



VIABILITY OF THE USE OF ARTIFICIAL INTELLIGENCE IN LEGAL DOMAIN: A CRITICAL ANALYSIS

9679

Dr. Balwinder Singh

Assistant Professor (SG), School of Law, University of Petroleum and Energy Studies, (UPES),
Dehradun, India

Email: balwinder.singh@ddn.upes.ac.in

Abstract

With the advent of the internet and the evolution of cyberspace from the steam engine to electricity to telecommunications to the internet, technology has come a long way and it is still developing. One such development of technology that has brought changes is Artificial Intelligence. Artificial Intelligence is the building of smart machines that can perform activities that usually require human intelligence. The goal of AI development is to meet the need for and desire for automation in today's fast-paced human lives. Artificial intelligence (AI) is currently being used to do mundane or even difficult tasks. Simply it is a form to feed information to a machine and through that information, the machine can perform such functions that require human force thus making the work of humans at ease. Artificial Intelligence (AI) can make the work for humans easy however due to the lack of information among people the topic of artificial intelligence is quite mislead and people are not looking at its benefits they fear that technology will take away their jobs and will affect their lives, a lot of misconceptions have been created in the minds of people regarding artificial intelligence and robotics but in reality, if artificial intelligence is regulated properly it can prove beneficial to all people as well as to countries. Here in this paper an attempt is made to understand the viability of use of artificial intelligence in the domain of law and analyse what will be the pros and cons if this AI is used in legal field.

Keywords: *Artificial Intelligence, Law, Indian Law, Machine Learning, Technology for Law*

DOI Number: 10.14704/nq.2022.20.6.NQ22946

NeuroQuantology 2022; 20(6): 9679-9684

I. Prelude

Artificial Intelligence is a system that has the capability and ability to solve problems that we humans would normally solve using our natural intelligence. Artificial intelligence (AI) is a vast discipline of computer science whose purpose is to develop systems that can operate autonomously and intelligently. Any machine that has the ability of learning and problem solving (Copeland, 2020) can be termed Artificial Intelligence. It can be described as an intelligent machine capable of thinking, understanding, and acting on its own, as well as the ability to replicate certain human behaviour. Artificial Intelligence is

believed to make the world a better place. Artificial Intelligence is made to make the life of humans easy and smooth and will speed up the tasks. It is normally believed that Artificial Intelligence will be beneficial in almost all fields that is entertainment, medical, transport, banking, financial, and gaming. Artificial Intelligence will also have an ethical purpose, societal benefits and will promote privacy, accountability, transparency, open data, and fair competition. It will protect inventions (Mohammad, 2019) and will promote innovation, economic benefits, fair competition, solve problems and create jobs. Each breakthrough in the field of law has



been revolutionary, from typewriters to computers, from using libraries solely for legal study to using internet portals to find relevant case laws, from fax machines to emails. Now is the moment for AI to enter the legal profession.

II. Application of Artificial Intelligence in Legal Domain

The linkage of artificial intelligence and law is of ancient origin. Leibnitz was one of the inventors of calculus, a famous mathematician. He was also trained as a lawyer and as far back as the 17th century Leibnitz expressed the idea that perhaps we could use math or algorithms to make the law more predictable, more manageable, and more useful and that's the heart of Artificial Intelligence in law (Capon & Ashley, 2012). The heart of the end laws using computers and mathematical formulas to make the law more understandable, more accessible, more useful, more predictable, more manageable so he was kind of on to something there. This was a lawyer who contributed major things to math so it turns out many lawyers have made important mathematical contributions so for instance, the mathematical topic of linear algebra which is the mathematical backbone of most of the machine learning these days was partially founded by lawyers too with the founding fathers of linear algebra were also lawyers and if looked in the history of mathematics many of the most famous mathematicians were lawyers as well so there a long tradition of lawyers influencing math. This interconnectivity between law and technology depicts the real modern era of Artificial Intelligence in law that happened right before the dawn of computing. Levinger came up with this idea of Jura metrics which is saying we should use more statistics and technical analysis to understand the law that was back in 1948 (Surden, 2019) and then really the heart of Artificial Intelligence in law happened from the 1960s to 1980s.

In recent times we have seen artificial intelligence being implemented at a small but highly effective scale in various Industries, from robotic caretakers in hotels to automated entertainment or in Cell phones. Artificial intelligence has changed the shape of multiple industries. The Indian legal sector has seen very little innovation in terms of technology and majority of legal professionals are still comfortable and relying on the methods and solutions that were designed years ago. The nature of the Indian legal profession is such that the entire procedure is done manually since the legal sector is still believed to be labour-intensive. As a result, AI is still in its early phases, with many older champions believing that technology should not be employed extensively since it may eventually take over man, and so avoiding the idea of AI in legislation. Notwithstanding that, there are many tech-savvy lawyers, as well as large law firms, who are taking full advantage of technological innovations in order to get an advantage over their competitors.

There are three categories where artificial intelligence and law can be used together (Kinni, 2020):

1. Administration law: Administrators of law are those who create and apply the law. Judges can use artificial intelligence for giving bail and sentencing to criminal defendants. For providing governmental benefits to people, it can be checked by artificial intelligence. Predictive policing for likely crime areas can be done by artificial intelligence. Also, Artificial Intelligence has a facial recognition system for suspects.
2. Artificial Intelligence use by the practitioners of law: Artificial intelligence can help lawyers in litigation, legal analysis, case outcome predictions, in the creation of legal



documents, document analysis, legal research, case management, and law firm management.

3. Artificial Intelligence use by users of law: Artificial intelligence can help the general public by providing expert systems, automated dispute resolution, automated legal documents, legal chatbots, and automated legal self-help.

Although the legal services market is one of the largest in the world, it is also believed to be under-digitized in its operations. The legal profession is fairly conventional in its approach and hesitant to adopt new technologies. It's time for us to accept that Artificial Intelligence has the potential to transform the way lawyers currently work and the way law is viewed in India. As stated by Justice D.Y. Chandrachud, *"technology is relevant insofar as it fosters efficiency, transparency, and objectivity in public government. AI is present to provide a facilitative tool to judges in order to recheck or evaluate the work, the process, and the judgments."* The primary purpose is to give common people greater access to justice in the long run(Shikhar, 2021).

AI technology is seen to have the potential to increase efficiency. With the aid of the machine learning algorithm input provided to the app, Artificial Intelligence works on numerous algorithms capable of speeding up document verification and processing activity. For a variety of reasons, simply removing manual tasks is insufficient to integrate artificial intelligence into the company's infrastructure. Rather, because of increased competition among businesses, there has been an increase in demand on enterprises to use AI. Legal firms that use Artificial Intelligence can work faster and pass savings to clients and other related businesses more quickly. Companies lack the ability to

automate this process and find legal services to be a little more expensive than other firms in the industry. However, it is unclear how the transition will take place. Law companies with a larger financial budget are expected to adapt to AI technology more steadily and quickly. New start-up firms and tiny businesses, on the other hand, maybe able to begin with a productivity-driven approach that is automated and progressive in comparison to the larger corporations. Many countries are considering the fact that how laws should be framed for Artificial Intelligence keeping in mind all the other factors that can affect humans. In the United States there are discussions to frame regulations regarding Artificial Intelligence, Germany has made ethical rules for autonomous vehicles favouring human beings and their life is prioritized following this China, Japan, and Korea are also following the same system of Germany. In India too there is progress in the field of creating a legal framework for Artificial Intelligence. NITI Aayog released a policy paper known as A National Strategy for Artificial Intelligence in 2018 highlighting the significance of Artificial Intelligence in different sectors. National programme on Artificial Intelligence was proposed in the 2019 budget and the WIPO is conducting conferences for discussing artificial intelligence and intellectual property to frame a policy for regulating them together. There is no comprehensive legislation to date on Artificial Intelligence in India (Beg, 2022).

III. Artificial Intelligence Challenges in Law

The benefits of AI look too fancy but today what type of artificial intelligence we have, has certain limits. Certain things are still beyond the realm of artificial intelligence. It requires certain patterns or rules to work, has no abstract reasoning, they have accuracy



limits, and sometimes it is hard to interpret artificial intelligence.

Artificial Intelligence has a lot of benefits but it raises serious issues too. If artificial intelligence takes the bail and sentencing decisions to criminal defendants there are chances that there will be a lack of interpretability, they can use biased data sets to build the information. Will artificial intelligence be able to give the proper explanation of law to a layman? Artificial Intelligence might have bias but can it be more biased than humans? Machines can provide information in the form of proper data and people tend to rely on it but the government making decisions based on the statistics and mathematical results by artificial intelligence they have to look under all the different aspects too. Non-experts cannot understand artificial intelligence thus they will still rely to humans for receiving the information.

One of the biggest disruptions that can be caused by Artificial Intelligence in law is that in the field of legal research. The Indian legal system is vast and constantly changing and with the use of Artificial Intelligence, lawyers can get unparalleled insight into the legal domain within seconds. Currently to get legal research done a significant number of man-hours are required and this significantly reduces the profit-making ability of a law firm, however, with Artificial Intelligence the entire legal fraternity can be balanced. An artificially intelligent platform for research can get research done in seconds and be it a law firm with 400 lawyers or single practising lawyer, artificial intelligence can balance the expenditure required for in legal research making the quality of research uniform. It can provide lawyers with highly efficient and advanced tools helping lawyers become better in advising clients or litigating (Shikhar, 2021). By contrast lawyering tasks involve

abstract thinking, problem-solving advocacy, client counselling, human emotional intelligence, policy analysis, big picture strategy, and creativity. These processes are less likely to be subject to artificial intelligence automation in the near term given the limits of today's artificial intelligence technology.

IV. NITI Aayog: National Strategy for Artificial Intelligence

In the budget speech of 2018, the honourable finance minister mandated Nitti Aayog to prepare a report on artificial intelligence pointing how artificial intelligence increases, thinking about the exchange in various sectors in various domains in India and reportedly in various departments. In 2018, the NITI Aayog released a policy paper titled "National Strategy for Artificial Intelligence," which considered the importance of AI and how it can be used in various sectors in India (Kumar 2021). The plan highlighted Artificial Intelligence has the potential to add a trillion to India's economy and in terms of gross value, it amounts to approximately \$16 million. Nitti Aayog envisions artificial intelligence solutions for India especially in five key sectors- agriculture, healthcare, education, smart cities, infrastructure, and transport. In the 2019 Budget, it also proposed the launch of a national AI program. Despite all of these advancements on the technological front, India still lacks effective legislation that regulates and controls the AI industry (Chakraborty, 2021).

V. Conclusion

Nowadays there is a burning question among the lawyers that whether Introduction of Artificial Intelligence in legal sector would replace the lawyer and legal analyst or the AI-based solutions and platform would increase the efficiency and productivity of Firms and Lawyers. The legal sector has seen the introduction of many new solutions where



technology has improved the efficiency of lawyers, contract analysis, trademark search software, legal research software and much more. However, none of the AI-based software or program target to take a lawyer's job and all the IA based software and programmes are increasing the authenticity, accuracy of research and analysis and the same are more result oriented now. The legal profession is highly driven by analysis, decision making, and representation which cannot be automated. AI-based software and programmes can reduce a lawyer's time and effort considerably and can help the lawyers and firms give a more authentic and result oriented suggestion to their clients. It can be concluded that AI in the field of law has numerous benefits: it has aided legal professionals in quick research; it can assist judges in decision-making processes with its predictive technology; it is useful for law firms for due diligence work, data collection, and other tasks, all of which make their work more efficient. The legal industry is still developing in India and looking forward to more IA based and automated assisting tools and software. Despite its numerous benefits, AI cannot replace lawyer's job, where analysis, decision making and stratification is required but would actually make them more efficient & competent while automating various clerical tasks.. It can assist them in certain areas of work, but AI lacks strategic thinking and is not creative in the same way that humans are. Robots lack emotional intelligence and empathy, as well as the ability to improvise in front of a judge. Incorporating AI into the legal business has numerous problems, including the fact that it is still vulnerable to a variety of hazards, necessitating the creation of a comprehensive legal framework to control Artificial Intelligence and prevent it from exploiting its clients' data. Only when we have a legal framework guiding AI's behavior in order to

reduce the hazards associated with it will we be able to reap the full benefits of AI.

References

- 1) Bench-Capon, T., Araszkievicz, M., Ashley, K. et al. A history of AI and Law in 50 papers: 25 years of the international conference on AI and Law. *ArtifIntell Law* 20, 215–319 (2012).
<https://doi.org/10.1007/s10506-012-9131-x>
- 2) Chakraborty M, Artificial Intelligence: Growth and development in India, *Analytics Insight*, 6 Jan 2021, <https://www.analyticsinsight.net/artificial-intelligence-growth-and-development-in-india/>
- 3) Harry Surden, Artificial Intelligence and Law: An Overview, 35 *Ga. St. U. L. Rev.* (2019). Available at: <https://readingroom.law.gsu.edu/gsulr/vol35/iss4/8>
- 4) Kini A, Artificial Intelligence and the Legal Profession: An 'intelligent' way ahead? *bar and bench.com*, 3 Jun 2020, 3:47 PM, <https://www.barandbench.com/columns/artificial-intelligence-and-legal-profession-an-intelligent-way-ahead#:~:text=Use%20of%20AI%20in%20the%20legal%20system&text=It%20provides%20cost%20effective%20solutions,due%20diligence%2C%20legal%20analytics%20etc.>
- 5) Kumar R, Responsible AI, # AI for all, <https://niti.gov.in/sites/default/files/2021-02/Responsible-AI-22022021.pdf>
- 6) MirzaAslam Beg, Impact of Artificial Intelligence on Indian Legal System, <https://www.legalserviceindia.com/legal/article-631-impact-of-artificial->



- intelligence-on-indian-legal-system.html last visited on 13 May 2022.
- 7) National Strategy for Artificial Intelligence (AI), Insights Mind Maps, <https://www.insightsonindia.com/wp-content/uploads/2018/06/National-Strategy-for-Artificial-Intelligence-AI.pdf>
- 8) SanjanaShikhar, Role of artificial intelligence in law, last visited on September 26, 2021 <https://blog.ipleaders.in/role-of-artificial-intelligence-in-law/>
- 9) *Supra* note 6.
- 10) Ziyad Mohammad, Artificial Intelligence, Definition, Ethics and Standards, 4 The British University in Egypt (2019). Available at: https://www.researchgate.net/publication/332548325_Artificial_Intelligence_Definition_Ethics_and_Standards

