future of AI in Arbitration: The Fine Line Between Fiction and Reality' (*Kluwer Arbitration Blog*, 26 September 2020)<http://arbitrationblog.kluwerarbitration.com/2020/09/26/future-of-ai-in-arbitration-the-fine-line-between-fiction-and-reality/> accessed 12 October 2022.

[116] Lito Dokopoulou, 'Arbitration X Technology: A Call for Awakening?' (*Kluwer Arbitration Blog,* 2020) <http://arbitrationblog.kluwerarbitration.com/2019/01/14/arbitration-x-technology-a-call-for-awakening/?doing_wp_cron=1573976511.5388379096984863281255> accessed 12 October 2022.

[117] Ibid.

[118] Geneva Sekula, 'ICCA Sydney: The Moving Face of Technology' (*Kluwer Arbitration Blog*, 2018) <http://arbitrationblog.kluwerarbitration.com/2018/04/18/icca-sydney-moving-face-technology/> accessed 12 October 2020.

[119] Ibid.

[120] --'ODR definition' (*Law Insider*) <https://www.lawinsider.com/dictionary/odr> accessed 12 October 2022.

[121] John Zeleznikow, 'Using Artificial Intelligence to provide Intelligent Dispute Resolution Support' (2021) 30 Group DecisNegot, 790.

[122] Putera, N. S. F. M. S., Saripan, H., Hassan, R. A., & Abdullah, S. M, 'Artificial Intelligence for Construction Dispute Resolution: Justice of the Future' (2021) 11(11) IJARBSS, 139–151; Hibah Alessa, 'The role of Artificial Intelligence in Online Dispute Resolution: A brief and critical overview' (2022) Information & Communications Technology Law, 9.

[123] Emilia Bellucci, Arno Lodder, John Zeleznikow, 'Integrating Artificial Intelligence, Argumentation and Game Theory to Develop an Online Dispute Resolution Environment' (2004) Proceedings of the 16th IEEE International Conference on Tools with Artificial Intelligence, 749.

[124] Hibah Alessa, 'The role of Artificial Intelligence in Online Dispute Resolution: A brief and critical overview' (2022) Information & Communications Technology Law, 9.

[125] Ibid.

[126] Ibid.

Support-based AI can primarily be used as a decision support system in ODR.[127] In this case, the AI system weighs various factors and determines the best optimal solution for that specific case.[128] Self-driving cars are a good example of how AI makes decisions. Comparatively speaking to the other support systems discussed below, this support system primarily offers procedural support.[129] Knowledge Support systems are yet another way in which AI can help with ADR.[130] It can be thought of as a very advanced search engine in the most basic terms.[131] But it is more than that. Efficient knowledge support systems should be able to accept all relevant data and circumstances, process them, and present the results logically.[132]

Substitutive AI systems in ODR consist of case reasoning systems, that incorporate the doctrine of precedent and aid ODR processes by applying past experiences to a new case with similar circumstances.[133] The AI system is used to suggest possible solutions to the current case using data from previous cases.[134] For instance, the system might not offer the option to burn one's belongings during a divorce if doing so in the past led to poor satisfaction levels.[135] Rule-based systems are similar to case reasoning systems in that they apply a defined set of principles to a specific case.[136] The rules can range from simple to complex principles.[137] Remarkably, AI systems become ever more complex as the rules become more complex.[138]

ODR platforms include the Centre for Alternate Dispute Resolution Excellence (CADRE), which allows parties to resolve disputes online via video chat and email.[139] This website is dedicated to the resolution of tenant and rental disputes.[140] CODR (Centre for Online Dispute Resolution), like AGAMI, is an ODR platform that resolves disputes

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[127] Ibid.

[128] Hibah Alessa, (n 39), 9.

[129] Hibah Alessa, (n 39), 11.

[130] Ibid.

[131] Ibid.

[132] Cade Metz, 'AI Is Transforming Google Search. The Rest of the Web Is Next' (*Wired*, 2 April 2016) <https://www.wired.com/2016/02ai-is-changing-the-technology-behind-google-searches/> accessed 12 October 2022.

[133] Hibah Alessa, (n 39), 12.

[134] Carneiro et al. 'Online dispute resolution: An artificial intelligence perspective' (2014) 41 Artificial Intelligence Review, 224.

[135] Hibah Alessa, (n 39), 12.

[136] John Zeleznikow, 'Can Artificial Intelligence and Online Dispute Resolution Enhance Efficiency and Effectiveness in Courts' (2017) 8 International Journal for Court Administration, 82.

[137] Kevin Ashley, Edwina Rissland, 'Law, Learning and Representation' (2003) 150 Artificial Intelligence, 19.

[138] Ibid.

[139] Megha Shawani, 'Alternate Dispute Resolution and Artificial Intelligence; Boom or Bane?' (2020) 2(1) LexForti Legal Journal, 12.

[140] Ibid.

online.[141] SAMA helps ICICI Bank resolve disputes up to Rs 20 lakh. It also makes it easier for clientele to find ADR providers.[142]

Locally, Utatuzi Centre is just but one of the ODR platforms that facilitates ADR mechanisms among small and medium-sized firms and companies.[143] It mainly applies to commercial disputes to reduce the need for litigation in resolving disputes.[144] According to UNCTAD, e-commerce in Kenya accounts for a whopping 6 percent of all transactions, a figure that is expected to rise.[145] This demonstrates a need for dispute resolution mechanisms other than litigation that are fast, efficient and accessible to internet users in Kenya.[146]

3.0 MERITS OF AI IN ADR

AI integration in ADR offers numerous advantages in addition to being quick, effective, and error-free.[147] The incorporation of AI into ADR facilitates justice because it can be used to prioritize cases involving human rights violations.[148] A prime example is the AI system used in the European Court of Human Rights, which was shockingly 79% accurate.[149] AI can and has been used to foresee a case's outcome.[150] In such a case, the AI system examines cases and legislation in order to reach the best conclusion.[151] The ability of an AI system to sift through multiple documents and conduct due diligence has been critical in ensuring that justice is delivered quickly.[152] This also allows legal practitioners engaging in ADR such as arbiters to focus on more pressing matters within the case that demand their uttermost interest.[153]

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[141] Ibid.
[142] Ibid.
[143] -- 'New Kenyan ODR Provider: Utatuzi Center' (*National Center for Technology & Dispute Resolution,*10 February 2021)<https://odr.info/new-kenyan-odr-provider-utatuzi-center/> accessed 12 October 2022.
[144] Ibid.
[145] MuriukiWanyoike, 'LETTERS: Kenya ripe for online dispute resolution' (*Business Daily*, 25 September 2019) <https://www.businessdailyafrica.com/bd/opinion-analysis/letters/letters-kenya-ripe-for-online-dispute-resolution-2265816>accessed 11 October 2022.
[146] --'Role of the emergence of Online Dispute Resolution on the African Continent' <http://www.kenyalaw.org/LVI2014/docs/RoleoftheemergenceofODRontheAfricancontinent.pdf> accessed 10 October 2022.
[147] Judy Kabubu, 'Artificial Intelligence (Ai) in Kenya' (*MMAN*, 26 January 2021)<https://mman.co.ke/content/artificial-intelligence-ai-kenya> accessed 11 October 2022.
[148] Wabia Nganatha Karugu, 'Artificial Intelligence and Alternative Dispute Resolution' (*Strathmore Dispute Resolution Centre Blog*, 27 January 2020) <https://sdrcentre.wordpress.com/2020/01/27/artificial-intelligence-and-alternative-dispute-resolution/> accessed 10 October 2022.
[149] Ibid.
[150] Ibid.
[151] Ibid.
[152] Horst Eidenmuller and FaidonVaresis, 'What is an Arbitration? Artificial Intelligence and the Vanishing Human Arbitrator,' (2020) 17(1) New York University Journal of Law and Business,56.
[153] Ibid.

Additionally, because some parties feel more at ease disclosing their issues to a machine-learning arbitrator, the use of AI in ADR has resulted in a higher customer satisfaction rate.[154] This is especially true in delicate cases where parties are concerned about being judged or having a biased arbiter/mediator/negotiator. AI has also aided individuals in obtaining legal funding for their cases and in locating professional advisors.[155] Sites like *GetAid* assist individuals in seeking legal redress. Furthermore, because AI can serve as either a supplement or a replacement, lawyers may take on a more relaxed role.[156] AI integration into ADR also ensures that those who wish to represent themselves have a better chance of receiving justice because the AI system works to provide the best solution for both parties.[157]

Human decision-makers frequently rely on first-hand information to make decisions.[158] At times, they may miss a critical piece of the puzzle, resulting in a denial of justice.[159] Artificial Intelligence attempts to correct this cognitive bias by sifting through relevant information at the same time to assist people in making rational and informed decisions.[160] Therefore, AI is programmed to make fairly logical decisions through its autonomous algorithms.[161]

4.0 CHALLENGES IN THE ASSIMILATION OF AI INTO ADR MECHANISMS

Despite the numerous advantages discussed above, the use of AI in ADR also has its shortcomings. As this is a relatively new area, some pertinent issues regarding the mechanics of AI ought to be addressed before fully incorporating it into ADR. One such area is the question of liability. If an AI system was to deliver a miscarriage of justice, who would be blamed? Is it the programmer? The human decision maker? Or the policy

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[154] Wabia Nganatha Karugu, 'Artificial Intelligence and Alternative Dispute Resolution' (*Strathmore Dispute Resolution Centre Blog*, 27 January 2020) <https://sdrcentre.wordpress.com/2020/01/27/artificial-intelligence-and-alternative-dispute-resolution/> accessed 10 October 2022.
[155] Hibah Alessa, 'The role of Artificial Intelligence in Online Dispute Resolution: A brief and critical overview' (2022) Information & Communications Technology Law, 20.
[156] Ibid.
[157] Ibid.
[158] Sunaina Jain, 'Pros and Cons of Artificial Intelligence in ADR' (*White Code VIA Mediation & Arbitration Centre*) <https://viamediationcentre.org/readnews/NTE5/PROS-AND-CONS-OF-ARTIFICIAL-INTELLIGENCE-IN-ADR#:~:text=It%20can%20identify%20blind%20spots,to%20make%20the%20process%20efficient.&text=AI%20can%20be%20used%20to,submitted%2C%20and%20the%20arbitrator%27s%20reasoning> accessed 19 October 2022.
[159] Ibid.
[160] Ibid.
[161] Ibid.

maker.[162] This grey area has been subject to numerous discussions basing their arguments on areas such as philosophy.[163] An even more salient concern at this point is which party would bear liability if an AI system developed flaws through its fault.[164]Where an AI system is fully autonomous and far removed from human decision-making, as was the case in a lawsuit against Tesla in 2017, it would be incredibly difficult to establish liability.[165]

Another limitation of AI is the element of bias. Recently, it has been noted that platforms like LinkedIn, which employ AI systems, advertise lower-paying jobs to women.[166] AI may become biased if the training and testing data used is biased in the first place.[167] This results in biased outcomes that are contrary to Article 27 of the Constitution[168] and as a result, constitute an injustice. To address this issue, software developers have worked to ensure that the data used in training and testing is free of bias.[169] Additionally, efforts have been made to diversify machine learning in order to quickly identify and correct biased data.[170]

Whether AI is fully capable of handling special circumstances has been brought up as yet another important question.[171]What happens in the self-driving car example above if the traffic lights turn green while an elderly lady is crossing the street? Would AI be able to

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[162] Lee Gluyas, Stefanie Day, 'Who is liable when AI fails to perform?' (*CMS*, 2018) <https://cms.law/en/gbr/publication/artificial-intelligence-who-is-liable-when-ai-fails-to-perform>accessed 10 October 2022; NurusSakinatulFikriahMohdShith Putera, Hartini Saripan, Rafizah Abu Hassan, Sarah Munirah Abdullah, ' Artificial Intelligence for Construction Dispute Resolution: Justice of the Future' (2021) 11(11) International Journal of Academic Research in Business and Social Sciences, 9.
[163] Lee Gluyas, Stefanie Day, 'Who is liable when AI fails to perform?' (*CMS*, 2018) <https://cms.law/en/gbr/publication/artificial-intelligence-who-is-liable-when-ai-fails-to-perform>accessed 10 October 2022.
[164] Lee Gluyas, Stefanie Day, 'Who is liable when AI fails to perform?' (*CMS*, 2018) <https://cms.law/en/gbr/publication/artificial-intelligence-who-is-liable-when-ai-fails-to-perform>accessed 10 October 2022.
[165] Lee Gluyas, Stefanie Day, 'Who is liable when AI fails to perform?' (*CMS*, 2018) <https://cms.law/en/gbr/publication/artificial-intelligence-who-is-liable-when-ai-fails-to-perform>accessed 10 October 2022.
[166] Sheridan Wall and HilkeSchellmann, 'LinkedIn's job matching AI was biased. The company's solution? More AI' (*MIT Technology Review*, 23 June 2021) <https://www.technologyreview.com/2021/06/23/1026825/linkedin-ai-bias-ziprecruiter-monster-artificial-intelligence/> accessed 10 October 2022.
[167] Gizem Halis Kasap, 'Can Artificial Intelligence ("AI") Replace Human Arbitrators? Technological Concerns and Legal Implications,' (2021) 2021(2) Journal of Dispute Resolution, 225.
[168] Constitution of Kenya 2010, Article 27.
[169] Susan Leavy, 'Gender bias in artificial intelligence: the need for diversity and gender theory in machine learning' (1st International Workshop on Gender Equality in Software Engineering, 2018)<https://www.researchgate.net/publication/326048883_Gender_bias_in_artificial_intelligence_the_need_for_diver si ty_and_gender_theory_in_machine_learning/link/5bce138aa6fdcc204a001d87/download> accessed 10 October 2022.
[170] Ibid.
[171]Gizem Halis Kasap, (n 82).

distinguish between good and evil in the same way that humans do? Legal professionals in ADR are concerned that AI is ill-equipped in handling some basic tasks like determining the reliability of witnesses in situations involving oral hearings.[172] Credibility evaluation would be difficult because AI lacks human emotions.[173] It is however prudent to note that software developers are making strides to ensure that AI can detect lies by measuring heart rate, eye movement and using psychology.[174]

The element of having the opportunity to be heard may also present a challenge to AI decision-makers, as they do not fully comprehend its significance.[175] Given that parties choose ADR because it is flexible, AI may result in a miscarriage of justice if it does not give parties enough time to be heard.[176] Furthermore, since human decision-makers apply the law based on context and circumstances rather than just logic or patterns, AI may struggle to make decisions involving public policy, fairness, and equity, which are occasionally prone to subjectivity.[177]

The issue of data privacy has been a source of consternation for AI experts. It rears its head once more in the context of ADR. AI systems have proven to be highly vulnerable to cyber-attacks and the leakage of sensitive information.[178] Human decision-makers, on the other hand, are sworn to secrecy, and it is exceedingly rare for confidential information to be leaked.[179] Additionally, the system is vulnerable to computer viruses, technical errors, and system failures, all of which could prevent parties from obtaining justice.[180] Furthermore, as a result of the fact that wealthier clients will have greater access to AI than their less fortunate counterparts, the inclusion of AI in ADR has drawn strong

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[172] Derick H. Lindquist and YlliDautaj, 'AI in International Arbitration: Need for the Human Touch,' (2021) 2021(1) Journal for Dispute Resolution, 53

[173] Ibid.

[174] Megha Shawani, 'Alternate Dispute Resolution and Artificial Intelligence; Boom or Bane?' (2020) 2(1) LexForti Legal Journal, 9.

[175] Jocelyn Turnbull Wallace, Sandra Aigbinode Lange, Adam Goldenberg, 'Arbitration and AI – friends or foes?' (*McCarthy Tetrault*, 29 August 2022) <https://www.lexology.com/library/detail.aspx?g=3d3c0c40-4255-4d4c-95be-abf4865ac191> accessed 11 October.

[176] Jocelyn Turnbull Wallace, Sandra Aigbinode Lange, Adam Goldenberg, 'Arbitration and AI – friends or foes?' (*McCarthy Tetrault*, 29 August 2022) <https://www.lexology.com/library/detail.aspx?g=3d3c0c40-4255-4d4c-95be-abf4865ac191> accessed 11 October 2022.

[177] Jocelyn Turnbull Wallace, Sandra Aigbinode Lange, Adam Goldenberg, 'Arbitration and AI – friends or foes?' (*McCarthy Tetrault*, 29 August 2022) <https://www.lexology.com/library/detail.aspx?g=3d3c0c40-4255-4d4c-95be-abf4865ac191> accessed 11 October 2022.

[178] Megha Shawani, 'Alternate Dispute Resolution and Artificial Intelligence; Boom or Bane?' (2020) 2(1) LexForti Legal Journal, 10.

[179] Megha Shawani, 'Alternate Dispute Resolution and Artificial Intelligence; Boom or Bane?' (2020) 2(1) LexForti Legal Journal, 10.

[180] Megha Shawani, 'Alternate Dispute Resolution and Artificial Intelligence; Boom or Bane?' (2020) 2(1) LexForti Legal Journal, 9.

criticism.[181] Installation of AI systems is undoubtedly expensive and many small and emerging firms will likely be unable to comply with the costs.[182] This would result in an uneven distribution of justice because poorer clients would be denied access to expedited justice, which would be a setback in achieving SDG 16.

Legal minds have also expressed concern that AI may one day outperform humans, leaving many unemployed.[183] This belief is reinforced by misinformation and false truths that AI can fully automate the profession. This is one of the factors preventing legal professionals and policymakers from fully integrating AI into ADR mechanisms. To dispel this myth, it is necessary to approach AI with an open mind and recognize that there are some processes that AI cannot fully automate and thus require the intervention of humans.[184] This includes cases in which the decision-maker must demonstrate empathy, fairness and trust, all of which are characteristics of Alternative Dispute Resolution.[185] Indeed, as Lito Dokopoulou quoted in her conference report, "Arbitration by humans is not over yet."[186]

5.0 OPPORTUNITIES FOR AI IN ADR

Total incorporation of AI into ADR cannot be done without sufficiently addressing the issues set out above. To this effect, the following recommendations are put forth: Firstly, policymakers ought to review cyber security laws as well as data privacy laws so as to cater for the growing need for AI. Rules especially on liability need to be addressed before AI can be fully incorporated into ADR.[187] One prospect is that the individual to be held accountable would be the one that triggered the system to experience defects.[188] If the

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[181]   Hibah Alessa, 'The role of Artificial Intelligence in Online Dispute Resolution: A brief and critical overview' (2022) Information & Communications Technology Law, 22.

[182] Amber Jenner, ' The Future of Dispute Resolution: AI' (*Kennedys*, April 2017) < https://kennedyslaw.com/thought-leadership/article/the-future-of-dispute-resolution-ai/> Accessed 11 October 2022.

[183]   Ibrahim Godofa, 'Artificial Intelligence and Its Future in Arbitration' (2020) 4(1) JCMSD, 10.

[184] Ibrahim Godofa, 'Artificial Intelligence and Its Future in Arbitration' (2020) 4(1) JCMSD, 10.

[185]   Geneva Sekula, 'ICCA Sydney: The Moving Face of Technology' (*Kluwer Arbitration Blog,* *2018)*<http://arbitrationblog.kluwerarbitration.com/2018/04/18/icca-sydney-moving-face-technology/>accessed   10 October 2022.

[186]   Lito Dokopoulou, 'Arbitration X Technology: A Call for Awakening?' (*Kluwer Arbitration Blog,* 2019) <http://arbitrationblog.kluwerarbitration.com/2019/01/14/arbitration-x-technology-a-call-for-awakening/?doing_wp_cron=1573976511.53883790969848> accessed 10 October 2022.

[187] Jim Pastore, 'Practical Approaches to Cybersecurity in Arbitration' (2017) 40(3) Fordham International Law Journal <https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=2658&context=ilj> accessed 12 October 2022.

[188]   Lee   Gluyas,   Stefanie   Day,   'Who   is   liable   when   AI   fails   to   perform?'   (*CMS*,   2018) <https://cms.law/en/gbr/publication/artificial-intelligence-who-is-liable-when-ai-fails-to-perform>accessed   10   October 2022.

faults were induced by the manufacturer, he would be held legally responsible.[189] Conversely, if the defects were brought about by unwarranted software updates by the user then the user would be liable.[190]

Additionally, legal practitioners should be subjected to rigorous training on the use of AI in ADR mechanisms so as to fully grasp the capability of AI as it is projected that most of the legal profession will be automated in future.[191] This training will assist legal practitioners to keep abreast, navigate and understand AI systems as used in ADR.

It is wise to keep in mind that ADR's use of AI is still in its early stages. Because of the confidential nature of ADR, AI may be unable to accurately predict outcomes at times.[192] Hence there is a need for time so that AI can fully develop into this type of system. Meanwhile, AI may be used to resolve analytical disputes in ADR, an area within which it has flourished as evidenced by case reasoning systems as discussed in previous sections.

Despite its use in developed countries and some developing countries, Kenya is yet to incorporate AI, fully owing to challenges to do with infrastructure.[193] It would be prudent for the government to invest in this area of law as the incorporation of AI would facilitate faster resolution of disputes thus reducing backlogs of cases that have plagued the courts.[194]

6.0 CONCLUSION

This paper has provided a brief overview of AI and its mechanisms in ADR. It has also summarized some of the benefits, limitations, and opportunities of AI as used in Dispute Resolution Mechanisms in the hope of dispelling some of the myths surrounding AI. The author submits that to ensure justice is available to all, the government must take proactive measures, according to Sustainable Development Goal 16 on Peace, Strong

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[189] Lee Gluyas, Stefanie Day, 'Who is liable when AI fails to perform?' (*CMS*, 2018) <https://cms.law/en/gbr/publication/artificial-intelligence-who-is-liable-when-ai-fails-to-perform>accessed 10 October 2022.

[190] Lee Gluyas, Stefanie Day, 'Who is liable when AI fails to perform?' (*CMS*, 2018) <https://cms.law/en/gbr/publication/artificial-intelligence-who-is-liable-when-ai-fails-to-perform>accessed 10 October 2022.

[191]MattherStepka, 'Law Bots: How AI Is Reshaping the Legal Profession' (*Business Law Today,* 21 February 2022) <https://businesslawtoday.org/2022/02/how-ai-is-reshaping-legal-profession/> accessed 10 October 2022.

[192] Rich Barker, and Calum Mackenzie, 'Technology: Coming for A Job Near You?' (*Accuracy,* July 2019) <https://www.accuracy.com/perspectives/tech-in-arbitration> accessed 10 October 2022

[193]Kariuki Muigua, 'The Evolving Alternative Dispute Resolution Practice: Investing in Digital Dispute Resolution in Kenya' (2020) 10(3) Alternative Dispute Resolution, 47.

[194] --'Role of the emergence of Online Dispute Resolution on the African Continent' <http://www.kenyalaw.org/LVI2014/docs/RoleoftheemergenceofODRontheAfricancontinent.pdf> accessed 10 October 2022.

Institutions, and Justice. ADR is just one of the solutions that have been implemented to inch closer to this objective. We can, however, advance this by incorporating Artificial Intelligence into ADR, just as we have done in traditional justice systems. As established in this piece, AI has many exciting prospects in ADR, such as the use of augmented reality and instant translation during ADR proceedings.[195] This paper makes the claim that by understanding AI and sequentially integrating AI into ADR, we may accomplish more than we intended to, particularly when it comes to achieving justice.

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[195] Geneva Sekula, 'ICCA Sydney: The Moving Face of Technology' (*Kluwer Arbitration Blog*, 2018) <http://arbitrationblog.kluwerarbitration.com/2018/04/18/icca-sydney-moving-face-technology/> accessed 12 October 2020

BIBLIOGRAPHY

Allam S, 'Artificial Intelligence and its Applications' (2016) 2(6) IEJRD <file:///D:/OTHER/My%20Personal%20Research%20activities/AI%20AND%20ADR/AI%20AND%20ITS%20APPLICATIONS.pdf>accessed 11 October 2022.

Alessa H, 'The role of Artificial Intelligence in Online Dispute Resolution: A brief and critical overview' (2022) Information & Communications Technology Law, 9.

Arbitration and Conciliation Act, Cap 18, LFN 2004, Section 57.

Arfin Miriam R., 'The Benefits of Alternative Dispute Resolution in Intellectual Property Disputes' (1995) 17 Hastings Comm. & Ent. L.J. 893

Ashley K, Rissland E, 'Law, Learning and Representation' (2003) 150 Artificial Intelligence, 19.

Barker R, and Mackenzie C, 'Technology: Coming for A Job Near You?' (*Accuracy,* July 2019) <https://www.accuracy.com/perspectives/tech-in-arbitration> accessed 10 October 2022

B. J Copeland, 'Artificial Intelligence' (*Britannica*, 24 August 2022) <https://www.britannica.com/technology/artificial-intelligence> accessed 12 October 2022.

Bellucci E, Lodder A, Zeleznikow J, 'Integrating Artificial Intelligence, Argumentation and Game Theory to Develop an Online Dispute Resolution Environment' (2004) Proceedings of the 16th IEEE International Conference on Tools with Artificial Intelligence, 749.

Carneiro et al. 'Online dispute resolution: An artificial intelligence perspective' (2014) 41 Artificial Intelligence Review, 224.

Chauhan A, 'Future of AI in Arbitration: The Fine Line Between Fiction and Reality' (*Kluwer Arbitration Blog*, 26 September 2020)<http://arbitrationblog.kluwerarbitration.com/2020/09/26/future-of-ai-in-arbitration-the-fine-line-between-fiction-and-reality/> accessed 12 October 2022.

Constitution of Kenya 2010, art 159 (2).

Dokopoulou L, 'Arbitration X Technology: A Call for Awakening?' (*Kluwer Arbitration Blog,* 2020) <http://arbitrationblog.kluwerarbitration.com/2019/01/14/arbitration-x-technology-a-call-for-awakening/?doing_wp_cron=1573976511.5388379096984863281 25> accessed 12 October 2022.

Eidenmuller H and Varesis F, 'What is an Arbitration? Artificial Intelligence and the Vanishing Human Arbitrator,' (2020) 17(1) New York University Journal of Law and Business,56.

Frankenfield J, 'Artificial Intelligence: What It Is and How It Is Used' (*Investopedia*, 6 July 2022) <https://www.investopedia.com/terms/a/artificial-intelligence-ai.asp> accessed 12 October 2022.

Gluyas L, Day S, 'Who is liable when AI fails to perform?' (*CMS*, 2018) <https://cms.law/en/gbr/publication/artificial-intelligence-who-is-liable-when-ai-fails-to-perform>accessed 10 October 2022

Godofa I, 'Artificial Intelligence and Its Future in Arbitration' (2020) 4(1) JCMSD, 10.

Holt Tyrone L., 'Whither Arbitration – What Can be Done to Improve Arbitration and Keep out Litigation's Ill Effects' (2008) 7 DePaul Bus & Comm LJ, 455<https://via.library.depaul.edu/cgi/viewcontent.cgi?article=1120&context=bclj> accessed 11 October 2022.

Jain S, 'Pros and Cons of Artificial Intelligence in ADR' (*White Code VIA Mediation & Arbitration Centre)* <https://viamediationcentre.org/readnews/NTE5/PROS-AND-CONS-OF-ARTIFICIAL-INTELLIGENCE-IN-ADR#:~:text=It%20can%20identify%20blind%20spots,to%20make%20the%20process%20efficient.&text=AI%20can%20be%20used%20to,submitted%2C%20and%20the%20arbitrator%27s%20reasoning> accessed 19 October 2022.

Kabubu J, 'Artificial Intelligence (Ai) in Kenya' (*MMAN*, 26 January 2021)<https://mman.co.ke/content/artificial-intelligence-ai-kenya> accessed 11 October 2022.

Kasap G, 'Can Artificial Intelligence ("AI") Replace Human Arbitrators? Technological Concerns and Legal Implications,' (2021) 2021(2) Journal of Dispute Resolution, 225.

Karugu W, 'Artificial Intelligence and Alternative Dispute Resolution' (*Strathmore Dispute Resolution Centre Blog*, 27 January 2020)

<https://sdrcentre.wordpress.com/2020/01/27/artificial-intelligence-and-alternative-dispute-resolution/> accessed 10 October 2022.

Kenya Revenue Authority, 'KRA records a 31% increase in the number of tax disputes resolved through Alternative Dispute Resolution' (2022) <https://www.kra.go.ke/news-center/press-release/1635-kra-records-a-31-increase-in-the-number-of-tax-disputes-resolved-through-alternative-dispute-resolution> accessed 11 October 2022.

Law Times, 'AI may help with alternative dispute resolution' (*Law Times*, 3 June 2019) <https://www.lawtimesnews.com/practice-areas/adr/ai-may-help-with-alternative-dispute-resolution/263579> accessed 12 October 2022

Leavy S, 'Gender bias in artificial intelligence: the need for diversity and gender theory in machine learning' (1st International Workshop on Gender Equality in Software Engineering, 2018)<https://www.researchgate.net/publication/326048883_Gender_bias_in_artificial_intelligence_the_need_for_diversity_and_gender_theory_in_machine_learning/link/5bce138aa6fdcc204a001d87/download> accessed 10 October 2022.

Lindquist D and Dautaj Y, 'AI in International Arbitration: Need for the Human Touch,' (2021) 2021(1) Journal for Dispute Resolution, 53

Metz C, 'AI Is Transforming Google Search. The Rest of the Web Is Next' (*Wired*, 2 April 2016) <https://www.wired.com/2016/02ai-is-changing-the-technology-behind-google-searches/> accessed 12 October 2022

Muigua K, 'The Evolving Alternative Dispute Resolution Practice: Investing in Digital Dispute Resolution in Kenya' (2020) 10(3) Alternative Dispute Resolution, 47.

Muigua K and Ombati J, 'Achieving expeditious Justice: Harnessing Technology for Cost Effective International Commercial Arbitral Proceedings' (2018) 7(1) Alternative Dispute Resolution, 11

Ngetich Rachel ChepkemoiBiomndo, Effectiveness of Alternative Dispute Resolution Mechanism (ADR) in Case Backlog Management in Kenyan Judicial System: Focus on Milimani High Court Commercial Division, (LLM thesis, University of Nairobi 2019), 70.

Pastore J, 'Practical Approaches to Cybersecurity in Arbitration' (2017) 40(3) Fordham International Law Journal

<https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=2658&context=ilj> accessed 12 October 2022.

Sakinatu N, Mohd F, et al 'Artificial Intelligence for Construction Dispute Resolution: Justice of the Future' (2021) 11(11) International Journal of Academic Research in Business and Social Sciences, 9.

Sekula G, 'ICCA Sydney: The Moving Face of Technology' (*Kluwer Arbitration Blog*, 2018) <http://arbitrationblog.kluwerarbitration.com/2018/04/18/icca-sydney-moving-face-technology/> accessed 12 October 2020.

Stepka M, 'Law Bots: How AI Is Reshaping the Legal Profession' (*Business Law Today,* 21 February 2022) <https://businesslawtoday.org/2022/02/how-ai-is-reshaping-legal-profession/> accessed 10 October 202

Shawani M, 'Alternate Dispute Resolution and Artificial Intelligence; Boom or Bane?' (2020) 2(1) LexForti Legal Journal, 2

S Putera, N. S. F. M.., Hassan Saripan, H.,, R. A., & Abdullah, S. M. 'Artificial Intelligence for Construction Dispute Resolution: Justice of the Future' (2021) 11(11) IJARBSS, 139–151.
The United States Department of Justice Archives, *Use and Benefits of ADR by the Department of Justice Fiscal Year 2017 Overview*, (Fiscal Year 2017 Report, 2020) 1,<https://www.justice.gov/archives/olp/alternative-dispute-resolution-department-justice> accessed 11 October 2022.

Transforming our world: the 2030 Agenda for Sustainable Development, (adopted on 21 October 2015), UNGA A/RES/70/1, <https://www.refworld.org/docid/57b6e3e44.html> accessed 11 October 2022.
University of Helsinki, "Elements of AI" <https://course.elementsofai.com/1/1> accessed 12 October 2022.

Wallace J, Aigbinode L, Goldenberg A, 'Arbitration and AI – friends or foes?' (*McCarthy Tetrault,* 29 August 2022) <https://www.lexology.com/library/detail.aspx?g=3d3c0c40-4255-4d4c-95be-abf4865ac191> accessed 11 October.

Wall S and Schellmann H, 'LinkedIn's job matching AI was biased. The company's solution? More AI' (*MIT Technology Review*, 23 June 2021) <https://www.technologyreview.com/2021/06/23/1026825/linkedin-ai-bias-ziprecruiter-monster-artificial-intelligence/> accessed 10 October 2022.

Wanyoike M, 'LETTERS: Kenya ripe for online dispute resolution' (*Business Daily*, 25 September 2019) <https://www.businessdailyafrica.com/bd/opinion-analysis/letters/letters-kenya-ripe-for-online-dispute-resolution-2265816>accessed 11 October 2022.

Zeleznikow J, 'Using Artificial Intelligence to provide Intelligent Dispute Resolution Support' (2021) 30 Group DecisNegot, 790.

Zeleznikow J, 'Can Artificial Intelligence and Online Dispute Resolution Enhance Efficiency and Effectiveness in Courts' (2017) 8 International Journal for Court Administration, 82

'ODR definition' (*Law Insider*) <https://www.lawinsider.com/dictionary/odr> accessed 12 October 2022.

'New Kenyan ODR Provider: Utatuzi Center' (*National Center for Technology & Dispute Resolution,*10 February 2021)<https://odr.info/new-kenyan-odr-provider-utatuzi-center/> accessed 12 October 2022.

'Role of the emergence of Online Dispute Resolution on the African Continent' <http://www.kenyalaw.org/LVI2014/docs/RoleoftheemergenceofODRontheAfricancontinent.pdf> accessed 10 October 2022.