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USE OF ARTIFICIAL INTELLIGENCE IN ARBITRATION PROCEEDINGS

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Abstract

This paper is a study on the impact created by Artificial Intelligence in arbitration proceedings, examining how the development of this technology has been inculcated into the system and its efficiency in managing this field of law, which has been traditionally dominated by human power. The significance of studying the intersection of technology and law is ever-increasing, which the paper has tried to address. With the aid of existing literature, the authors have conducted doctrinal research while taking the assistance of qualitative data collected through interviews of various professionals from various fields as a form of methodology to gain insight into the research question, which dwelled on understanding whether Artificial Intelligence has any severe implications for the working and efficiency of decision making in Arbitration, particularly international Arbitration. The authors have also analysed the functioning of the existing AI tools employed by Arbitration courts and tribunals and have drawn conclusions regarding their contribution to the current system. The paper also delves into various aspects of AI that could be incorporated into multiple stages of arbitration. Based on the study conducted, a judicious conclusion has been drawn, suggesting that AI, while being beneficial in time and cost reduction, fails to provide data security to susceptible documents. The tool as such is not readily and willingly used by arbitrators for fear of lack of originality in decisions made through AI tools and inefficiency of AI tools in handling sensitive data. Suggestions have been made as to what improvements could be brought in this partnership of varying dynamics to mitigate the growing concern regarding efficiency, accuracy in decision-making, acceptance of AI-assisted decisions and the primary concern, data privacy. In conclusion, it can be said that AI in Arbitration is a gradual mechanical process which needs proper deliberation.

Keywords: Arbitration, Artificial intelligence, Automation, Machine-learning, Technology.

1. Introduction

Arbitration, in the words of Nigel Black, is a simple method of resolving disputes where each party submits their case to the Arbitrators, wherein on hearing the case, they would make decisions known as “award” and is binding on the parties because they agree to accede to the terms they have agreed to. In this process, the parties select a neutral third party for the resolution of their claims, and it is usually employed as a method to save time, expenses and the complexity of litigation. The process of Arbitration is consensual, and its origin lies in international and local courts, which were developed as a substitute for the court System of the Middle Ages as a response to the demands made by merchants in need of an alternate system as the royal courts were inaccessible to people outside England and due to its slow processing in mercantile disputes.

Halsbury's Laws of England defined Arbitration as: "a process used by agreement of the parties to resolve disputes. In Arbitration, disputes are resolved, with binding effect, by a person or persons acting judicially in private, rather than by a national court of law that would have jurisdiction but for the agreement of the parties to exclude it" . Over the last 50 years, Arbitration has grown in popularity within the international community in commercial disputes, particularly in construction, commodities, shipping and insurance. Arbitration's prominence in the international arena owes to its enforceability, procedural flexibility and a neutral forum.

Since the arbitral Tribunal, which is the impartial body in charge of Arbitration proceedings, is not bound by substantive law nor follow any procedural formalities of the court, it is the state's and the parties' duty to honour the decisions. The primary difference that sets arbitration proceedings apart from regular judicial proceedings is that the arbitrators are chosen by the parties, thus establishing control over the dispute resolution. The Tribunal is duty bound to ensure due process of law, giving the parties equal opportunity to present and defend their case.

The International Court of Arbitration of the International Chamber of Commerce ("ICC"); the London Court of International Arbitration ("LCIA"); the Geneva Protocol of 1923, The Geneva Convention of 1927, the New York Convention of 1958, the UNCITRAL Arbitration Rules (the UNCITRAL Rules) adopted by resolution of the General Assembly of the United Nations in December 1976, the Washington Convention of 1965 and the UNCITRAL Model Law adopted by the United Nations Commission on International Trade Law are a few prominent institutions which are popular for international arbitration proceedings, harbouring unity, discipline and peace in the process for the betterment of the parties.

John McCarthy coined the term Artificial Intelligence in 1956 as “the science and engineering of making intelligent machines, brilliant computer programs” [1], he added that its abilities does not have to be restricted to biologically observable methods. It is an autonomous machine capable of performing tasks associated with human intelligence, and it is increasingly being integrated into various aspects to, reduce costs, improve decision-making and enhance efficiency. Artificial Intelligence, as a branch of computer science, involves reasoning, planning, communication, learning, knowledge, perception and the ability to move and manipulate objects; it is a system that involves itself with machine intelligence, where the intelligence in action maximises the chances of success through its actions [2]. Alan Turing 1950 devised a test called the “Turing Test” to determine

the capability of a machine to imitate human intelligence, which led to the first identifiable definition of Artificial Intelligence.

"Automated systems capable of handling a particular task, like driving a car, are currently defined as narrow Artificial Intelligence". Following this, the first chatbot computer program, ELIZA, was created in the 1960s. The first application in law started in 1956 when logic was introduced as a tool for drafting and interpreting legal literature. With the gradual growth in the use of AI in the legal sphere, the foundation of the International Conference on AI and LAW ("ICAIL"), held in Boston, was made in May 1987. After this, the International Association for AI and Law (IAAIL) was established in 1991, leading to the launch of the Journal of Artificial Intelligence and Law in 1992. AI's impact on legal aspects ranging from consumer protection, data protection, and intellectual property to liability, labour and legal procedure [3].

Artificial Intelligence's impact on the legal sector has increased in recent years with the increased use of technologies like Westlaw, LexisNexis and many more. The impact created by artificial intelligence in the arbitration sphere has become a topic of importance globally, mainly with programs that aid the arbitrators with analysis of the parties' written submissions. Artificial Intelligence in Arbitration currently exists without legal implication but poses the risk of bias, lack of empathy, and unreasoned and unemotional award. Though its benefits have proven to be sluggish, it is incremental in the primitive stage, depending on the quality of data provided to the system and the algorithm used.

Case studies conducted on the legal system of the USA and Germany in their use of machine-based evidence and reports on the determination of drowsiness in-car drivers through Artificial Intelligence produced varied results. In the USA, the current evidentiary system relies on legal memorandum and scientific documents rather than oral hearings, raising questions as to whether machine evidence should be used in the courtroom. as an assertion of facts.

The trustworthiness of machine evidence could be ascertained through disclosure, and it has also widened the scope of acceptance of evaluations and testimonies outside the courtroom. However, this varies with different case types and on the other party's right to access that information, which would be with a party who can refuse to share those details. Challenging the credibility of statements of machine intelligence requires direct access to its working, which is not regularly accessible [4].

In Germany, which follows an inquisitorial system, the reports generated by machine intelligence may be accepted as expert pieces of evidence asserting the facts. However, the bench can appoint another expert team to assess the machine's findings. Due to the nature of the country's judicial system, it is not easy to establish the value assigned to the machine evidence as there are multiple methods of obtaining evidence in the investigatory phase.

Through this article, the authors attempt to understand how artificial intelligence may be used in Arbitration to reduce the time taken and increase efficiency.

2. Literature Review

The literature review explores current developments in identifying key methods and gaps that explain the present research emphasis, as illustrated in Table 1.

Table 1. Analysis of existing studies.

References	Main purpose
Can Artificial Intelligence ("AI") Re- place Human Arbitrators [5]	-The author of this paper delves into the evolution of artificial intelligence around the globe. Further, he states that artificial intelligence primarily relies on "big data", which needs to be constantly given. Since the law is dynamic, the judges need to provide inputs constantly. Therefore, the author states that artificial intelligence has not evolved to the extent of self-analysing or interpreting legal principles. -The author also points out that artificial intelligence in contemporary times can solve only narrow problems. It cannot provide reasons for the awards passed in an arbitration proceeding. -The author also points out that artificial intelligence applies the law to situations and does not provide out-of-the-box solutions. -Research gap: This paper's author fails to address the confidentiality aspect of arbitration proceedings. Since the proceedings are held only between the parties, providing data for artificial intelligence would be difficult. Therefore, artificial intelligence is not capable of adjudicating the matter judiciously
AI in International Arbitration: Need for Human Touch [6]	-The authors of this paper opine that Artificial Intelligence is incapable of performing beyond something that is not explicitly coded. Hence, there needs to be constant human intervention. -The authors also pointed out the Nuremberg trials, in which activism was used to meet the ends of justice. Thereby going beyond the black letters of the law. This would somehow be impossible for the current artificial intelligence. -Research Gap: The authors of this paper proposed a conservative approach to bringing artificial intelligence into law. The authors believe that artificial intelligence cannot replace human touch. They also failed to address various ways artificial intelligence is already part of the law
Artificial intelligence and its role in the development of the future of Arbitration [7]	-This paper's authors opine that artificial Intelligence development is making great strides. It can perform multiple tasks, such as reviewing and analysing contracts. -However, the authors state that artificial intelligence tools must be used only as predictive tools as it becomes a challenge to determine liability when Artificial Intelligence tools make decisions. -The authors state that there would be data concerns if artificial intelligence were brought into Arbitration. Concerns regarding collection, storage, and processing will rise as the arbitration proceedings rely on confidentiality. -Research Gap: The authors of this paper did not discuss how existing artificial intelligence tools can be utilised to increase the efficiency of international Arbitration
Artificial Intelligence Challenges and Opportunities for International Arbitration [8]	-Through this paper, the author notes how the technological revolution through Artificial Intelligence is taking over the world and how AI has transcended the concerns regarding the availability of resources. -However, the author has highlighted the concerns regarding the efficiency and accuracy of the AI system in handling the data. -While discussing the advantages and disadvantages of the AI system, the author briefly describes Artificial Intelligence, particularly emphasising the micro-data and macro-data involved in digitised arbitration and how AI can solve the issues it created, especially regarding arbitral uncertainty.

	-However, its advantage in providing arbitral actors with a broader range of resources are indisputable. The author has also discussed how the major challenge faced by AI is the non-disclosure of arbitral awards in International Commercial arbitration. -Research Gap – The author has given too much emphasis on the technical aspect of the efficiency of AI rather than analysing the benefits for human contributors involved. The paper also fails to convey international arbitration's significant challenges in accessing AI tools, especially in various international bodies. The paper has also not discussed the future of international arbitration and data protection
Artificial Intelligence and Arbitration: The Computer as an Arbitrator — Are We There Yet? [9]	-The authors begin the paper by addressing the advantages of using computers over humans in arbitration due to their efficiency in handling large amounts of data. AI platforms handle routine dispute resolution matters where the public is granted access. -The authors have also addressed the compatibility of AI and arbitration by expanding on the limitations placed on both parties. The author has shown how the efficiency of AI is determined by the type of training it receives. The author analysed the decision-making ability of computers through two tests. The author also pointed out that all kinds of cases are incompatible with AI. -Research Gap – The author, however, fails to give a reasoning for the accountability and bias that AI has in its decision when its working is controlled by another being. No original input on how to train the AI algorithm has been provided in this paper. The discussion on the use of AI was limited to small-scale clients with small claim matters.

3. Harnessing Artificial Intelligence for Efficiency in Arbitration

In a dynamic world where individuals and businesses constantly outsource their tasks to external agencies, it ensures excellent expertise and reduced cost. Companies like Amazon have been developing Prime Air, a delivery system that aims to use remote-controlled robots to transport goods from the company's order fulfilment centres to the consumers[1]. However, the use of robots is not limited to giants like Amazon. Still, in countries like Japan, which has the largest elderly population in the world, it has adopted artificial intelligence as a way of life. The legal community is slowly adapting to the changing technology [10].

Globally, public forums welcome technology with open arms. Private adjudicative mechanisms like Arbitration have had their own experiences and challenges in adopting these technological advancements. In the following passages, we can see how artificial intelligence can be utilised in every stage of the arbitration process.

The first stage of Arbitration is the arbitration clause or the arbitration agreement, where the parties add an arbitration clause to the contract. This helps the parties in a situation when a dispute arises between the parties. In this stage, artificial intelligence tools like 'Clause Builder' take data input from the parties and then prepare a customised contract that meets the parties' needs. This ensures the absence of arbitrariness, which otherwise would have been present in the contract.

The next step of Arbitration arises when a dispute arises, and the party sends a notice to the opposite party, and they receive the same. After this, the parties finally appoint arbitrators to resolve the dispute. International Arbitration uses an artificial intelligence tool, Arbitrator Intelligence, with data on potential arbitrators. This

artificial intelligence tool helps identify and appoint the most qualified and suitable arbitrators according to their preferences and rankings. Using artificial intelligence tools like 'Arbitrator Intelligence' would help the parties choose an arbitrator that would be unbiased towards the parties.

The next stage is the most crucial stage of the Arbitration process, which is the hearing of parties. Conducting this stage over a virtual platform is the most commonly used practice. Institutions like the Singapore International Arbitration Centre offer a one- stop solution by collaborating with various service providers. They also introduced a common platform for conducting proceedings, sharing documents, etc. It also has a mix of services like cloud storage, video conferencing software, etc[1]. However, one of the drawbacks of virtual hearing is the possibility of witnesses being prompted to answer from the other side. This anomaly can be resolved using a 360-degree camera so the parties can answer the question honestly.

The final stage of the arbitration process is the award stage. No further evidence shall be presented here, and the hearing is finally closed. In this stage, artificial intelligence may not interfere. However, once the copy of the award is received, it is mandatory to get it stamped before it can be enforced as a court decree [11]. However, e-stamping would not compel the parties to get their awards physically stamped.

Artificial Intelligence has created new opportunities by offering lawyers services such as data analytics software. It can now review contracts, research case laws, and streamline due diligence tasks by analysing evidence and removing unnecessary documents, reducing time and costs. This efficiency allows legal professionals to allocate saved time to critical tasks like preparing arguments and pleadings, marking a significant stride towards integrating AI into arbitration processes.

4. Innovations in Arbitration: The AI Frontier

Artificial Intelligence's capability of computing information in the same manner as arbitrators and the promise of the ability to render awards significantly faster than the human method, which might take years, is proving to be a challenge for human beings due to its phenomenal advancement. Some artificial intelligence tools have been discussed briefly in the subsequent passages.

NetCase initiative is a virtual case room with a secure environment at ICC [12]. This tool helps with digital documentation, simplifying legal research, electronic records, and document presentation. The systems can learn from previous cases independently to produce better awards; they can also overhaul the established practices, increase efficiency, reduce costs, and expand Arbitration into new market fields.

It also allows parties to screen through thousands of arbitrators to assign to their cases, giving suggestions in drafting clauses. Since international Arbitration is a document-intensive field that requires arbitrators to spend hours on legal research, this practice has shifted to online platforms. Artificial Intelligence assists in managing cases and diagnosing inefficiencies in the arbitration process with its ability to streamline administrative tasks [13, 14].

The role of artificial intelligence currently in international Arbitration is limited to the primitive stage, depending on the data provided and the algorithm applied. Dispute Resolution Data is a US startup that provides a global database on international commercial Arbitration and mediation, covering information like

industry type, claim amount, and case status. It is collected from the International Centre for Dispute Resolution ("ICDR"), the International Chamber of Commerce ("ICC"), and the Centre for Effective Dispute Resolution ("CEDR") [15].

Another instance is a non-profit initiative, Arbitrator Intelligence, where information about arbitrators' decision-making abilities while maintaining arbitration confidential- ity is available through post-award questionnaires.

Increased use of AI can be examined by incorporating Natural Language Processing in AI, which is specific software that can read ordinary human language. This can prove fruitful in analysing legal texts and providing accurate results, reducing the need to spend money and time on mundane administrative tasks. This strategy can also be used in translating work, which takes up unnecessary time in international Arbitration as parties speak and documents are in different languages. However, NLP requires a high level of sophistication as contextual analysis is more necessary than word-to-word analysis, as some words may be lost in translation [16].

Artificial Intelligence has emerged for some time as arbitrators like Kira Systems, a machine learning software that identifies, analyses and extracts text in contracts and other documents since 2011. A robot mediator was used in Canada for the first time in mediation, settling a three-month-long dispute in less than an hour. There is also an international talk about replacing tribunal secretaries who play vital roles in research with AI.

For international Arbitration, AI has become a prominent strategy that creates the right mix of human and machine capabilities. Its presence in reducing workload, selecting arbitrators through arbitrator intelligence based on specific data, and analysing documents has brought significant advantages to the process.

A Barrier to using the machine system in Arbitration is the need of the parties to appoint a member based on the assumption that they will work in their favour, and the transnational legal principles that play a crucial role are social and political. A generic argument against AI is its lack of empathy or idea of justice, which requires complex analysis of the circumstances surrounding a case as this is not a simple algorithm. Another dilemma is the comfort of the parties involved in settling their dispute with an automated system, as empathy cannot be translated into an algorithmic code.

Confidentiality is a significant issue for artificial intelligence arbitration, as arbitral awards are not published. It is proving to be a great hindrance as AI arbitrators need access to data, especially for machine learning models, as its accuracy depends on the volume of sample data. The quality and types of the data are also crucial, such as the awards determined with a regular tendency to grant complete immunity to arbitrators under Article 41 of ICC rules; accountability of machine arbitrators presents a unique conundrum.

AI is currently in a phase where it is replacing certain aspects of the legal process, but the complete transformation is not yet here. In the foreseeable future, human intelligence and judgement will remain at the forefront of Arbitration, but artificial intelligence will enable the revolution of the legal profession. Artificial Intelligence in Arbitration would make the process smoother and just. Introducing this method does not aim to undermine conventional techniques but only seeks to supplement the existing system with advanced technologies.

5. Qualitative Data Analysis

The experts in Arbitration proceedings conducted qualitative data analysis.

- **Interview of Mr Vivek (expert is known by a different name)**

The expert lives in Mangalore, Dakshina Kannada, and Karnataka. He has been a practising advocate for over two decades in Mangalore. Hence, it has a vast clientele base from various backgrounds.

He shared his experience when a client approached him for a case, and the cause of action occurred in a small village. Mr Vivek approached the district courts of Mangalore, the adjoining district Udupi, and a few other courts to know the territorial jurisdiction. However, nobody had the correct answer. Finally, when the hearing started in the district court of Mangalore, Mr Vivek found out that the jurisdiction lay in the court of Moodbidri. Then, he had to request the court to allow the proceedings to continue in the Mangalore district court. However, this whole process wasted considerable time for the parties. Thereby delaying justice to the party that was wronged.

This incident explains the need for technology to ensure speedy justice for the parties. With the help of Artificial Intelligence, identifying the location and establishing the jurisdiction, as in this case, would have been quicker, and the parties would not have had to face the delay.

- **Interview of Ms Veda (expert is known by a different name)**

The expert lives in Karnataka, Bangalore. She has been a practising advocate in Bangalore for nearly a decade. She is currently practising in cases that fall under the Commercial Courts Act.

When we interviewed Ms Veda about the idea of coupling arbitration with artificial intelligence, she believed human interference should be present in the proceedings. Some arbitration cases involve intricate legal issues, nuanced facts, and subjective considerations that may be challenging for Artificial Intelligence algorithms to comprehend fully. Human arbitrators bring expertise, experience, and judgment to navigate these complexities effectively.

This explains that although Artificial Intelligence can undoubtedly enhance efficiency and effectiveness in the arbitration process, it is unlikely to replace the need for human intervention entirely. Instead, Artificial Intelligence should be viewed as a tool to augment human decision-making and improve the arbitration process.

- **Interview of Mr Kalyan, a software engineer (expert is known by a different name)**

The person lives in Trivandrum, Kerala and has worked in a startup company in Technopark for the past 3 years. A general inquiry stated that the development of codes required for the involvement of Artificial Intelligence in Arbitration could not be a one-sided effort and will need a constant opinion that artificial intelligence can make the arbitration process efficient. Artificial intelligence tools may be used to analyse large data sets. He also stated that the codes developed vary from different arbitration methods and cases.

Hence, it can be concluded that artificial intelligence will only be valuable if the legal fraternity widely accepts it. It is pertinent to note that the legal fraternity should also use artificial intelligence technology with due care.

- **Interview of Mrs Padmavathi Kavoor**

The expert resides in Karnataka, Bangalore. She has been a practising company secretary in Bangalore for over three decades.

When we proposed introducing artificial intelligence in arbitration proceedings, she believed that artificial intelligence would help summarise the documents required for arbitration proceedings. She opined that this would save time for the arbitrators. Artificial intelligence can also be used to find case laws, applicable legal principles, etc. This would enormously help in the development of the jurisprudence.

The introduction of Artificial Intelligence technologies like machine learning and natural language processing can streamline arbitration proceedings by automating mundane tasks, such as document review, case analysis, and legal research. This could lead to faster resolution of disputes and reduced costs for all parties involved.

Therefore, it can be said that if artificial intelligence technology is coupled with arbitration proceedings, it would help make it more efficient and effective.

- **Interview of Ms Radha (expert is known by a different name)**

The expert is a practising Advocate residing in Bangalore, Karnataka. She has been practising company law for nearly a decade.

The expert opined that introducing artificial intelligence technology into arbitration proceedings offers promise and challenges. Artificial Intelligence has the potential to streamline the arbitration process through automated document review, case analysis, and legal research, leading to faster resolutions and reduced costs. However, concerns about algorithmic bias, transparency, and accountability must be carefully addressed to ensure fairness. While AI algorithms can analyse data and identify patterns, they lack human arbitrators' nuanced understanding and moral judgment. Therefore, human intervention and oversight remain crucial to upholding ethical standards and ensuring procedural integrity in Arbitration.

To summarise, the integration of AI in arbitration proceedings should be accompanied by robust safeguards and a balanced approach that leverages the strengths of both AI and human arbitrators to maximise efficiency and fairness in dispute resolution.

6. Enhancing Arbitration: The Advantages of Artificial Intelligence

Artificial intelligence-initiated online dispute resolution has an increased role today, providing ground for preliminary discussion and facilitating negotiation. Its predictive analysis method can predict likely outcomes to make informed decisions. It is also very efficient in finding related case laws that help improve the quality of legal arguments. It can also aid in the due diligence process by recognising potential conflicts of interest early. The fact that artificial intelligence is still not used in the decision-making of Arbitration and only provides evidence analysis and additional aid to the arbitrators in decision-making shows the reluctance to use it in the judicial field.

Also, regarding the limited applicability and acceptability in the legal sphere, cohesive guidelines will be created addressing artificial intelligence issues and their use in arbitration. A reasonable and strict balance must be maintained between

human-centric values and artificial intelligence to successfully integrate artificial Intelligence into Arbitration.

Artificial intelligence systems have increased the efficiency in managing arbitral institutions to improve internal processes, enhancing the procedural efficiency of arbitration proceedings. Development in artificial intelligence use is not restricted only to the Western world, as the Supreme Court of India developed the SUVAS (Supreme Court Vidhik Anuvaad Software), which converts judicial papers from English into nine regional languages. Artificial intelligence tools like this, when further developed, help establish global legal principles. Thereby strengthening jurisprudence.

Using Artificial Intelligence tools to summarise large documents helps save the parties' time. Artificial intelligence tools help summarise the data that is previously avail- able, and additionally, available data helps in accurately meeting justice. This ensures speedy justice for the parties.

Additionally, since artificial intelligence tools are available globally, they become more accessible to the people at large. Hence, this allows the parties to be more self- aware and self-reliant on the legal principles. Thereby making Arbitration more accessible to the people.

7. Challenges and Limitations of Artificial Intelligence in Arbitration

With advantages come disadvantages that cannot be ignored, firstly regarding its historical bias as it uses existing data, not providing the system an opportunity to deal with arbitral matters that are unknown to it.

As the decision-making processes of artificial intelligence tools are not easily understandable by humans, the concern of accountability and transparency is created in situations where the parties would request the reasoning behind the decision. Human arbitrators provide this level of intuition and contextual understanding.

With the increased use of GenAI by judges in drafting decisions in the jurisdiction of Brazil, India, Colombia, UK and Taiwan, there are risks associated with artificial intelligence arbitration. Two US lawyers and their law firm were recently fined USD 5,000 for relying on fictitious cases. Those cases were created using the generative artificial intelligence (AI) tool ChatGPT. The court found that, while there was nothing "inherently improper" about using AI as a research tool, the lawyers and their firm "abandoned their responsibilities when they submitted non-existent judicial opinions with fake quotes and citations" [17].

The problem of bias caused by artificial intelligence tools, as they are the invention of human beings, develops a need for safeguards to mitigate possible bias. As stated earlier, since the arbitration awards are not made public, the data set used is incomplete, causing disparity in the result. Another possibility is that the decisions produced by artificial intelligence could become detached from the source material, and the publicly available tools raise concerns about confidentiality and lead to other disputes related to copyright and data infringement charges.

Judicial decision-making involves the process of deductive reasoning and logic, and the inclusion of artificial intelligence in decision-making would be counterproductive to the decision-making method as they lack pre-defined rules,

where deductive reasoning gets replaced with an inverse approach of using probabilities, thereby leading to a departure from formalist theories of judicial decision making. The decisions would not be based on predetermined legal rules or deductive logic.

There must be proper guidelines on how AI should be used in decision-making. One of the most seminal works regarding this, which is still under public consultation, is Guidelines on the Use of Artificial Intelligence, created by the Silicon Valley Arbitration and Mediation Centre and published in August 2023. Such guidelines are to ensure the arbitration process's legitimacy and transparency.

8. Suggestions for Enhancing Arbitration with Technology

Addressing data protection and storage concerns is paramount for fostering trust and ensuring accountability on a global scale. This involves adhering rigorously to relevant regulations, promoting transparent data practices, and minimising unnecessary data collection. Implementing robust security measures, obtaining informed consent from users, and establishing accountability frameworks such as privacy impact assessments are essential measures in this regard. Educating developers and users about privacy rights and adopting international best practices strengthens the foundation for a secure and reliable global data environment. Instead of the data protection laws and regulations and arbitration laws existing as independent entities, they should be integrated on a few levels to streamline legal processes and ensure comprehensive protection and resolution mechanisms for all parties involved.

The financial implications of technology-driven Arbitration must align with the fiscal capabilities of respective nation-states. Data and privacy protection can be effectively managed by including non-disclosure agreements and confidentiality clauses in agreements with technology service providers.

Arbitration councils worldwide should proactively train arbitrators in leveraging artificial intelligence technologies. These technologies can enhance various facets of Arbitration, including witness examination, virtual hearings, and decision-making pro- cesses. The evolution towards a more technologically integrated arbitration landscape is inevitable, as recent advancements have already demonstrated significant improvements in data analysis and decision-making through AI tools.

The shift towards document-only mechanisms has revolutionised Arbitration by ensuring expeditious and fair trial principles. In jurisdictions like India, where private arbitration systems have embraced AI tools like NetCase from ICC and SCC Platform from Stockholm Chamber of Commerce, the legal-mandated arbitration systems must similarly adopt and expand technological boundaries.

In the post-COVID era, the imperative for technological involvement in ensuring judicial efficiency has become evident. Integrating technological advancements is crucial for maintaining an effective and just judicial system.

9. Conclusion

Integrating artificial intelligence with arbitration proceedings represents a transformative leap in dispute resolution mechanisms. Artificial Intelligence technologies offer

substantial advantages, from enhancing efficiency through automated document review and data analysis to facilitating streamlined virtual hearings and arbitrator selection processes. These innovations not only expedite the resolution of disputes but also ensure greater accuracy and consistency in decision-making.

However, artificial intelligence should be integrated into arbitration proceedings with enough caution. Due to the dynamic nature of law, mechanisms should be implemented to ensure constant input from legal experts. Complying with the countries' data protection laws has also become essential. Hence, striking this balance is essential to preserve the integrity and fairness of the arbitration process.

Artificial Intelligence can be a great assistant in meeting the ends of justice. It not only saves time but also helps achieve speedy justice. By leveraging artificial intelligence responsibly and proactively addressing its associated challenges, the arbitration community can pave the way for more efficient, transparent and equitable dispute resolution mechanisms in future years.

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