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# Moving Towards an AI Oriented Arbitration: Significance and Challenges

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#### **ABSTRACT**

In the second decade of the twenty-first century, it has become common knowledge that litigation, although the most commonly preferred form of dispute redressal, is often timeconsuming and expensive. As a result, the preference for Alternative Dispute Resolution (ADR) methods, such as mediation, negotiation, and conciliation, has become quite common. However, with the rising necessity of redressal of corporate matters pertaining to private entities, the rise of Arbitration as a form of ADR has been considered inevitable. Arbitration has been considered the biggest innovation in terms of dispute redressal for its private, speedy, and conclusive nature. Recently, a new question has emerged as to whether Arbitration, like all other professions, would be influenced by the advent of Artificial Intelligence (AI). This research paper primarily focuses on the significance and challenges of such an inclusion. It delves into the multiple pros of AI in arbitration, such as timereduction, data compilation, pattern-oriented decisions, reduced influence, and minimal demerits, as well as the cons which may include the possibility of hacking, lack of human conscience and justice, and inability to provide a reason among many others. The paper attempts to recognize the possibility of AI as an arbitrator, the road ahead and the challenges faced with adoption of AI in ADR.

**Keywords:** Artificial Intelligence, Arbitration, ADR, Technology, Judiciary.

#### I. Introduction

#### (A) Meaning

In the wake of the twenty first century, humans had become privy to the possibility of the work front being dominated by the use of computers. Towards the second decade, this advent was taken to a whole different level with the increased involvement of the most modern technology i.e.; AI (Artificial Intelligence). It was first coined by a computer scientist named John McCarthy in 1956 who exactly defined AI as "making a machine behave in ways that would be called intelligent if a human were so behaving". It includes machine learning, deep learning, neural pathways, BOTs, cognitive computing and natural language processing.<sup>2</sup> In layman

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<sup>&</sup>lt;sup>2</sup> Kathleen Paisley and Edna Sussman, Artificial Intelligence Challenges and Opportunities for International

terms, the computer which we use to store files, process large amounts of data, perform mathematical calculations, make a statistical analysis, will have a mind of its own to automatically learn from its past behaviours which the humans have taught and be able to perform its functions in a faster and smarter way. The functioning of AI involves reasoning, information, planning, learning, communication, perception and the ability to move and manipulate objects.<sup>3</sup> In the present scenario, AI disruption is still in an inceptive stage where new boundaries of potential are created every day with its quality of data that is being processed.

#### (B) History

Origin of AI machines goes far back in 1950's where the first operational AI programs were written in 1951 to run on the Ferranti Mark I machine of the University of Manchester. 4 In 1955, Allen Newell and Herbert A. Simon created the "first artificial intelligence program which had proved 38 of 52 mathematics theorems, and found new proofs of other theories as well.<sup>5</sup> After 1956, many engineers made prominent discoveries in the field of AI which attracted the private sector to divulge its resources into its research and development. The Government also went deep into the AI evolution as they were particularly interested in a machine that could transcribe and translate spoken language as well as high throughput data processing.<sup>6</sup> As a base to build with, involvement of AI in these sectors would be strictly advantageous in terms of the time efficiency, the flexibility, the lack of exhaustion and the continuous ability to work (something which humans are limited to). As a result, by the first half of the second decade, most companies and factories incorporated robots assisted with AI in their workforce specifically in their production and manufacturing units. This helped in diversifying the profits of companies as the such technological investments were simply one-time investments. With the success attained in this sector it was soon suggested that AI should be incorporated into all sectors and thereby creating ease in the respective sectors. Tech giants such as Google and Microsoft were the forefront bidders in such an initiative. Such an involvement soon raised eyebrows and made people retrospect the use of AI and eventually come up with disadvantages of the same. Loss of human employment is a disadvantage we all know of but there are other problems which will deeply impact in the society when the world will be surrounded by A.I, including Arbitration.

Arbitration, New York State Bar Association, https://archive.nysba.org/DisputeResolutionLawyer/

<sup>&</sup>lt;sup>3</sup> Pooja Agarwal et al; *Artificial Intelligence*; Vol-2, Issue 6 Issn (2305-509X), INT'L JOURNAL OF CASE STUDIES, 3 pp. 07-14

<sup>&</sup>lt;sup>4</sup> Ibid

<sup>&</sup>lt;sup>5</sup> History of Java Intelligence, JavaTPoint, https://www.javatpoint.com/history-of-artificial-intelligence

<sup>&</sup>lt;sup>6</sup> Rockwell Anyoha, *History of Artificial Intelligence*, Harvard University Graduate School of Arts and Sciences, https://sitn.hms.harvard.edu/flash/2017/history-artificial-intelligence/

#### II. THE RISE OF ARTIFICIAL INTELLIGENCE IN JUDICIARY

#### (A) Traditional Problems Faced by Judiciary

Judicial decision-making requires assessing the credibility of witnesses, evaluating the probative weight of evidence, interpreting the meaning and intended effect of legal statutes and other normative authorities and, especially in criminal cases, balancing mercy with justice. But it would be a farce to say that AI disruption has not affected the judiciary. It has already found its meaning with things such as legal research, drafting of contracts, corporate records, preparation of research memos, drafting of pleadings, facilitating document discovery and providing language translation and interpretation. However, there are still major blockades such as lack of legal resources for the needy, complex court procedure, prolonging of cases and corruption that have been stuck within the tiresome offices of the courts for decades. This makes judiciary not only a dispute resolution tool but an exploitation weapon. People are being exploited by the rich in the name of legal proceedings as top-notch law firms can easily use their man force to crumble small institutions, MSMEs, blue collar workers and rural families. This form of utilization of the most important pillar of democracy was far from what was envisaged by our forefathers of democracy.

#### (B) What Ai Can Offer to Smoothen the Judicial Process

If observed correctly, AI has already been use in the judiciary in one way or another. Supreme Court and most High Courts have computerised day to day case files and a lot of the proceedings happen by referring to digital devices such as laptops, tablets as well as mobile phones. SCC Online and Manupatra have already triumphed the field of legal research by providing Supreme Court or High Court Judgements, Legal Commentaries, Statutory Law and Law Reports. Therefore, AI has already taken hold of some of the functioning of judiciary.

To make AI a core part of judiciary, machine-learning algorithm is a new concept which has been in the works for a while. Softwares like Lex Machina, Premonition are already being used by lawyers to predict the chances of winning a case. Basically, Predictive justice refers to using analysis of large amount of data by the means of AI-enabled technologies for predicting

<sup>&</sup>lt;sup>7</sup> Sartor, G & Branting, L.K, *Introduction: Judicial Applications of Artificial Intelligence*, SpringerLink, https://link.springer.com/chapter/10.1007/978-94-015-9010-5\_1#citeas

<sup>&</sup>lt;sup>8</sup> William S. Veatch, Artificial Intelligence and Legal Drafting, *American Bar Ass'n Legal Analytics Committee Newsletter*.

 $https://www.americanbar.org/groups/business\_law/publications/committee\_newsletters/legal\_analytics/2019/201904/ai-legaldrafting/$ 

<sup>&</sup>lt;sup>9</sup> N. Aletras st al, *Predicting judicial decisions of the european court of human rights: A natural language processing perspective*, PeerJ Computer Science, https://peerj.com/articles/cs-93/

outcomes of legal disputes.<sup>10</sup> Although it may seem difficult to fathom the application of this algorithm in the judiciary but applying it on day-to-day basis may help in removing the blockade the judiciary is facing for a while. If used correctly, AI can gather large amounts of data over the years and create a consistent pattern of decision making towards a specific issue by referring to vast amounts of precedents which ideally a human judge is not able to do. This would help in reducing biasness, favouritism or corruption. The lengthy court proceedings may finally come to an end (at least in small number of cases). Apart from increasing efficiency and bringing standardisation into the institution, the biggest impact this technology would have in the judicial system is that it would reduce the influential powers of the parties on the basis of their incomes. Considering how bribery is the most external form of influence,<sup>11</sup> AI machines would be immune to such form of influence if they are programmed correctly. Therefore, switching to an AI based decision making might not be a such a bad idea and may steer the judiciary's future into a sustainable direction.

Giving judges an option to refer to AI for decision making is one way which can improve decision making process as the judge would be able to recognize the pattern which have been adopted in the similar disputes in the past thereby, improving decision making process. However, one major problem would be that judges will put feeble effort in a case and thus become intellectually 'lazy'. <sup>12</sup> So binding or not binding, AI will eventually pave its way into the decision making of the judges.

One instance of AI-based decision making was witnessed in the *Loomis Case*, <sup>13</sup> whereby the defendant's ability to recidivism was predicted by a software named COMPAS (Correctional Offender Management Profiling for Alternative Sanctions) and was taken into consideration by the Circuit Court during the sentencing. This case created a lot of controversy which even led to an appeal by the defendant in the Appellant Court. The Court quashed the appeal and held that the use of COMPAS risk assessment at sentencing did not violate the defendant's rights to due process because he failed to show that the sentencing court actually relied on gender as a factor in sentencing; in addition to the COMPAS risk assessment, the seriousness of the crime and his criminal history both bore a nexus to the sentence imposed. <sup>14</sup> This proves that the AI decision making days are not far behind and the judiciary might be ready for an AI disruption.

Bhishm Khanna, *Predictive Justice: Using AI for Justice*, https://www.cppr.in/wpcontent/uploads/2021/05/predictive-justice-using-ai-for-justice-2.pdf

<sup>&</sup>lt;sup>11</sup> Michael Abramowicz, *Predictive Decisionmaking*, VIRGINIA LAW JOURNAL, 92 Va. L. Rev. 69 (2006)

<sup>&</sup>lt;sup>12</sup> Bex, Floris & Prakken, Henry, Can Predictive Justice Improve the Predictability and Consistency of Judicial Decision-Making? 10.3233/FAIA210338.

<sup>&</sup>lt;sup>13</sup> State v. Loomis, 881 N.W.2d 749, 66, 68 (2016).

<sup>14</sup> Ibid

But this paper is not limited to the acceptance of AI as a referral for the judge's decision making. It goes further for putting the AI right into the spot of judge's seat and use its own algorithmic conscience to analyse the case and come to a binding decision.

#### III. HOW AI WILL FUNCTION AS AN ARBITRATOR?

While this paper will not go into an in-depth analysis of as to how exactly an AI will function and what formulas and analysis it will use to make decisions, but for basic knowledge there is a need to understand as to what type of technology we may be looking for in the near future for robot arbitrators to function. There are three types of predictive algorithms (also known as "Machine Learning"): (a) Supervised Learning, (b) Unsupervised Learning and (c) Reinforcement Learning. The type of predictive algorithm we are expecting to grab hold of in the future is Unsupervised Learning. Deep Learning, which is a part of Unsupervised Learning, is the technology which will bring light into Judiciary's, specifically Arbitration, AI future.

Deep learning is a subfield of machine learning which attempts to learn high-level abstractions in data by utilizing hierarchical architectures, <sup>16</sup> and has removed tons of blockades with which the AI community was struggling for many years.<sup>17</sup> Deep Learning, having artificial neural networks, use multiple processing layers to discover patterns and structure in very large data sets. 18 Each layer learns a concept from the data that subsequent layers build on, 19 which permits the machine to create algorithms necessary to make predictions. So, if this concept is used in Arbitration, the AI should identify the type of contract made by the parties, the applicable laws, similar disputes which arose in the past and the ability to bring forth a decision. The algorithm used should also be able to filter out cases which involves any question of law or involving issues of fact or both. Although this might sound good in theory, the practical aspect of this notion is not far from reality. There is no dispute AI arbitrator would have to be trained to overlook the biased submissions of both the parties' statement of claims and defences and connect the factual position to the law stated by parties in their submissions.<sup>20</sup> But once trained. it would be able to analyse previous patterns, study them, apply them in the present dispute and render an award. Therefore, AI should not be restricted to filter out documents or find out a few case judgements but should be expanded to implement some standards based on integrated

<sup>20</sup> IBID

<sup>&</sup>lt;sup>15</sup> Paul Bennett Marrow et al, *Artificial Intelligence and Arbitration: The Computer as an Arbitrator- Are we there yet*, 74 Dispute Resolution Journal 35 (2020) (American Arbitration Association), 2020

<sup>&</sup>lt;sup>16</sup> Guo, Y et al, *Deep learning for visual understanding: A review. Neurocomputing*, Volume 187, Pages 27-48 (2016).

<sup>&</sup>lt;sup>17</sup> LeCun, Y et al, *Deep learning. Nature*, Volume 521, Pages 436-444 (2015).

<sup>&</sup>lt;sup>18</sup> Rusk, N. *Deep learning*, Volume 13, Page 35 (2016). 7

<sup>19</sup> Ibid

strategic and resource management and the use of innovative means of solving justice problems, which confer quality to the act of justice.<sup>21</sup>

#### IV. CHALLENGES FOR THE FUNCTIONING OF AI IN ARBITRATION

#### (A) Question Of Biasness

Although the legal community might celebrate the inevitable entry of technology in the judiciary, there comes the unexpected dangers packed with this advent evolution waiting to unfold in the near future. One of them is algorithmic bias. It is still a matter of question as to how the AI would be trained with what algorithm and who will be the architect of the algorithm. Studies have shown that arbitrators, judges and juries tend to bring hidden biases which they are themselves unaware of and they tend to use heuristics (mental shortcuts) when making decisions.<sup>22</sup> Therefore deeply embedding unconscious biasness of various stakeholders in the algorithm will create an unwanted pattern which the algorithm will nourish and grow day by day. For example, the Portrait AI Art Generator, which converts a user's picture into a realistic impressionist portrait was whitening the portraits of coloured people which raised serious issues whether these algorithmic biases reflect society's systematic problems.<sup>23</sup> Twitter's cropping system also raised questions about the algorithmic biasness when it cropped out black people and making white person the centred point in the preview. In Florida, a criminal justice algorithm termed African-Americans as "high risk" which was twice the rate of white defendants.<sup>24</sup> These examples are only a few of many algorithmic biasness which are being witnessed around the globe and may have an impact if a biased algorithm is used in arbitration as well. Some of the solutions are: (a) Identifying potential sources of bias (b) Set guidelines and rules for eliminating bias and procedures (c) Identify accurate representative data (d) Monitor and review models in operation.<sup>25</sup> However, AI Arbitrator cannot be used as a platform for trial-and-error experimentation as we are talking about a dispute of crores which may affect the financial position, lay-off rate or even winding up status of a company. AI cannot be used in arbitration even if there is a possibility of 0.000001% bias in its algorithm which is a strong

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<sup>&</sup>lt;sup>21</sup> Moroianu Zlatescu, Irina & Zlătescu, Petru Emanuel, *Implementation of the European Ethical Charter on the Use of Artificial Intelligence in Judicial Systems and Their Environment*, Supplement of Law Review - Year 2019, <sup>22</sup> Paul Bennett Marrow et al, *Artificial Intelligence and Arbitration: The Computer as an Arbitrator- Are we there* 

yet, 74 Dispute Resolution Journal 35 (2020) (American Arbitration Association), 2020

<sup>&</sup>lt;sup>23</sup> Edward Ongweso Jr, *Racial Bias in AI Isn't Getting Better and Neither Are Researchers' Excuses*, Vice, (29 July 2019), https://www.vice.com/en/article/8xzwgx/racial-bias-in-ai-isnt-getting-better-and-neither-are-researchers-excuses

<sup>&</sup>lt;sup>24</sup> James Manyika et al, *What do we do about the Biases in AI*? Harvard Business Review, https://hbr.org/2019/10/what-do-we-do-about-the-biases-in-ai

<sup>&</sup>lt;sup>25</sup> Ronald Schmelzer, 6 ways to reduce different types of bias in machine learning, (10 June 2020), https://www.techtarget.com/searchenterpriseai/feature/6-ways-to-reduce-different-types-of-bias-in-machine-learning

argument to keep AI away from decision making process.

## (B) The Black Box Theory

AI might process large amounts of data, analyze each data set, perform new functions and provide its "intelligent" information to humans. But a major problem is regarding its explanation which is extremely crucial in systems that are responsible for decisions and automated actions.<sup>26</sup> AI is unable to provide reasons for its decisions which is one of the major problems in the AI industry. In arbitration, one of the most important questions that arises is that how an A.I would be able to give a proper detailed reasoning for each of the issues which are arising in a dispute and satisfy the parties. There are a lot of debates as to how an AI is just a "Black Box', which would ignore the applicability of logical deduction, ignore intrinsic details within the case at hand and just apply certain irrelevant mathematical formulas to arrive at an assertion. The mainstream knowledge is that the computer can be used to resolve any problem, be it mathematical or statistical, but what is not known is that the algorithms don't direct computers to explain to the user why is it doing so to reach to a conclusion, <sup>27</sup> which questions the biasness of the algorithm used by the machine. <sup>28</sup> Adopting models like Deep Learning will use millions of data points to correlate specific data which largely self-directed and not only hard to a common user but also to data scientists and programmers.<sup>29</sup> AI's overarching goal may still remain intact, but black-box AI may do things in ways the creators of the AI may not understand or be able to predict.<sup>30</sup> One of the solutions to such a problem is using of an AI tool called "Explainable AI". It is a programme which displays how the AI reached to the output it has provided. This means that the human can look at the criteria the AI has used, the chosen decision-making process and the potential for error.<sup>31</sup> However this does not solve the problem. It only provides as to what formulas the AI has used into reaching a decision. It does not provide as to why the A.I has used such a formula to reach a particular decision. When two parties agree to appoint an arbitrator, the least they expect from the arbitrator is to provide a detailed reasoning for its award with each issue being discussed in detail, all being done in an equitable and fair manner. A simple "Yes" or "No", "Right" or "Wrong", "Correct" or "Incorrect" by a

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<sup>&</sup>lt;sup>26</sup> Jose Maria Lopez, *Ever heard of the AI Black Box Problem?* WorldLine (October 4, 2021), https://worldline.com/en/home/knowledgehub/blog/2021/january/ever-heard-of-the-aI-black-box-problem.html

<sup>&</sup>lt;sup>27</sup> Ryan Calo, Artificial Intelligence Policy: A Primer and Roadmap, 51 U.C. Davis L. Rev. 399, 414 (2017)

<sup>&</sup>lt;sup>28</sup> Julia Angwin et al., *Machine Bias*, ProPublica (May 23, 2016), https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing.

<sup>&</sup>lt;sup>29</sup> Ivy Wigmore, *Black Box AI*, Tech Target (November 4, 2021), https://www.techtarget.com/whatis/definition/black-box-AI.

<sup>&</sup>lt;sup>30</sup> Martin Abadi & David G. Andersen, *Learning to Protect Communications with Adversarial Neural Cryptography*, ARXIV (Oct. 24, 2016), https://arxiv.org/pdf/1610.06918v1.pdf.

Penny Labach, *ELI5: Explainable AI*, Think Automation (December 16 2021), https://www.thinkautomation.com/eli5/eli5-explainable-ai/

machine is not a convincing answer for someone who has spent tons money in legal proceedings and is provided with solution with a few assertions. Therefore, there is a need for an AI who thinks like a human and explains its arguments like an actual human, something which seems to be light years ahead.

### (C) AI's Efficiency to Render Awards

The main difference between an arbitrator and a judge is that a judge can apply the laws of the country in any given case and interpret its provisions accordingly in order to decide a particular dispute. However, the powers of arbitrator are limited only to the facts of the disputes which the party has presented itself and as per the laws directed by the legislation. If an AI presided over a litigation bench, then the most expectable form of algorithm which it would follow is the compilation of millions of cases pertaining to that specific dispute along with the applicable laws and create a pattern which has been followed throughout the years in order to reach a specific conclusion. The A.I in an arbitration proceeding cannot use a similar algorithm like that in the litigation cases. Instead of judgements, various awards have to be complied, analyzed, creating mathematical implications and then find a pattern for the particular dispute. The blockade that arises is that arbitration awards are not easy to find in the public sphere, <sup>32</sup> as it is upto the discretion of the parties to disclose them to the outside world. Barely there are enough awards openly published, the few that are accessible also tend to be heavily redacted.<sup>33</sup> Using half-uploaded awards which divided into various fields of law and considering the unsolved hidden biases in the coding, the end result would make for a very inaccurate data set.<sup>34</sup> This is one of the biggest challenges for the incorporation of AI arbitrator as it questions the use of AI arbitration in the first place when there is limited data for it to learn from and create a pattern.

#### (D) Data Privacy Issues

One of the challenging issues for using an AI powered Arbitrator is its ability to protect the data it has been given with. Various companies, who submit confidential documents during Arbitration proceedings are tend to be sensitive in nature and requires utmost privacy during such proceedings. The security of AI systems is currently underrepresented in public discussions; however, reports on successful attacks on AI systems have emerged over the past couple of years.<sup>35</sup> The utilised attack vectors range from requiring little technical expertise to

<sup>32</sup> Ibid

<sup>&</sup>lt;sup>33</sup> Maxi Scherer, *Artificial Intelligence and Legal Decision-Making: The Wide Open?* Queen Mary School of Law Legal Studies, https://ssrn.com/abstract=3392669

<sup>&</sup>lt;sup>34</sup> Ghazal Bhootra and Ishan Puranik, *Arbi(Traitor)? A Case Against Ai Arbitrators*, INDIAN ARBITRATION LAW JOURNAL, 4 Ind. Arb. L. Rev. 28 (2022)

<sup>35</sup> K. Hartmann and C. Steup, Hacking the AI - the Next Generation of Hijacked Systems, 2020 12th International

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attacks involving detailed knowledge of the underlying AI.<sup>36</sup> Furthermore, many countries are silent on data protection and other privacy related issues which raises a lot of question on the accountability for any data leaks by the A.I.<sup>37</sup> Public notion is still mixed regarding the safety of data processing by the A.I.<sup>38</sup> Some AI regulated drafts are still in making like the Artificial Intelligence Act proposed by the European Commission. The objectives of the act are: ensuring AI systems in the EU are safe and respect fundamental rights and values; fostering investment and innovation in AI; enhancing governance and enforcement; encouraging a single European market for AI.<sup>39</sup> The California Privacy Rights Act also touches upon the use of A.I by giving the rights to consumers to understand automated decision making, which includes A.I and Machine Learning.<sup>40</sup> Similarly Brazil,<sup>41</sup> and South Africa,<sup>42</sup> have inserted provisions in their respective acts by questioning the process used by automated decision making programmes which store user's sensitive data and make them liable accordingly.

#### V. CURRENT LAWS SUPPORTING AI IN ARBITRATION

Let us assume that an algorithm is fully functional and an AI is developed specifically for Arbitration, can the parties to the dispute, in the status quo, appoint an AI Arbitrator to arbitrate the dispute? This leads us to the question as to whether AI Arbitrators can be appointed by the parties in the status quo. The Arbitration and Conciliation Act does not specifically define who exactly is an arbitrator but defines Arbitration Tribunal as a Sole Arbitrator and or a panel of arbitrators. It does not specifically define an arbitrator to be a human arbitrator and therefore one interpretation is that AI could be appointed as an Arbitrator by the parties. Even referring to the New York Convention on Recognition and Enforcement of Arbitral Awards, arbitrator is a person who renders an arbitral award. No provision provides for the appointment of only human arbitrators and therefore the AI arbitrators could issue an arbitral award which can be enforced under this convention. 44 But this does not mean that AI arbitrators can just be blatantly

Conference on Cyber Conflict (CyCon), 2020, pp. 327-349, doi: 10.23919/CyCon49761.2020.9131724

<sup>&</sup>lt;sup>36</sup> J. Vanian, *Why Google's Artificial Intelligence Confused a Turtle for a Rifle*, FORTUNE, 8 November 2017, https://fortune.com/2017/11/08/google-artificial-intelligence-turtle-rifle/

<sup>&</sup>lt;sup>37</sup> GUY PEARCE, BEWARE THE PRIVACY VIOLATIONS IN ARTIFICIAL INTELLIGENCE APPLICATIONS, ISACA NOW BLOG, HTTPS://www.isaca.org/resources/news-and-trends/isaca-now-blog/2021/beware-the-privacy-violations-in-artificial-intelligence-applications

<sup>&</sup>lt;sup>38</sup> According to the European Consumer Organization in 2020, a survey showed that 45-60% of Europeans agree that AI will lead to more abuse of personal data. (https://www.weforum.org/agenda/2022/03/designing-artificial-intelligence-for-privacy/)

<sup>&</sup>lt;sup>39</sup> Artificial intelligence (AI) and data privacy, Usercentric, https://usercentrics.com/knowledge-hub/data-privacy-artificial-intelligence/.

<sup>40</sup> Ibid

<sup>&</sup>lt;sup>41</sup> Article 20 of Brazil's Lei Geral de Proteção de Dados (LGPD)

<sup>&</sup>lt;sup>42</sup> Chapter 8 of South Africa's Protection of Personal Information Act (POPIA

<sup>&</sup>lt;sup>43</sup> Arbitration & Conciliation Act, 1996, Sec 2(d)

<sup>&</sup>lt;sup>44</sup> Implementation of Artificial Intelligence in Arbitration, Faculty of Law, University of Ohio,

be appointed by parties as per the current laws as these laws are made in such a manner which is applicable to humans only. 45 While countries like India and the US may not have provisions specifically for a human arbitrator, countries such as France, 46 Netherlands, 47 and Portugal, 48 strictly restricts the appointment of an arbitrator only if they are a natural person. There are observations that since legal status of personhood is also accorded to non-living entities such as corporations and companies incorporated under company law in most if not all countries, <sup>49</sup> then such legal status can also be given to AI arbitrators. Before countries can make domestic amendments into their statues, it is important the Arbitration community as a whole recognizes the use of AI as arbitrators. The first stepping stone would be to amend one of the most important arbitration agreements in the international sphere i.e., Convention on the Recognition and Enforcement of Foreign Arbitral Awards 1958 (the NY Convention) to recognise AI Arbitrators. Of course, that would be another hassle as more than 150 countries would need to agree in regards to the amendment and not all countries have an equal footing with technology. But if the international agreement is somehow amended, countries which have ambiguous definition of "Arbitration Tribunal" or do not have such a definition at all can amend their statues and include the following "Arbitration Tribunal includes a sole arbitrator or all the arbitrators where more than one. [An arbitrator includes Artificial Intelligence Software]."50

#### VI. CONCLUSION

Under the ambit of this paper, it has been attempted to identify the various intricacies of incorporating AI into the legal spectrum of Arbitration. AI has been around for considerable amount of time especially since the beginning of the second decade of the 21<sup>st</sup> century. This paper has attempted to intricately observe the possible advantages as well as various disadvantages of the incorporation of AI into Arbitration. Based on all the above observations it can be concluded that the incorporation of AI into arbitration although advantageous in multiple ways, is still in its inception stage and requires a lot of blocks to be built upon before it is up and running. But sooner or later, it is inevitable that AI will be incorporated into the Arbitration spectrum. On an ending note, French philosopher Henri-Louis Bergson quoted "For

<sup>45</sup> Ibid

<sup>&</sup>lt;sup>46</sup> France Arbitration Act, 2011

<sup>&</sup>lt;sup>47</sup> Netherlands Arbitration Act, 1015

<sup>&</sup>lt;sup>48</sup> Rui Ramos, *The New Portuguese Arbitration Act* (Law No. 63/2011 Of 14 December on Voluntary Arbitration)'

<sup>&</sup>lt;sup>49</sup> Banta & Varsha, *Is Arbitration Necessarily a Human Activity? – Technological Disruption and The Role of Robots in Arbitration*, Indian Arbitration Law Review, 1. 49-59 (2019)

<sup>&</sup>lt;sup>50</sup> Thomas R. Snider & Sergejs Dilevka, *Artificial Intelligence and International Arbitration: Going beyond E-Mail*, Tamini (April 18 2018), https://www.tamimi.com/law-update-articles/artificial-intelligence-and-international-arbitration-going-beyond-e-mail/

a conscious being, to exist is to change, to change is to mature, to mature is to go on creating oneself endlessly."

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