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## Research Article

# The Role of Digitalization and Artificial Intelligence in Arbitration: Issues and Challenges

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Abstract: Technology is here to stay for the future, forever"- Hon'ble Chief Justice DY Chandrachud. Internet and digitalization have brought a rapid transition globally. Almost every sector is impacted by the advent of internet technologies. During the ancient times, when technology was not much advance, the things were simple and less complex. Also, with the invention of Artificial Intelligence (AI), things are moving towards the different direction. It has pros as well as cons, certain advantages are seen while other disadvantages are being observed. It is declared by the experts that no job is safe from AI. One day, human jobs will be replaced by AI. The human labour and human intellect will be substituted by AI. Is it true? AI can become the third party who can act like an arbitrator, can it happen in reality? These questions will be answered in detail in the present paper. Apart from AI, digitalization has also changed many things. Let's take an example of courts hearing during the covid-19 times, court hearings were taking place remotely. This was the result of digitalization. Nowadays, every meeting, conference, workshop and many such important events are taking place remotely due to which human interaction is reducing day-by-day. Man is a social animal, but nowadays, this quote is not justifiable. The paper will elaborate the role of digital technology as well as Artificial Intelligence advancements in arbitration. Along with it, the positive as well as negative impacts of AI will be discovered. Some of the suggestions will conclude the paper.

**Keywords**: Artificial Intelligence, Digitalization, Internet Technology, Arbitration, Litigations.

# INTRODUCTION

The rapid transition of the world is the result of increasing innovations and technology. The advancements in digitalization have bought the changes in the process of Alternate Dispute Resolution (ADR) which results into faster disposal of trials, speedy justice and cost-effective. One of the most popular nowadays is virtual hearing which took place during the covid-19 era also. Despite of the fact that there are several advantages of digital technologies and AI but there are certain limitations of the same. The privacy concerns, cyber security threats are a few examples. Undoubtedly, we must say technological that advancements have redefined the process of Arbitration. Like introducing the digital case management systems; through which the case documents, important dates, coordination between an arbitration and parties can be managed effectively. Another most important advancement in digital technology, which we have discussed prior also, is the virtual hearings. In addition to this, the cloud-based solutions which are used to restore cloud platforms centralize document storage, offering encryption and cloud-based access to ensure data confidentiality and integrity. To protect all the information which is transmitted and stored electronically or via electronic device, a strong encryption protocols and protected channels are vital for avoiding the cyber risks. Also, the dissemination of confidential information also needs to be restricted. Therefore, the information must be encrypted. A good technology has no privacy concerns. The use of AI in the Arbitral proceedings is a boon for people who are geographically distant. The most satisfying feature of AI with regard to arbitration is that, it can create an automated routine task which the manual labour would do in an hour or two. This is how the work can be done speedily. Another most important benefit of AUI in arbitration is that, "machine cannot be bias". The human labour and intellect somewhere and sometimes involve certain level of biasness which can be avoided by AI. This helps in impartial decision making. The concept of environmental sustainability is also accomplished. Paperless operations may help to reduce the cost and increase the efficiency. The consumption of resources also gets less. In every field, the AI is at boom. Nowadays, AI can also detect the diseases which a human being cannot see or detect. The robotic surgeries are also performed. Also, the robots are used in factories and can work faster than human beings. Therefore, AI and digital technologies are taking a lead day-by-day resulting in redefining the Arbitration. AI has a significant role in commercial arbitration as well. Where there are variety of jurisdictions involved, AI plays a significant role in removing such barriers. The communication gap between the parties of two different countries may also be dealt by AI. This is very effective in carrying out the arbitration process where there is difference between the parties. AI has served many purposes nowadays. The use of chat GPT and other apps is known to everyone. It is not only in the field of law, that AI is useful, but in all the other sectors such as telecom industry, healthcare sector, hotel industry, AI is doing its best. It helps to reduce human labour and reduces the time of doing the specific task also. AI is beneficial in performing complex functions in less time. It can conduct

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research, identifies the data and also do massive documentation in no time. Although there is no comparison between human beings and AI, but if we compare the working of both, then undoubtedly, AI is faster than humans. It also helps to conduct complex legal writing and research which may help lawyers to prepare the documents early. In arbitration, AI is helpful in conducting the process of arbitration in speedy and effective manner. The parties need not to appear physically every time, rather AI and digital arbitration may solve the problem. The case management may also be simplified by the sue of these technologies. The arbitrator may also be appointed by the use of AI. So, AI and digital technologies are one of the major revolutions to the mankind.

AI and machine learning is a very new concept in today's modern world, so every one is keen to understand it in better way. Despite of its uses there are certain abuses also. ~Elon Musk once said, "I think we should be very careful about artificial intelligence. If I were to guess like what our biggest existential threat is, it's probably that. So, we need to be very careful with the artificial intelligence. Increasingly scientists think there should be some regulatory oversight maybe at the national and international level, just to make sure that we don't do something very foolish. With artificial intelligence we are summoning the demon. In all those stories where there's the guy with the pentagram and the holy water, it's like yeah he's sure he can control the demon. Didn't work out."

So, AI needs to be controlled by the human beings, if reverse happens, then it is a dangerous tool which can do anything dangerous to mankind. Afterall, the reality is AI works on the data being fed and instructions being given to it. Its intelligence is in the hands of the owner who guides it. and it wrong and misleading information is being fed in it, then it may lead to disaster. So, the use of AI must be judicious and authentic.

## **IMPACT OF AI ON ARBITRATION**

Arbitration is a process of settling the disputes out of the court in a speedy manner. The impartial arbitrators act as a third party which helps to resolve the disputes between the two parties. Unlike courts, arbitration also results in binding decisions. The arbitral award is also granted in some cases. The proceedings take place in a confidential manner, taking care of the privacy of the parties involved. "Artificial Intelligence (AI) in arbitration refers to the integration of advanced technologies such as machine learning, natural language processing, and data analytics into the arbitration process."

The AI powered tools are often used for the dispute resolution. The potential of AI to speed up processes, cut expenses, and enhance the overall effectiveness and fairness of the arbitration process makes it significant in this context. Arbitration can stay up with the needs of the current world by utilising AI. The invention of smart contracts and online ADR is a revolution in today's world.

#### Digitalization and AI: Future Perspective

AI and digitalization in ADR are immensely effective as

well as efficient to redefine the concept of dispute resolution. The accessibility is one of the major advantages of digital arbitration. Some of the technologies are blockchain and Natural Language Processing (NLP) are vital when we consider AI and digitalization. Blockchain is also associated with the process of ADR. It helps in increasing trust and integrity in adjudicating the process of ADR. It also makes it possible for securing the records of arbitration, procedural steps and arbitral awards. In addition to this, the evolution of smart contracts has made the life easy. Now, people can enter into the contract without the hassle specially, the smart contracts powered by blockchain. It makes the process of ADR more efficient. The possibility of providing speedy justice increases, the delays are reduced and the process is simplified. The crossborder disputes are specially improved by the compliance of these agreements. Therefore, where transparency and accountability are required, the technology is necessary to reduce the complexity of things. There are many aspects through which AI can play a significant role in arbitration:

- Review of the documents: AI can help to identify the useful and important information which the human beings may take a lot of time.
- Research: AI can also help to do research in the field of law. The relevant information can be filtered through AI.
- Case management: AI is useful in managing the documents and scheduling the deadlines.
- Analysis: Unlike, research, AI also plays a vital role in conducting an effective analysis of any legal document. It can identify patterns and trends also.

The use of AI is not limited up to the point mentioned above, these are only the major uses which are associated with the use of AI. Basically, AI is the ability of machine to perform the intelligent functions with or without human intervention. It has certain cognitive abilities which enables it to perform the advanced functions. The idea refers to the attempt of developing systems with cognitive capacities resembling to those performed by humans, such as reasoning, 245eneralization, semantic comprehension, and experience-based learning. The digital technologies are also the representation of artificial intelligence. It would have the considerable impact on the human beings in near future. It has both pros and cons. The technological transition as well as advancements were seen during the time of covid-19 pandemic when the courts started to operate the court hearings via video conferencing. "Arbitration is receptive as well as reluctant to AI". However, it is pertinent to note that Arbitration via digital mode and AI has certain limitations such as error in data, inadequate data and lack of repetitive parties. In addition to this, there is a possibility of inconsistencies making the scope of digital arbitration and AI narrow and restrictive. Artificial intelligence (AI) has been introduced and used, at least in part, to determine arbitration costs, choose arbitrators, identify and eliminate conflicts of interest, evaluate evidence, make judgements, and study case law. There are basically two aspects through which AI is operated; rule-based system and machine learning. Rule based systems are created by hand and they need human

interference for the alterations. These are not complex and created manually. The disadvantage of rule-based system is that it can be biased and predictable too. On the other hand, machine learning means "learn from data". It does not require human intervention. Machine learning systems are dynamic and less complex. But it needs the resources for training and maintenance which making it costly and little complex.

The scope of Online Dispute Resolution (ODR) is wide. It includes international business-to-business and business-to-consumer disputes, employment, intellectual property and foreign investments. In addition to this, the technology has brought a new concept of smart contracts in arbitration which is entirely a novel idea.

Arbitration customarily has been used for the settlement of disputes between members of trade associations and between different exchanges in the securities and commodities trade. Form contracts often contain a standard arbitration clause referring to specific arbitration rules.

The technological advancements in international arbitration are also taking a new face nowadays. The efficiency is enhanced. The rapid rise in globalization, the adaptation of modern technology has become the need of the hour. It also helps in dealing with complex business transactions. With the increased use of AI, conducting legal research has also become easy. Therefore, AI and digital technology runs parallel to each other. Virtual hearings is also an important step towards digitalization, through this the concept of online arbitration process can be established. These virtual hearing rooms also offer additional features such as real-time transcription and interpretation services that enhance the transparency and accessibility of the arbitration process.

The revolution has taken place in international arbitration through AI technologies. AI can help to filter the arbitrators based on their expertise, past decisions and biases. In all these contexts AI plays a vital role in selection of arbitrators. It also helps for analysing and interpreting the data, cases and arbitral awards. On of the major role of AI in arbitration is to fill the gap between various traditions in law. when the parties involved in arbitration belongs to different countries, undoubtedly, the gap between their laws are also significant which can make the process of arbitration more complex. Parties may face certain issues due to difference in laws and legal principles as they vary from country to country. The parties are unfamiliar with the legal framework of the other countries which creates a major issue in resolving the disputes. On of the renowned example is of, "Silicon Valley Arbitration & Mediation Centre" (SVAMC) in which a method for the use of AI in arbitration has been introduced. All these incidences prove that the awareness on AI is increasing, so the regulations for its implementation must also grow. This transition requires the updated legislative framework to maintain fairness and transparency in arbitration. Also, the confidentiality needs to be maintained. With the introduction of harmonized set-up for the use of AI technologies, an international arbitration may get a standardized system. This makes the process of arbitration more consistent in resolving the disputes. The reasonable and positive use of AI helps to maintain the transparency and efficiency in arbitration. In addition to this, AI can also help to review the documents and e-discovery process which takes a lot of time by human operations. The important information is identified by AI through natural language processing (NLP) and machine learning algorithms.

Also, the predicts made by AI helps the parties to sort out whether to proceed with arbitration for settlement or not. The legal documents can also be drafted by the use of AI in no time and negligible errors. This helps to speed up the process of arbitration. Also, the language barriers between the parties may be removed with the use of AI. The remote proceedings are also being carries out by AI; hence, it is a good decision-maker.

#### **ISSUES AND CHALLENGES**

Along with the advantages of AI and digital technologies, there are certain disadvantages of the same which also needs addressal. In international arbitration, one of the significant issue is biasness and fairness which affects the outcome. AI is intelligence which is artificial, so it works on the data which it is supposed to work upon. If the biased data is fed, then obviously the result will automatically be biased.

Another important issue is maintaining the confidentiality and security of the data and information. In addition to this, there are certain questions which involves ethics and regulations, if any wrong or biased decision is made by AI, then it is a matter of question, that who would be held liable? A question of future disputes may also arise by the use of AI. The transparency and accountability in making future decisions may also be questionable. So, all these are certain disadvantages of AI and digital technologies which may make them susceptible to errors and wrong decisionmaking. Also, the lack of human intervention and human decision, makes AI cruel. There is a need of human beings in decision making process through arbitration. There must be an inclusion of humanity and empathy while making the decision which AI cannot detect. AI can only help to lay down the foundation od anything, but sole power cannot be provided in the hands of AI and digital technologies. It must have no capability to replace the human jobs. In addition to this, there are many lawyers and stakeholders who do not trust AI. The decisions made by AI are not trustworthy, being thought by many arbitrators. Parties might feel that decisions are being made by a machine rather than a human who can empathize with the situation and the individuals involved. Therefore, AI cannot replace human beings, it may only help us to generate the data or do the work which is complex, time-taking and which do not require the decision-making.

## CONCLUSION AND SUGGESTIONS

AI in dispute resolution mechanism is useful and effective. It saves time and energy of human labour. It also helps in speedy disposal of trials and escalates the justice delivery system. It has certain pros and cons. With the advancements

in technology, things are changing rapidly. This transition is useful as it is making the lives of people easy and accessible but it also poses certain challenges due to which the possibility of errors and doubts increases. So, the way forward for successful arbitration through AI and digital technologies is possible if there is a comprehensive legislative framework to deal with the flaws. Overall, AI's influence is more of a logical development that improves arbitration without radically changing its essential ideas. Without seriously endangering the arbitration process as a whole, technology can improve consistency in decisionmaking, increase efficiency, and lower costs when used properly. There is a need to establish a legislative framework to deal with AI. It must not rule the human intellect and human labour, rather it must work on guidance of human beings.

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