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# Artificial Intelligence in Legal Practice: Implications for the Legal Profession's Future

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## I. AN INTRODUCTION

The phrase Artificial Intelligence (AI) has gained popularity more than 50 years after it was first used. Artificial intelligence (AI) technologies influence our consumption of social media content, criminal defendants' risk assessments before sentencing, people's creditworthiness, and even the best route to take when driving home from work.

The majority of AI systems are trained using previous data, and they can identify trends, gain knowledge from instances, and forecast future results to aid in decision-making. These categorizations and forecasts are generalisations derived from big datasets that are beyond the pace and scale of human analysis. AI is thought to have such profound effects that it has been dubbed the "new electricity". The development and implementation of these technologies by governments and industry has brought attention to the sociological and ethical consequences.

By concentrating on the three key phases of deploying machine learning, the most widely used subset of AI techniques, this article offers a framework for comprehending the consequences of AI: the data, model, and application stages. I propose that the social, ethical, and technical constraints of data-driven decision-making should be taken into serious account when developing AI policy, setting this against the backdrop of AI policy in India. In order to help with this, I also apply the framework to sector-specific issues seen in Indian policy-making procedures. To put it briefly, I concentrate on the risks and constraints that can result from data-driven decisions generally and specifically in the Indian context.

First off, it provides an alternative to the way that policies are currently being implemented to address moral and social difficulties that are now categorised as "challenges to adoption". The current strategy is unproductive and short-sighted. AI applications function in cultures that are disorderly, prejudiced, uneven, and deeply ingrained with injustice and discrimination from the past. Treating these significant social realities as afterthoughts, extra features, or even as defects that need to be rectified implies that the foundation these institutions are constructed upon is intrinsically flimsy. I provide an outline for this approach and illustrate the social and ethical factors that need to be taken into account when developing AI systems and policies. It also encourages a multidisciplinary conversation about AI policy in India. Getting stakeholders and sectors to communicate using a common language and understanding has proven to be a basic issue in this area thus far. I try to express policy concerns in technical terms by putting forth this framework, and vice versa.

Lastly, it broadens debates on artificial intelligence, ethics, law, and policy around the world, which are presently mostly based on Western contexts. The AI systems we use today are socio-technical systems that rely on the context in which they operate, much beyond being straightforward mathematical puzzles. For several reasons, India is a significant jurisdiction to take into account. It is a powerful force due to its immense size and developing AI sector.

The Indian government's emphasis on developing technologies in the context of the digital economy means that in the coming years, AI policy will change and advance quickly. Aadhaar, the largest biometric identity project in the world, is located in the nation and, depending on how it is applied, may serve as the hub for AI applications there. Additionally, India is at a turning point in the development of data protection laws, which will significantly impact how AI technology may and will operate in India.

The problem this article aims to solve is covered in the introduction, however the next section will go over its intended scope and provide definitions and conceptual clarifications for technical terms used in the article. Before guiding the reader through each step of the framework, it will first address the existing state of India's AI policy landscape in order to offer contextual information for understanding the proposed framework. Lastly, the sectors that are currently taken into account in India's policy-making processes are covered by this framework.

The paper will conclude with some thoughts and conclusions.

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## II. THE SIGNIFICANCE OF ARTIFICIAL INTELLIGENCE: WHAT IS IT?

A wide area of computer science called artificial intelligence is concerned with building "smart" machines that can carry out tasks that normally call for human intelligence. Therefore, when we refer to artificial intelligence, intelligence is defined as the ability to do any of the following tasks: creativity, problem-solving, planning, reasoning, and perception.

The development of different computer systems that are able to carry out tasks that would normally need human intelligence is referred to as artificial intelligence. This indicates that science was able to guarantee the abolition of mechanical processes by means of a "non-human" intelligence through AI. Artificial intelligence applications in daily life include computer games, computer programs that allow people to converse online, self-driving automobiles, navigation systems, and computer or mobile programs. One of science's biggest successes to date is the efficient application of artificial intelligence. Machines are now able to learn from experience, adjust to new inputs, and carry out jobs that resemble those of humans thanks to artificial intelligence. Science has enabled Artificial Intelligence to be incorporated into the functions of various fields, including economics, law, and technical terms, to accomplish a multitude of jobs.<sup>1</sup> A programming system for artificial intelligence of this kind signifies intelligence levels that have progressed beyond human comprehension.

Artificial intelligence is used in conjunction with machines or preprogrammed systems. Furthermore, the AI reduces the likelihood of errors and allows complex problems to be solved between challenging calculations because the computer operates based on previously entered data.

## III. ARTIFICIAL INTELLIGENCE'S EVOLUTION IN ACCORDANCE WITH LEGAL FRAMEWORKS

The goal of legalizing artificial intelligence is to establish laws, policies, or other legal frameworks that specify specific guidelines for the use, protection, and operation of AI. Beyond the significant advancements in this sector, controlling the potential negative effects of this progress is another reason why artificial intelligence needs legal regulation. Researchers and prominent figures in technology caution that Artificial Intelligence is poised to elevate robots to a level where, should it not wipe out humanity, it will enable the subjugation of humankind.

Boston hosted the First International Conference on AI and Law in May 1987.<sup>2</sup> Even if there had been some preliminary research on AI and law, the Conference can be considered as the initial steps towards the development of an AI and law community.

<sup>1</sup> Artificial Intelligence and Law in India by Ashutosh Kumar is an Assistant Professor, Amity Law School, Amity University Patna <https://www.jetir.org/papers/JETIR2108439.pdf>

<sup>2</sup> A history of AI and Law in 50 papers: 25 years of the international conference on AI and Law [https://www.researchgate.net/publication/257449742\\_A\\_history\\_of\\_AI\\_and\\_Law\\_in\\_50\\_papers\\_25\\_years\\_of\\_the\\_international\\_conference\\_on\\_AI\\_and\\_Law](https://www.researchgate.net/publication/257449742_A_history_of_AI_and_Law_in_50_papers_25_years_of_the_international_conference_on_AI_and_Law)

The Conference's contribution to the fields of artificial intelligence and law is unique due to its significance and unique qualities. Every planned gathering provides a forum for the discussion of novel concepts and real-world research done by scholars to create the legal framework for regulating artificial intelligence and other fields. In particular, the Conference's sessions are limited to the topic of artificial intelligence and its legal framework. The defining of terms, field regulation, and artificial intelligence development have all seen early study. Published works pertaining to the intersection of law and artificial intelligence date back to the early 1950s.<sup>3</sup> Nonetheless, we made it clear that the International Conference—which was previously mentioned—marks the beginnings of the AI legal community.

The First International Conference's major sessions were centered around a number of important topics. First, the topic of a precise legal definition of "Artificial Intelligence" was raised. Researchers also emphasized the necessity of passing laws and developing policies in the area of artificial intelligence. The First Conference, however, focused primarily on presenting projects demonstrating the application of AI in law rather than creating a legal framework. This indicates that the advancement of AI has already had a positive impact on the legal system, facilitating work in this area by enabling digital research and introducing a "case database," which allows for the swift and efficient search for specific cases or detailed information for legal arguments or academic research.<sup>4</sup>

By offering cutting-edge technology solutions to challenging issues, artificial intelligence (AI) is revolutionizing a number of industries. The legal sector is not an anomaly. AI has the potential to change the legal industry in a number of ways, including by improving the accuracy of legal analysis and automating repetitive jobs. The legal sector has already begun to use AI more frequently, and there is a great deal of room for growth. This essay examines the relationship between artificial intelligence and the law, including the several ways that AI is used in the legal sector, its ethical ramifications, and its potential future uses.

The digital revolution that has upended many economic sectors is not exclusive to the legal field. Artificial Intelligence (AI) has the potential to completely transform the legal industry by automating legal work and increasing the effectiveness of legal processes. Artificial Intelligence (AI) technology, including computer vision, natural language processing (NLP), and machine learning algorithms, are already revolutionizing the legal field. Artificial intelligence (AI) has made it possible for machines to carry out formerly lawyer-only duties including contract assessment, legal research, and case outcome prediction.<sup>5</sup>

Artificial intelligence (AI) is having a significant impact on the legal profession in a number of ways, changing the way attorneys practice, provide services, and communicate with clients. Here are some significant ways AI is influencing the legal industry:

- 1) Document Review and Due Diligence: AI-powered technologies can swiftly and accurately evaluate enormous volumes of legal documents, greatly accelerating the process of document review and due diligence for tasks like compliance checks, contract analysis, and discovery of lawsuits.
- 2) Legal Research: AI systems are able to search through enormous databases of statutes, case law, regulations, and legal precedents to uncover pertinent information for legal research. This makes it possible for attorneys to find new information and present their cases more effectively.
- 3) Predictive analytics: With the use of artificial intelligence (AI) and data analysis, predictive analytics can forecast the likely result of ongoing legal matters. This information can assist attorneys in developing more strategic legal plans, negotiating settlement offers.
- 4) Drafting and Analyzing Contracts: AI systems are able to create and examine contracts, pointing out any possible problems or gaps in language. By creating standardized contracts using pre-established templates, they can also aid in automating the drafting process.
- 5) Legal Process Automation: By automating repetitive legal duties like creating standard legal papers, scheduling, billing, and workflow management, AI-powered software frees up attorneys' time to concentrate on more intricate and strategic areas of their practice.
- 6) E-Discovery: Artificial intelligence (AI) technology is being utilised more and more in e-discovery to find pertinent electronic documents and information in court cases quickly and accurately, saving money and time by doing manual review.
- 7) Legal analytics: AI can examine data from multiple sources to reveal patterns, trends, and tactics in legal cases. This helps attorneys make more informed decisions and perform better .

<sup>3</sup> The First International Conference on Artificial Intelligence & Law: Proceedings of the Conference, May 27-29, 1987 - Boston, Massachusetts <https://www.abebooks.com/first-edition/First-International-Conference-Artificial-Intelligence-Law/17087811327/bd>

<sup>4</sup> <https://niti.gov.in/sites/default/files/2021-02/Responsible-AI-22022021.pdf>

<sup>5</sup> Make 'Artificial Intelligence' work for India: PM. The Economic Times. Available from <https://cio.economicstimes.indiatimes.com/news/government-policy/make-artificial-intelligence-work-for-india-pm/62980259>.

- 8) Ethical and Regulatory Compliance: By examining papers, messages, and other data for any infractions or hazards, AI systems can assist law firms and legal departments in ensuring compliance with ethical guidelines, regulations, and data protection laws
  - 9) Client Services and Communication: By offering prompt answers to frequently asked legal questions, setting up appointments, and assisting clients with fundamental legal procedures, chatbots and virtual assistants driven by artificial intelligence can improve services.
- Cybersecurity and Risk Management: By tracking and examining data for unusual activity, artificial intelligence (AI) tools can assist legal departments and law firms in identifying and reducing risks associated with cybersecurity threats, data breaches, and regulatory compliance.<sup>6</sup>

Although AI in the legal sector is still in its infancy, its use is growing quickly. The global legal AI market is estimated to be worth \$714.4 million in 2020 and is projected to expand at a Compound Annual Growth Rate (CAGR) of 37.9% between 2021 and 2028, according to a Grand View Research analysis (Grand View Research, 2021). According to the report, the need for effective contract management, growing legal expenses, and the growing demand for automation in legal procedures are the main causes of this development. AI is a branch of study and a collection of computing tools motivated by the way humans' neurological systems perceive, process information, think, and act. These new technologies have helped many different industries, but there is also concern that they could be abused or used in unexpected and potentially dangerous ways.

AI in law has the potential to improve productivity and cut expenses, but it also brings up issues with responsibility, bias, and privacy. There are ethical and legal concerns with the use of AI in the legal system. How, for instance, can we guarantee the accountability and transparency of AI systems? How can bias be eliminated from AI decision-making? If AI can handle legal responsibilities, what would be the role of lawyers in this scenario? An overview of artificial intelligence (AI) and its uses in the legal sector is given in this research paper. The article addresses the ethical and legal ramifications of AI adoption in the legal field and examines the advantages and difficulties of employing AI in the legal field.

There are numerous ways in which artificial intelligence (AI) could change the legal sector. The application of artificial intelligence (AI) in the legal sector has already begun to take off, with enormous potential for growth in areas such as automating mundane work and improving the precision of legal analysis. This essay examines the relationship between artificial intelligence and the law, including the several ways that AI is used in the legal sector, its ethical ramifications, and its potential future uses.

Since the legal industry is still viewed as being labor-intensive, the entire process in the Indian legal profession is done by hand. Consequently, artificial intelligence (AI) is still in its infancy, with many of its more seasoned proponents holding the view that technology should only be used sparingly because it may one day replace humans. Nevertheless, there are plenty of tech-savvy solicitors and large law firms that are utilizing technological advancements to their advantage. In the area of legal research, lawyers can quickly gain unparalleled insight into the legal world by utilizing machine learning technologies. Cyril Armarchand and Mangaldas is one company that has embraced AI with enthusiasm after realizing its potential. By being the first Indian legal practice to license "Kira," a machine learning application created by Kira Systems in Canada, CAM has made legal history.<sup>7</sup> A great deal of time and effort can be saved by using this AI-based software, which can perform many tasks. "Kira" technology is used to extract provisions from different legal documents, identify and find potentially harmful regions, and analyze legal paperwork.

The Toronto, Canada-based company Kira Systems is well-known for creating the Kira machine learning software platform. Kira is capable of extracting, analyzing, and managing data from contracts and other documents by utilizing machine learning and artificial intelligence(AI).

Kira's technology automates the extraction of important information and clauses from documents, which helps with a variety of tasks like contract analysis, regulatory reporting, compliance, and due diligence. This considerably expedites the evaluation procedure and lowers the possibility of human error. Because of Kira's precision and quickness in document examination and analysis, the legal and corporate sectors have come to rely on her services. To better serve its consumers, it is always changing with updates and enhancements to its machine learning algorithms.<sup>8</sup>

The Indian legal system is undergoing fast change due to artificial intelligence (AI). AI is used to enhance operations, automate processes, and make wiser decisions. But there are also a lot of ethical and legal concerns with the application of AI in the legal system. The potential for AI to be exploited to exclude particular groups of people is a serious concern.

<sup>6</sup> Digital India - Vision and Vision Areas. Digital India. Available from <http://digitalindia.gov.in/content/vision-and-vision-areas>.

<sup>7</sup> Corporate Legal Operations and the New Era of AI – Kira Systems Whitepaper available at <https://www.artificiallawyer.com/2020/01/09/corporate-legal-operations-and-the-new-era-of-ai-kira-systems-whitepaper/>

<sup>8</sup> Kira Systems brings machine learning to law firms available at <https://www.investontario.ca/spotlights/kira-systems-brings-machine-learning-law-firms>

Algorithms driven by AI, for instance, may be used to determine which individuals qualify for loans or jobs, and the results may have an impact on particular social groups.

AI's potential to violate people's right to privacy is a further worry. AI-powered systems are able to track people's movements, habits, and preferences by gathering and analyzing vast volumes of data. People may have less control over their data as a result, and their privacy may be compromised. Lastly, there are worries that AI is being used to make decisions that are not optimal for the general populace. Artificial intelligence (AI) systems are used in a variety of industries, including advertising and law enforcement, since they can draw valid conclusions and classify and categorize data. Our expectations of anonymity and privacy are drastically altered by the profiling that their use permits, both online and offline. Algorithms driven by AI, for instance, can be used to allocate resources without taking into account the needs of the people who will be most impacted. The ethical and legal concerns around the application of AI to law enforcement are known to the Indian government. The National AI Strategy, published by the government in 2018, lays out a number of guidelines for expanding the application and function of AI. These values include preserving people's right to privacy, utilizing AI in a fair and equitable manner, and utilizing AI to advance human rights. Additionally, the government is creating new rules and laws to control the application of AI to the legal system. The Data Protection Act, which was passed by the government in 2020, regulates the gathering, use, and exchange of personal data.<sup>9</sup>

There are specifics in this measure on using Artificial Intelligence for legal objectives. While the application of AI to law enforcement is still in its early stages, it is obvious that AI has the power to alter how the law is applied. In the coming years, there will likely be more legislation and regulations pertaining to the use of AI in the legal system, since the Indian government is making efforts to guarantee that technology is applied morally and responsibly.

#### IV. THE STATUS OF ARTIFICIAL INTELLIGENCE IN LAW AT THE PRESENT

The global legal market is among the biggest and is estimated to be over \$1 trillion. However, it hasn't been digitalized yet. For better or worse, the legal industry is traditional, infamously slow to accept new technologies, and continues to rely on long-standing solutions. Within the upcoming years, this might alter. AI has the power to alter both how legal professionals practice law in India and how the general public views it. This is a continuous process. Legal research is one of the most important areas where AI can have a big impact on the legal industry. The Indian legal system is flexible by nature, and attorneys can quickly obtain a distinctive awareness of the law by using astute talents. AI is capable of matching legal research costs while preserving the same standard of quality. It can offer practical resources to aid solicitors in giving their customers better advice. The legal landscape is rapidly changing due to artificial intelligence (AI). AI is being utilised to increase productivity, automate processes, and make wiser choices. But there are also some ethical and legal issues with AI's application in the legal system. Nowadays, the majority of industries have increased in effectiveness and efficiency thanks to the use of contemporary technologies. However, there isn't much use of contemporary technologies in the legal profession. To make advances, they still need to start utilizing antiquated technology and file-handling programs. Thus, there is a strong need in law for law to be up to date with contemporary technologies. In this instance, they can quickly implement AI technology to increase the effectiveness of their advancement. Furthermore, the Indian Supreme Court has consistently cited it as a necessary component of democracy and concluded that this freedom encompasses the right to knowledge. Given the growing reliance on AI systems for online content monitoring and the growing use of AI applications in daily life, such as smart phone autocorrection, AI has a significant impact on freedom of speech.<sup>10</sup>

#### V. TASK FORCE ON ARTIFICIAL INTELLIGENCE

In order to "embed AI in our Economic, Political and Legal thought processes so that there is systemic capability to support the goal of India becoming one of the leaders of AI-rich economies," the Union Ministry of Commerce and Industry established an Artificial Intelligence Task Force in August 2017. Ten areas of importance for AI in India were identified in their March 2018 paper, which was based on the general thesis that AI can tackle socioeconomic problems on a large scale.<sup>11</sup> Manufacturing, finance technology (FinTech), healthcare, agriculture, national security, environment, public utility services, retail and consumer interactions, technology for the disabled, and education are a few of these.

<sup>9</sup> section 4 of the DPDP Act mandates that valid consent or legitimate uses are required for the processing of Personal Data of a Data Principal available at [https://tsaaro.com/blogs/the-impact-of-the-dpdp-act-on-artificial-intelligence-and-machine-learning/#:~:text=To%20regulate%20the%20same%2C%20section,\)%20\(f\)%20of%20GDPR](https://tsaaro.com/blogs/the-impact-of-the-dpdp-act-on-artificial-intelligence-and-machine-learning/#:~:text=To%20regulate%20the%20same%2C%20section,)%20(f)%20of%20GDPR).

<sup>10</sup> A year in review: How AI transformed the legal profession in 2023 available at <https://legal.thomsonreuters.com/blog/how-ai-transformed-the-legal-profession-in-2023/>

<sup>11</sup> Artificial Intelligence Task Force. Available at <https://www.aif.org.in/>.

The report's explicit goals were to determine the proper role for the government and the large-scale problem-solving capabilities of artificial intelligence. Among other things, it suggests creating the National Artificial Intelligence Mission as a key organisation to oversee AI-related initiatives. The paper outlines the conditions that could lead to the broad adoption of AI and identifies government ministries and organisations that may play a key role in this process, but it does not adequately address the ethical, social, and technological issues that underpin the application of AI technology. Even in the rare cases where the study takes privacy and data protection into account, it falls short of addressing issues with data that are specific to AI. For example, the Task Force recognises the difficulties associated with data sharing and third-party access to data while debating the subject of ethics and social safety. Although it mentions data privacy issues, it ignores how data-driven decision-making can reinforce and reinforce historical bias and discrimination.<sup>12</sup> It is also possible that algorithmic systems, even with the best of intentions, could disproportionately affect marginalised and vulnerable communities. The sectoral analysis conducted by the Task Force also exhibits this omission. For instance, forecasting market demand and striking a balance between scale and innovation are among the difficulties faced by the FinTech industry. Issues of how those on the periphery of data collecting and technological inclusion will be affected by the growth of FinTech are completely ignored. Most concerning, the influence of AI technologies on exercising fundamental freedoms was disregarded, and the use of AI for "autonomous surveillance and combat systems" was mentioned without acknowledging the serious implications that these technologies have for freedom of speech and privacy.<sup>13</sup>

The goal of the Task Force's work is to clarify the path that India's AI policy should take. Its greatest strength is perhaps the emphasis it places on accessible technologies. The scant (at best) ethical and social examination of India's AI landscape, however, makes clear the absence of legal, governmental, and civil society participation in this process.

#### VI. THE FOLLOWING IS A DISCUSSION OF SOME OF THE MAJOR DISADVANTAGES OF AI IN LAW:

- 1) Algorithm and Data Bias- Because AI algorithms can only be as objective as the data they are trained on, biased results may result. Artificial intelligence algorithms may be trained with personal data, such as records of past discrimination and social biases. In the legal sector, incomplete data can provide limited outcomes, which can have dire repercussions. AI systems that forecast case outcomes, for instance, might be biased against particular groups of people, producing unjust consequences. Similar to this, AI systems that review documents might only accept pertinent data if it matches their predetermined standards for what is necessary. The objectivity of AI systems is limited by the quality of the training data. AI algorithms will be constrained if the data used to train them is biased. This has the potential to result in unfair case outcomes in the legal sector, which would support institutionalized prejudice and unfairness. To solve this problem, it is essential to make sure that the data utilized to train AI algorithms is impartial and representative.<sup>14</sup>
- 2) Restricted Range- Artificial Intelligence is typically limited to particular legal tasks, which is another legal constraint. AI-powered legal research tools, for instance, might be very good at locating pertinent case law. However, compared to a human legal researcher, they might need to offer a different degree of understanding into the subtleties of legal precedent. Comparably, whereas AI-driven document review systems can analyze a lot of documents, they might not be able to recognize every nuance and detail that a human reviewer can.
- 3) Absence of Background- AI algorithms are limited to the data that is provided to them, and their comprehension of the context in which that data is presented may be limited as well. This can be especially problematic in legal circumstances, when a term's meaning can change based on the particulars of the case. Artificial intelligence (AI) algorithms may be able to precisely evaluate and interpret legal documents if they are given human context knowledge.
- 4) Absence of Disclosure- The necessity for increased transparency in the decision-making process of AI algorithms is one of the main disadvantages of AI in law. Since AI algorithms are frequently seen as "black boxes," it might be challenging to comprehend how they arrived at a certain decision. Because of this opaqueness, it may be difficult to find and fix biases or inaccuracies in the system. Furthermore, it may be challenging for solicitors to give their clients an explanation of the thinking behind a specific ruling.<sup>15</sup>

<sup>12</sup> Artificial intelligence policy in India: a framework for engaging the limits of data-driven decision-making available at <https://royalsocietypublishing.org/doi/10.1098/rsta.2018.0087#:~:text=The%20Union%20Ministry%20of%20Commerce,rich%20economies%20%5B18%5D>.

<sup>13</sup> Fintech Laws and Regulations 2023 | India available at <https://www.globallegalinsights.com/practice-areas/fintech-laws-and-regulations/india>

<sup>14</sup> Artificial Intelligence in legal profession: Pros, Cons and Challenges available at [https://www.researchgate.net/publication/365939293\\_Artificial\\_Intelligence\\_in\\_legal\\_profession\\_Pros\\_Cons\\_and\\_Challenges](https://www.researchgate.net/publication/365939293_Artificial_Intelligence_in_legal_profession_Pros_Cons_and_Challenges)

<sup>15</sup> Legal and human rights issues of AI: Gaps, challenges and vulnerabilities available at <https://www.sciencedirect.com/science/article/pii/S2666659620300056>

- 5) The Price and Availability- Although AI technology can lower expenses in the legal sector, its implementation can be costly. Artificial intelligence (AI) technology may be less available to those who need it most because small legal firms and solo practitioners may not have the funds to invest in it. Accessibility may be further restricted by the fact that AI-powered legal services might not be offered in all regions or for all legal matters.
- 6) Job losses- The possibility for employment losses is one of the main issues with AI in law. Numerous repetitive duties, such as document review and legal research, can be automated by AI technology, which could lead to a decline in the number of positions in the legal sector. While AI can assist legal practitioners focus on higher-value work by freeing up time, it also has the potential to cause job losses for individuals who do routine duties.
- 7) Information Security- Data breaches and other security issues are a serious disadvantage of utilizing AI in the legal sector. Legal practitioners manage private and sensitive data, and any data breaches could result in serious financial and legal repercussions. Sensitive data must be protected by implementing suitable security measures and ensuring that AI technologies used in the legal sector are appropriately safeguarded.
- 8) Moral Issues- The use of AI in law raises a number of ethical questions. AI algorithms have the potential to be utilized, for instance, to forecast a person's risk of committing a crime. This raises concerns regarding privacy and the presumption of innocence. In a similar vein, applying AI to hiring decisions could result in unfair consequences. When using AI technology, the legal sector needs to take these ethical issues into serious consideration.

## VII. TECHNOLOGY AND AI USED IN LAW DURING COVID-19

The COVID-19 pandemic has had a profound effect on the legal system, necessitating changes in how courts and solicitors operate. AI and technology have been crucial in this transition, keeping the legal system operational and granting those in need of it access to justice.<sup>16</sup>

The following are some examples of how AI and technology have been applied to the legal system during the COVID-19 pandemic:

- 1) Online hearings- Due to the pandemic, virtual hearings have grown in popularity, enabling judges and solicitors to hold hearings from a distance. This has aided in lowering the infection risk and maintaining the efficiency of the legal system.
- 2) Examining documents- Lawyers may now review a lot of documents more swiftly and effectively thanks to AI-powered document review technologies. This has been particularly beneficial in intricate instances involving fraud or intellectual property.
- 3) legal investigation-AI-powered legal research tools have made it easier and faster for attorneys to locate pertinent statutes and case law. This has been particularly useful in situations where new or developing legal issues have arisen, such as those pertaining to COVID-19.
- 4) Legal counsel- The public has been given legal advice via chatbots driven by AI. This has made legal counsel more widely available to people who require it, particularly those who cannot afford to retain an attorney or reside in rural locations.

During the COVID-19 pandemic, the legal system has managed to function thanks in part to the application of AI and technology. Additionally, it has aided in increasing the accessibility of legal assistance for individuals in need. We anticipate seeing a greater and more extensive use of AI and technology in the legal system as the pandemic spreads. "The wheels of justice cannot be stopped because of lockdown," said Justice Sikhari.<sup>17</sup> Justice delivery falls under vital services, and technology has been crucial to COVID-19, helping with everything from e-filing to e-payment of court fees. The Delhi High Court has gone one step further and created entirely paperless courtrooms called "e-rooms," where visitors can view the details of their cases via an online portal. Technology is the one companion that will stick with us through thick and thin, considering the times we all find ourselves in. Thus, it's time to welcome technological innovations like artificial intelligence and continue on the path of progress.

Artificial intelligence poses significant, although manageable, problems to the legal system. The main source of conflict is because using AI systems affects general normative norms (including nondiscrimination, human rights, transparency, etc.) rather than just specific sectoral legal domains. As a result, a suitable normative concept needs to take into account civil society's expectations for ethics and trust, as well as its interests, while making decisions. AI systems can therefore only be used within a normative framework that ensures adherence to the universally acknowledged fundamental rights.

<sup>16</sup> COVID-19, artificial intelligence, ethical challenges and policy implications available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9117835/>

<sup>17</sup> Critical Study on Artificial Intelligence (AI) in Indian Legal Sectors available at [https://www.researchgate.net/publication/359941249\\_Critical\\_Study\\_on\\_Artificial\\_Intelligence\\_AI\\_in\\_Indian\\_Legal\\_Sectors](https://www.researchgate.net/publication/359941249_Critical_Study_on_Artificial_Intelligence_AI_in_Indian_Legal_Sectors)



### VIII. TOP TRENDS OF ARTIFICIAL INTELLIGENCE

- 1) **Reinforcement Learning:** This learning framework avoids the usage of data recognition methods. It makes decisions based on experience. This approach uses interactions with the surroundings to help learners learn and progress. Algorithms that play games employ reinforcement learning to figure out how to win through computer movements.
- 2) **AI ethics:** There are discussions over AI ethics and whether or not AI will eventually replace human labor in the workplace. There must be an answer to this query. Are the ethical values of the individual, the community, and society being taken into consideration in the creation of the autonomous and intelligent systems?
- 3) **Quantum Calculation** -Calculations are performed by quantum computers more quickly than by any supercomputer now in use. It can store information using quantum bits as well. 2020 would witness a rise in the study of quantum computing and the development of techniques to lower error rates and enable useful computations. Unsolvable issues like climate change, the existence of planets similar to Earth in the galaxy, and the capacity of our bodies to eradicate cancer could all be resolved.<sup>18</sup>
- 4) **Convergence of AI with Other Emerging Technologies-** In 2020, there will be more instances of AI convergence. Without the Internet of Things collaborating closely with artificial intelligence, self-driving automobiles are not a realistic option. Artificial Intelligence models fuel the decision-making programs in cars, while the Internet of Things enables the sensors that collect real-time data. The capacity for these driverless cars to speak with one another in order to optimized traffic is another potent feature.
- 5) **Facial recognition-** In 2020, facial recognition technology would still be developing. An artificial intelligence technology called facial recognition uses a person's digital image or the patterns in their facial features to identify them. 2020 would see a rise in the application of this more accurate and dependable technology. Facial recognition is already a digital password on the iPhone X. We would also witness an increase in things like law enforcement and money processing via security checks. Medical diagnostic procedures and follow-up clinical trials can benefit from the application of this picture recognition technology.
- 6) **Machine learning algorithms with bias** have no place in decision-making processes including hiring, mortgages, and social assistance benefits. Because of the data used for training, certain biases are conscious, while others are unconscious. Historical employment data may demonstrate that women are promoted less frequently than men, which could lead to the use of discriminatory AI.
- 7) **Neural Networks-** Neural networks mimic how the human brain functions. All of the data is kept in digital format. Neural networks are used in medical diagnosis, robotics, and stock market prediction. By 2020, neural network technologies will be enhanced. Artificial intelligence will advance due to improved network topologies and training techniques brought forth by neural networks.
- 8) **Socioeconomic-** Everyone believes that artificial intelligence will replace many human workers in this particular field. The response to this query is "it depends." In places with limited resources, routine jobs would be eliminated by artificial intelligence. It would also create new, skill-different occupations. The World Economic Forum, the United Nations, and countries are all having discussions on this subject. Applications of artificial intelligence create new professions and skill sets. There are three ways in which the automation of artificial intelligence could eliminate the need for some jobs. High-tech positions like customer service agents, teachers, and carers, among others, would be in demand.
- 9) **Deep Learning-** The most widely used type of artificial intelligence is machine learning. It would get difficult as the quantity of data dimensions rises. Our voice would be converted to text by it. Deep learning technology includes voice control, picture recognition, and self-driving automobiles. A vast array of voice-activated applications, such as Google Home and Alexa from Amazon, use natural language processing algorithms, which are another kind of deep learning.
- 10) **Policies and privacy** are crucial for safeguarding privacy and ensuring that businesses take data privacy seriously. The relevance of privacy and national and legislative policies will only grow in the ensuing years. Since artificial intelligence is new, further research is necessary. Every nation on the planet would keep working on plans and projects to direct the advancement of artificial intelligence. Additionally, all the criteria that are necessary to guarantee transparency, safety, and knowledge of the intricate AI technologies will be developed.

The emphasis will be on how the industry's new technologies and applications interact with society and usher in technological advancements for better futures, in addition to the technologies themselves. The legal industry's foundation has changed as a result of technological advancements. It is challenging to conceive about the legal industry's future without taking artificial intelligence software into account. The legal industry is currently client-focused.

<sup>18</sup> Unveiling the future: Top 10 AI trends for 2024 and beyond available at <https://industry4o.com/2024/01/30/top-10-ai-trends/>

Legal research is conducted using web tools, and legal information is accessible with only a click. These software programs are being used by law firms and solicitors to assist in the drafting and review of case papers as well as contracts.<sup>19</sup> Artificial intelligence has helped small legal firms and solicitors by giving them access to resources and information. It's putting them on level with more reputable legal companies in terms of resources. Legal research is becoming the most crucial component of practicing law because of technology. The delivery of legal services has altered as a result of technological advancements in the field, including online software, CD-ROMS, reporters, journals, and reporters.

The development of technology facilitates the speedy and effective completion of legal tasks by solicitors. This does not imply that technology will take the role of lawyers.

#### IX. LEGAL AND REGULATORY PROVISIONS IN VARIOUS NATIONS

Up until recently, the legal context around artificial intelligence was unclear. South Korea has started the process of drafting the Intelligent Robot Distribution Development and Promotion Act through legal measures.<sup>20</sup> The primary objective of this act, which was introduced in 2008, was to support policies for the sustainable development of intelligent robots and to set the groundwork for future developments through their distribution. South Korea shows out to have built certain regulatory procedures in the field of artificial intelligence, despite the fact that the original statute did not provide for a broad scope. The definition of AI presents an additional challenge for the area. However, the Act described intelligent robots as mechanical

By means of the aforementioned Act, South Korea has established tangible protocols to govern the domain. It stipulates the creation of a collegial organization, the Policy Council for the Robot Industry, under the Ministry of Trade, Industry, and Energy in addition to the basic plan<sup>1</sup> for accomplishing the aims and goals outlined in the Act (SOUTH KOREA, 2008).<sup>21</sup> Drafting strategies and policies and advising with technological authorities and firms on policy matters are anticipated to be the Council's primary responsibilities. The council would only exclusively address the topic of intelligent robots when carrying out its duties; other artificial intelligence-related topics would not be included. The Act has concentrated on establishing an ethical position for intelligent robots in order to regulate the industry. The Intelligent Robotics Charter governs this position.

The continent of America is currently "living" in the era of artificial intelligence development. The legal regulation of artificial intelligence poses a challenge to American legislators. Legislative initiatives have always centered on finding a middle ground between fostering innovation, advancing development, and defending fundamental liberties and rights. The primary objective of the "National Strategic Plan on the Development and Research of Artificial Intelligence" is to establish a number of goals that will encourage Federation-funded AI research at the governmental or extra-governmental level and in scientific academies. The plan's main goal is outlining the tactics that must be used to ensure artificial intelligence development and funding. Additionally, the Plan is predicated on the fundamental tenet that, with government funding, artificial intelligence will continue to develop in a distinctive and sophisticated manner, thereby expanding its influence across a range of industries, including employment, national security, public safety, and others.

United States Senate, Artificial Intelligence Initiative Act, 2020 The Act's main goal was to establish federal regulations for artificial intelligence.<sup>22</sup> This objective was to harmonize state-by-state practices for controlling AI research and development. It is thought that the law contains beneficial provisions pertaining to US regulation of artificial intelligence. The most ambitious attempt by Congress to promote artificial intelligence development in the US is the Artificial Intelligence Initiative Act. First, according to the proposed law, "artificial intelligence" refers to a system that can operate autonomously under a variety of unforeseen conditions or that can learn from experience and exposure to data sets.

Among the nations with the greatest potential for the development of artificial intelligence is China. China's scientific advancements in this field have reached new heights, and the country is now viewed as a prospective global leader and a legitimate rival of the United States of America. The Chinese government views artificial intelligence (AI) as a crucial part of the country's agenda and intends to create a legislative framework governing AI soon. China's State Council (2017) unveiled The Plan for the Development of the Next Generation of Artificial Intelligence. The plan, which was created by the Chinese government, outlines China's goal to lead the world in artificial intelligence by 2030 and calls for the execution of the specific tactics it outlines.

<sup>19</sup> Evolution of artificial intelligence research in *Technological Forecasting and Social Change*: Research topics, trends, and future directions available at <https://www.sciencedirect.com/science/article/pii/S0040162523002640>

<sup>20</sup> ARTIFICIAL INTELLIGENCE AND LEGAL CHALLENGES available at <https://www.redalyc.org/journal/6338/633875004009/html/>

<sup>21</sup> The Effect of the Korean Robot Act on the Korean Robotics Industry and Its Implications available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4204279](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4204279)

<sup>22</sup> H.R.6216 - National Artificial Intelligence Initiative Act of 2020 available at <https://www.congress.gov/bill/116th-congress/house-bill/6216>

Regarding legal elements, the Plan supports, among other things, the creation of a framework for laws and regulations pertaining to artificial intelligence, as well as the development of a policy system, ethical standards, and mechanisms for assessing and controlling artificial intelligence security.<sup>23</sup>

Regarding legislative stances in other states, we can remark that states are currently pursuing a number of legal initiatives in an effort to legally control the area due to the evolution that artificial intelligence is undergoing. It is necessary to discuss here the legislative actions taken by France since 2016. Motivated by the swift pace of technological advancement, the French President deemed it imperative to take the lead in establishing ethical guidelines for the field of artificial intelligence. Consequently, a law was established in 2016 granting the National Commission for Computer Technology and Civil Liberties the authority to investigate the moral and societal implications of newly developed digital technologies. Because they worked in an area that was poorly researched, the authorities' fear of the potential negative effects of technology development and widespread use drove the need for a "control." The most delicate topics in the discipline were covered in research that the committee provided as a report.<sup>24</sup>

The goal of France's National Strategy (MOLTZAU, 2018)<sup>25</sup> is to encourage the advancement of AI throughout the nation. The goal of the strategy is to maintain France's leadership in artificial intelligence while leveraging the vast pool of human resources available to it in the hopes of regaining its position as the industry leader. The Strategy is centered on developing an ethical framework and expanding the report's recommendations while also supporting them, among other things.

## X. THE LEGAL PERSONALITY OF ARTIFICIAL INTELLIGENCE: A DISCUSSION.

The ability of a subject of law to exercise rights and undertake obligations within a certain legal system is referred to as "legal personality." Natural persons and legal entities are the first people that spring to mind when we discuss legal personality in the context of the law. Artificial intelligence needs to pass a number of evaluation filters and achieve a number of requirements before its legal personality can be discussed. We'll assess the legal personality feature in light of rights, duties, and legal accountability. We also talked about Artificial Intelligence's capacity for rights and obligations in the previous issue. Should the AI be acknowledged as possessing complete legal personality, it would be able to engage in ownership activities, sign contracts, manage bank accounts, handle legal matters, and produce, own, acquire, and trade intellectual property. However, these privileges also come with obligations.

Legally speaking, artificial intelligence cannot be considered a person. It is true that artificial intelligence creations are unlike anything our legal system has ever dealt with because they are neither people nor property. Numerous commentators draw parallels between the legal status of AI today and the legal status of the "quasi-person" that existed in the past. Numerous writers draw parallels between the legal status of AI now and the legal status of the "quasi-person" in the past. Other jurists, in reference to the legal personality of artificial intelligence, believe that the legal discussion regarding the recognition of the legal personality of AI would make sense insofar as the discussion regarding the moral and ethical conduct of the AI makes sense. Legal personhood is a crucial step towards realizing all of the rights outlined in the constitution since it activates constitutional protections the instant artificial intelligence is acknowledged as a person in the legal sense.

The freedom of speech and opinion is one of the liberties and rights protected by the Constitution. In this instance, the unclear aspect is how AI will enable this personal autonomy to materialize. It doesn't seem like freedom of thinking is entirely independent when it comes to robots or any other technology. When we consider artificial intelligence (AI) as if it were capable of learning from its past and making judgements on its own, based on prior experience, the issue gets more complicated. Systems-based technologies, such Machine Learning, Expert Systems, and Neural Networks, can no longer be viewed as objects due to their autonomous decision-making capabilities. Though the time has come for nations to act, the argument over artificial intelligence's legal personality is still up for debate.<sup>26</sup>

<sup>23</sup> The Chinese approach to artificial intelligence: an analysis of policy, ethics, and regulation available at <https://link.springer.com/article/10.1007/s00146-020-00992-2>

<sup>24</sup> National Commission for Information Technology and Civil Liberties (CNIL) available at <https://www.cabinetbouchara.com/en/lexicon/national-commission-for-information-technology-and-civil-liberties-cnil/>

<sup>25</sup> The French AI Strategy and the Climate Crisis available at <https://medium.com/dataseries/the-french-ai-strategy-and-the-climate-crisis-4890b22067a5>

<sup>26</sup> Artificial intelligence from A to Z: From neural network to legal framework available at <https://www.sciencedirect.com/science/article/pii/S0720048X20302722>

## XI. ARTIFICIAL INTELLIGENCE AND CRIMINAL LAW

Artificial Intelligence's criminal liability is a topic of discussion when discussing its legal personality. When we talk about artificial intelligence criminal liability, we're talking about the responsibility placed on the AI at the moment when it commits a crime. Nonetheless, there has been much discussion over whether artificial intelligence is legally accountable for crimes. One of the legal defenses against artificial intelligence's legal personhood was its "inability" to act criminally in court. However, how does artificial intelligence compare to the definition of criminal liability, even in cases when it is established that the intelligence systems engaged in illicit activity?

We also mentioned that AI cannot be regarded as a person in the legal sense, nor can it have the same rights or responsibilities. However, in many industrial processes, humans are being replaced by robots and artificial intelligence systems. The most obvious example is the intelligent assistants that are built into our phones and help us operate them or remember the information and actions we take between phones. The individuals engaged in the AI and its decision-making must be identified in order to examine the actus reus element<sup>27</sup>. Assigning an actus reus to an artificial intelligence system is rather easy. The actus reus element of a criminal offence is present if a system acts in a way that leads to a criminal offence or does not act when it is required to. But it's important to remember that artificial intelligence relies on preprogrammed code created by its creator. This implies that no activity that hasn't been "learned" before may be carried out by artificial intelligence.

Hallevy examines current models by putting them later in the context of AI systems in an effort to provide an explanation or direction for the development of new criminal liability systems, which is driven by the need for control over AI. The author-via-third (perpetrator-via-another) model is the first one that Hallevy analyses. This paradigm is applicable in all situations where an irresponsible person, as defined by the law, commits a criminal offence but is encouraged to do so by a criminally responsible party. The author used the example of crimes committed by animals to help readers better understand this approach. Under the law, the owner of the animal will be held criminally liable in this instance if it can be demonstrated that the animal was provoked by the owner.

The natural-probable-consequence model is the other one Hallevy brings up. This model states that criminal culpability occurs when a programmer must consider the possibility that the activation of the system may lead to the commission of a criminal offence and does nothing to prevent this from happening. This model suggests that the maker of the AI will once more be subject to criminal liability. The liability model with natural consequences may be more applicable if the entity assumes the role of the physical offender of a specific offence, even when the offence was not intended. Direct liability is the most recent model of criminal liability. Regarding the direct liability paradigm, Hallevy contends that an AI system that has engaged in illegal activity is subject to direct culpability under this approach. This reasoning holds that every artificial intelligence system is designed with a specific goal in mind. The Institute of Criminal Responsibility will be activated in the same way as it would be for humans, either when this goal is proven to have been achieved or when the AI is unable to act in accordance with it and a legal violation result. After analyzing the three models previously described, I believe that the author's suggestion<sup>8</sup>—which combines the three models—would be more appropriate for evaluating criminal culpability against the AI.<sup>28</sup> because no two cases are alike that might be submitted for resolution, necessitating a case-by-case analysis of each situation.

## XII. A FEW FUTURE LEGAL DIFFICULTIES ARISING FROM ARTIFICIAL INTELLIGENCE

The legal personality of artificial intelligence is the primary subject of discussion when it comes to law and technology. One of the largest legal difficulties in the sphere of new digital technologies is legal personality and legal regulation. For many years to come, artificial intelligence law regulation will continue to be one of the most significant legal issues. Legal doctrine challenges would be more precisely addressed by updating the current legal system.

The legal personality and status of artificial intelligence present another potential obstacle for legislators in the future. Artificial intelligence is being used extensively in every aspect of life, frequently even taking the place of human procedures, so it is becoming increasingly necessary to regulate it legally. The EU parliament suggests giving more sophisticated robots a personality in order to prevent these legal voids. This would grant them a number of rights and responsibilities and apply in situations where the robots make decisions on their own or engage in other autonomous interactions with third parties (IURICORN, 2019).<sup>29</sup>

<sup>27</sup> [AI Regulation in India: Current State and Future Perspectives](https://www.morganlewis.com/blogs/sourcingatmorganlewis/2024/01/ai-regulation-in-india-current-state-and-future-perspectives) available at <https://www.morganlewis.com/blogs/sourcingatmorganlewis/2024/01/ai-regulation-in-india-current-state-and-future-perspectives>

<sup>28</sup> LEGAL ISSUES AND CHALLENGES OF AI: A STUDY by Dr Amita Verma and Arpit Bansal available at <https://jouils.puchd.ac.in/issues/JUILSvol-2021-I.pdf>

<sup>29</sup> Sharma, Y. S. & Agarwal, S. 2018 Niti Aayog to come out with national policy on artificial intelligence soon. The Economic Times. Available at <https://economictimes.indiatimes.com/news/economy/policy/niti-aayog-to-come-out-with-national-policy-on-artificial-intelligence-soon/articleshow/63387764.cms>

Nonetheless, this method is currently being evaluated by governments and has not yet been fully resolved.

The increasing use of technology has presented the legal system with new challenges, including ensuring cyber security and data protection. Misuse of the technology frequently results in cyberattacks and improper usage of AI-generated data. Cybersecurity and privacy are at greater danger as artificial intelligence advances. Since cybercrime and personal data are currently regarded as sensitive subjects, certain jurisdictions have developed unique legal frameworks to ensure high standards of security. The European Union and United States of America

Right now, artificial intelligence stands as the most advanced and inventive branch of technology. Its creation appears to have been motivated by the desire to make our daily lives easier by automating tasks and processes that humans would otherwise have to complete. The term "artificial intelligence" has several definitions, but no single, accepted definition exists. The idea of forms and intelligent systems has undergone significant development since the invention of the first computers, when the idea of artificial intelligence was first introduced. The ability to think independently and more quickly and effectively than a person is known as "artificial intelligence." Technology is the foundation of artificial intelligence, which can carry out mechanical tasks more quickly and with less effort than a human could.

Artificial intelligence (AI) has been used for years in a variety of industries to improve human life and productivity. Humanity is aware of the advantages that come with applying artificial intelligence, and it is continuously working to advance technology so that it can better serve human needs. In all of its guises, artificial intelligence is present everywhere these days. We are aware that using artificial intelligence has significant drawbacks in addition to the many benefits that intelligent technologies have brought to our lives. Scholars differ in their perspectives on the significance and effects of artificial intelligence.

The idea of artificial intelligence has changed over time. Although there is now no appropriate legal framework for artificial intelligence, states need to take action to regulate this area legally. It can be argued that, given the rapid advancements in technology and artificial intelligence (AI) as well as the recognition of these technologies' broad applications and impacts across a range of industries, nations should now take steps to establish appropriate legal frameworks for AI regulators.

States have taken the lead in creating laws and regulations governing the field of artificial intelligence, despite the lack of a unified legal framework. Based on a detailed examination of the legislative acts that are currently in place in numerous countries, we have come to the conclusion that legislators are attempting to regulate the field of artificial intelligence because of the drawbacks associated with its use, as well as its broad applicability and capacity to shape the course of numerous processes. A further observation drawn from the thesis's consideration of the legal norms is how little progress has been achieved in using them. There isn't a single legislative act that fully and precisely governs artificial intelligence.<sup>30</sup> These laws are the initial steps towards creating an appropriate legal framework for artificial intelligence.

Regarding criminal liability and damages resulting from autonomous AI or AI exploited by third parties, this is another concern that emerges because of AI's legal personality. The most appropriate model for determining criminal responsibility is that of the person who developed or programmed the Artificial Intelligence that caused the damage, according to the analysis of the AI's potential legal personality and operational mechanisms.

When it comes to civil culpability emerging at the moment of producing damage, the same reasoning would apply. Practice and experience have demonstrated that artificial intelligence is not entirely dependable. This fact ought to function as a caution flag for states looking to tighten laws to stop illicit activity and unfavorable outcomes from the use of AI. A lot of academics advise developing a penal system for intelligent systems that are "involved" in different kinds of legal transgressions. This may be a useful strategy to stop any unfavorable repercussions that AI use might have down the road.<sup>31</sup>

### **XIII. IS ARTIFICIAL INTELLIGENCE NOT A GOOD REPLACEMENT FOR LAWYERS?**

Lawyers now disagree on whether AI will eventually replace them or make them more productive and efficient in the legal sector. Lawyers, contract analysts, trademark search engines, and other legal scholars now have access to a plethora of new instruments because of technical advancements in the legal area. However, none of the AI-based tools are intended to replace legal counsel; rather, they are all intended to improve the validity, precision, and outcome-orientedness of research and analysis. Analysis, judgement, and representation in the legal field cannot be automated. Lawyers can save a tonne of time and effort while still giving their clients advice that are more sincere and goal-oriented by utilising AI-based software and programmes.

<sup>30</sup> 2018 Digital India - Vision and Vision Areas. Digital India. Available at <http://digitalindia.gov.in/content/vision-and-vision-areas>.

<sup>31</sup> Make in India. Available at <http://www.makeinindia.com/about>.

In India, the legitimate More AI-based and automated support tools and software are eagerly awaited, as the industry is still in its infancy. AI-based and automated aiding technologies will automate a lot of administrative work, but they won't replace the need for lawyers; rather, they will make them more competent and productive.<sup>32</sup>

#### XIV. THE ADVANTAGES MENTIONED ABOVE JUST SCRATCH THE SURFACE OF AI'S ABILITY TO IMPROVE CYBERSECURITY

However, there are disadvantages to using AI in this industry as with anything. For an organisation to create and sustain an AI system, financial resources would need to expand significantly. Furthermore, as AI systems are educated on data sets, you will need to become familiar with a wide range of distinct sets of malware codes, benign codes, and anomalies. Compiling all of these data sets requires a significant investment of time and money, which most organisations cannot afford. When large volumes of data and events are missing, artificial intelligence (AI) systems are more likely to generate false positives and/or inaccurate outcomes. Moreover, getting misleading information from questionable sources could even backfire.

In addition to completing a wide range of other tasks, lawyers, or practitioners of law, advise clients, assess the merits of legal arguments, reduce risk, draft contracts and other documentation, and pursue litigation. Six Which of these conventional legal jobs can artificial intelligence be used to automate, either totally or partially?

Technology-assisted review and litigation discovery provide valuable insights into the possible uses of AI in law practice, as well as areas where it may be more restricted. Litigation discovery is the process of obtaining evidence for a lawsuit. This often means obtaining and reviewing vast volumes of documents that the opposing counsel has given over in modern commercial disputes. Document review was traditionally the job of solicitors, who would quickly go through each document and decide—often by hand—whether or not it was likely relevant to the ongoing legal actions or perhaps protected by privilege. As electronic discovery gained traction in the middle of the 2000s, technology helped review and so-called predictive coding became possible.<sup>33</sup> Predictive coding is the collective title for a set of computer-based document analysis techniques designed to automatically identify documents relevant to litigation discovery based on their likelihood of being pertinent or not. These predictive-coding solutions have recently employed artificial intelligence (AI) techniques like knowledge representation and machine learning to aid automate this task. Certain machine-learning e-discovery programmes can be "trained" to identify patterns in emails and other potentially significant documents up to the level of the legal dispute by using sample documents. But it's important to understand the limitations of automated predictive coding. The final say for document relevance does not belong to the computer. In the end, human solicitors decide whether documents are relevant to the case at hand and the law, and those that don't. The reason is that computer software simply cannot make those types of decisions—which include understanding the law and the facts and dealing with strategy, politics, and other abstractions that modern AI technology struggles to handle.<sup>34</sup> Conversely, automatic predictive coding systems can be conceptualised as using patterns and heuristics to filter out texts that are probably irrelevant to the case. Instead of having human solicitors provide their opinions on a vast sea of likely irrelevant documents, the software is used to filter out the most irrelevant documents, allocating the limited attorney-judgment time to that subset of documents that are far more likely to be relevant.

Ultimately, it is a human, not a machine, who determines whether or not a document is relevant and helpful to the law and the circumstances at hand. This is a great illustration of how, as was previously said, even with the most sophisticated AI systems, humans are still necessary for oversight and provides information about the wider use of AI in the legal field. It will likely be difficult to replace human cognition in legal disciplines involving judgement given the current state of AI technology. Another crucial feature about the legal discovery example is this. This is exactly the kind of task that we would expect to be largely automatable using AI given its qualities. In many document troves, there are often apparent underlying heuristics that can be recognised by algorithms. For instance, the programme can be trained to look for terms that regularly appear in harassing emails, or it can use data that it has found in previous harassment cases containing words that were likely used in those emails. This would be useful in the event of a sexual harassment lawsuit.

Nowadays, a lot of AI techniques require problem domains with underlying patterns or structures. That might be the case for some subsets of lawyering, such as document review, but many lawyering jobs requiring abstraction, conceptualization, and other cognitive processes are beyond the capabilities of present AI technology.

<sup>32</sup> An Analysis of the Feasibility of Artificial Intelligence to Replace Lawyers available at [https://www.researchgate.net/publication/371206988\\_An\\_Analysis\\_of\\_the\\_Feasibility\\_of\\_Artificial\\_Intelligence\\_to\\_Replace\\_Lawyers](https://www.researchgate.net/publication/371206988_An_Analysis_of_the_Feasibility_of_Artificial_Intelligence_to_Replace_Lawyers)

<sup>33</sup> eDiscovery for In House Counsel JOSEPH BAMBARA Attorney at Law UCNY, Inc., USA available at <https://www.iicj.net/subscribersonly/16january/iicj3jan-ediscovery-josephbambara-ucny-usa.pdf>

<sup>34</sup> Impact of Artificial Intelligence on Legal Industry available at <https://ijlmh.com/paper/impact-of-artificial-intelligence-on-legal-industry/>

There are more examples of machine learning being used in situations and for jobs that lawyers have traditionally performed. The bulk evaluation of contracts is one of these instances. It is important to emphasise that these AI systems are capable of quickly surpassing their constraints. Often, these technologies provide only a basic awareness of different legal obligations; for example, they provide a sample legal document. In other circumstances, the programme might just highlight legal issues that a real lawyer ought to be aware of. In contrast, in more complex scenarios, like a completely executed merger contract, the AI programme typically does not generate the final work output.<sup>35</sup>

People still have complete knowledge of complex, challenging legal obligations. A considerable percentage of the mechanical and repetitive aspects of practicing law is being automated.

One fascinating use of machine learning in the legal profession is the prediction of legal outcomes. Evaluating a client's stance and arguments in a fictitious or actual lawsuit is one of the duties solicitors have traditionally carried out on their behalf. A growing number of interested parties, including solicitors, are relying more on data than gut feeling to determine their prospects of winning cases, and they are using machine learning algorithms to forecast case outcomes. All things considered, the work that lawyers do these days varies from the highly abstract to the routine and mechanistic. The likelihood of modern AI automating a legal task is much higher if it can exploit an underlying structure or pattern. However, it is unlikely that legal jobs involving abstract cognition, problem-solving, advocacy, client counselling, human emotional intelligence, policy analysis, and big-picture strategy will be automated due to the limitations of present AI technology.

## XV. GLOBAL VIEWPOINT

It is possible to observe the global expansion of artificial intelligence beyond national borders. The most appropriate and economical artificial intelligence technologies are being made available for artificial intelligence to shift and adapt. It has been noted that a variety of businesses are using AI technologies, and the legal sector is no exception. In certain industrialised nations, such as the United States and Canada, the legal sector has already implemented artificial intelligence (AI) technologies to support judges in their decision-making regarding the granting of bail and the release of convicts on parole. Artificial Intelligence's use and impact can be observed in a variety of contexts, including investing and contract due diligence. It is able to forecast the legal result of cases that are filed with the courts. Artificial intelligence can be used to find important details from earlier case law and help solicitors present a set of precedents for the particular case at hand. Artificial intelligence software and tools can help with document documentation in the simplest way possible. They can also be used in the area of intellectual property rights, where they can provide insights into IP portfolios, such as the search and registration of patents, trademarks, and copyrights, among other things.<sup>36</sup>

By anticipating crucial details about a case in progress based on precedents of a similar kind, artificial intelligence (AI) might subtly influence the decisions made by the judges. An examination of various case information, such as the number of accused, the date the charge sheet was filed, the number of witnesses questioned during the evidence stage, the emergence of hostile witnesses, and the reasons for adjournments, can be made public. for the sake of assisting judges in reaching more informed strategic choices. Similarly, AI can be used in India. To start, court duties that require speeding up can be identified, ranging from simple ones like serving processes to more complicated ones like evaluating evidence.

Artificial intelligence will improve the use of public funds by saving the courts' judicial time. It would guarantee prompt justice delivery and avoid needless delays in its administration. It is anticipated that artificial intelligence would rationalise the decision-making process by more effectively summarising all pertinent data than the human brain can. In the sphere of justice, artificial intelligence refers to algorithms' capacity to minimise discretion. Software-generated artificial intelligence is meant to be regarded as more trustworthy, genuine, and scientific than other sources of knowledge, including personal opinions.

## XVI. CONCLUSION

The legal industry's perspective has undoubtedly changed as a result of propelling innovation, and it stands to reason that artificial intelligence (AI) in the regulatory space offers several benefits. It has assisted legal experts in expeditious examination; with its foresighted innovation, it can aid in decisions made in dynamic cycles; law offices can benefit from it for an expected level of effort work, information assortment, and various assignments, all of which enhance the quality of their work; and law offices can benefit from it for an expected level of effort work, information assortment, and various functions.

<sup>35</sup> Study on the Influence of Artificial Intelligence on Legal Profession available at <https://www.atlantis-press.com/article/125931568.pdf>

<sup>36</sup> Artificial Intelligence by Charlie Giattino, Edouard Mathieu, Veronika Samborska and Max Roser available at <https://ourworldindata.org/artificial-intelligence>



Even with all of its benefits, artificial intelligence cannot replace legal counsel. They can benefit from it in certain fields of work, but AI lacks human creativity and requires critical thinking.

Robots must possess enthusiastic intellect, empathy, and the ability to function under the direction of a designated authority. There are a number of problems with integrating AI into the legal industry, one of which is that it is now powerless to protect itself from a variety of threats. As a result, a comprehensive legal framework must be created to regulate AI and prevent it from exploiting client data. We won't be able to fully benefit from AI until we have a legislative framework controlling its behaviour to reduce the risks involved. Nevertheless, there are a number of moral and legal issues with using AI in the legal sector. Due process, accountability, and transparency are only a few of the basic legal concepts that could be broken by using AI in decision-making procedures. AI may potentially result in discriminatory judgements and prejudice against particular people or groups.

Legal experts and legislators need to make sure AI systems are more accountable, transparent, and compliant with ethical and legal requirements in order to allay these worries. They also need to make sure AI systems are reviewed and audited in order to find and fix any biases or mistakes. All things considered, AI has the ability to lower expenses while simultaneously improving the efficacy and efficiency of the legal sector. To prevent unforeseen effects, AI systems must be made transparent, accountable, and compliant with legal and ethical requirements. AI has the power to completely transform the legal sector by cutting expenses, increasing productivity, and simplifying repetitive work. But there are also serious practical and ethical issues with AI use in law.<sup>37</sup> When incorporating AI technology into their work, lawyers need to think about the ramifications and make sure they do it in a morally and responsibly manner. Although there are obstacles when it comes to utilising AI in law, with proper planning and execution, this technology can contribute to the development of a more effective and efficient legal system.

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<sup>37</sup> ADVENT OF ARTIFICIAL INTELLIGENCE IN LEGAL FIELD available at <https://theamikusqraie.com/advent-of-artificial-intelligence-in-legal-field-advantages-disadvantages-2/>





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