

**EMERGING ARTIFICIAL INTELLIGENCE**  
**IN**  
**LEGAL FIELD**

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# **EMERGING ARTIFICIAL INTELLIGENCE IN LEGAL FIELD**

## **ABSTRACT:-**

Artificial intelligence , a creation of human intelligence, is the ability to try and induce human abilities into robots and machines with the help of computers to get work done. Through the years, AI has been through continuous modifications and developments. Numerous thinkers, having started this journey by introducing artificial neurons, led this brilliance to such an extent that we are able to see speech-visual enhancements, self-thinking and adaptation abilities in robots, problem solving capabilities and many more. Constant contributions in this field has diversified the growth to various sectors with its branches such as natural language processing, machine learning, deep learning, robotics, virtual assistants etc. This diversification has made a great impact on many industries, especially those sectors where the use of technology is mediocre. One such is the legal field. Many branches of AI have been adopted by the legal organisations for many tasks which either need very little or too high man power and consume time. There have been recent studies which depict the use of technology in the legal field and their consumption in many new and different ways.

## **INTRODUCTION:**

Artificial intelligence(AI) is a machine's work where it encompasses human intelligence and performs human-like tasks, learn from experience, adjust to new inputs and interpret like humans. This term was coined in 1956, increasing its reach and popularity due to data volumes, advanced algorithms and improvement in computing power and storage.

Artificial intelligence in the current generation is an essential technological advancement which is becoming a part of everyone's lives. Not only does it help in scientific purposes or research, AI with its capability to complete much pettier tasks has led to its usage in almost everything.

The aim of the paper is to provide a review on methods of using artificial intelligence in the law and legal field. Legal sector being a very sensitive and taciturn field, very low risks and high security is expected. The data, decision making, and storage are an essential part of this area. AI is being used to help these be secured and as precise as possible in order to maintain the vulnerability intact.

### **Some of the famous branches of AI are defined as follows;**

- **NLP** is a subset of AI that processes natural human language, either in text or voice. Some of the most familiar examples include Google's predictive search suggestions, spell checkers and voice recognition.
- At its simplest, **deep learning** can be thought of as a way to automate predictive analytics. While traditional machine learning algorithms are linear, deep learning algorithms are stacked in a hierarchy of increasing complexity and abstraction.
- **Machine learning (ML)** is a type of artificial intelligence (AI) that allows software applications to become more accurate at predicting outcomes without being explicitly programmed to do so. Machine learning algorithms use historical data as input to predict new output values.

### **LAW AND ITS LEGAL STRATEGIES:**

The field of law is vastly spread in every section of any industry, from individuals to large groups, from small works to large establishments, we can see law everywhere. There is no work being done without having a legal attention to it. Such a huge field has huge tasks to complete both qualitatively and quantitatively. Having a great amount of resources which are to be highly protected leads to a higher amount to work needed to secure them. This kind of work led this sector to have some hesitations while adapting to technology. The basic techs like dictation machine, typewriter etc started to come into use in 1950s although they were invented and introduced long ago. It took almost a decade for the legals to accept technology in such a diverse yet vulnerable field.

Today, the technology has brought many changes to the legal field in many ways. Technology has various descriptions of itself and it can be divided into software and hardware technology. Although it was easy for the machines to get into law, software and IT was still a susceptible matter which concerned the sector due to his highly sensitive data handling. With the emerging technology and research and development to it, adaptations are being made possible. Not only did it enter the field but the effect is showing many changes being made for an effortless job.

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.

At close to \$1T globally, the legal services market is one of the largest in the world. At the same time, it remains profoundly underdigitized. For better or worse, the field of law is tradition-bound and notoriously slow to adopt new technologies and tools. Expect this to change in the years ahead. More than any technology before it, artificial intelligence will transform the practice of law in dramatic ways. Indeed, this process is already underway.

## **APPLICATIONS OF AI AND ITS SUBSTANCES IN LEGAL TECH:**

Artificial intelligence (AI) is changing the way the legal sector operates. While AI adoption in law is still new, lawyers today have a wide variety of intelligent tools at their disposal. One of the most helpful of these AI applications is natural language processing (NLP).

NLP is a promising industry, expected to be worth \$27.6 billion by 2026, and it has significant implications for the legal sector.

### **Applications of NLP in LAW:**

- Streamlining Legal Research
- Drafting and Analyzing Legal Documents
- Automating routine tasks
- Predicting rulings

The legal sector's dependence on precise language makes it the ideal place to utilize NLP. While this concept is still in its early stages, it's already showing tremendous potential for lawyers and their clients.

### **Applications of AI and Machine Learning in LAW:**

The law touches every corner of the business world. Virtually everything that companies do—sales, purchases, partnerships, mergers, reorganizations—they do via legally enforceable contracts. Innovation would grind to a halt without a well-developed body of intellectual property law. Day to day, whether we recognize it or not, each of us operates against the backdrop of our legal regime and the implicit possibility of litigation. Within the field of law, a few areas stand out as particularly promising for the application of AI.

- Contract Review.
- Contract Analytic.
- Litigation Prediction.
- Legal databases have put the law at everyone's fingertips. At the same time, though it remains largely untapped, the amount of data generated within law firms keeps growing. Solutions leveraging AI and machine learning – a type of AI that finds patterns in a lot of data – can help legal practitioners gain the information and insights needed to prepare for litigation, draft documents and verify their work products. Technology is enabling fast, accurate research, and cutting down on the time and cost of legal work.

- Search providers offer tools such as semantic search (using new machine learning representations to find relevant documents) and passage level retrieval (pinpointing relevant portions in documents). For some time (two decades), e-discovery has used classification, a kind of machine learning, to automate the lengthy process of document review. Armed with a database of past negotiations or verdicts, public or firm-specific, lawyers can analyze past outcomes and use newly gained insights to assess the likely outcome of a specific scenario.
- One additional area where AI has potential to improve access to justice is in expertise automation. Some AI tools automate simple workflows in civil matters, providing wider access to the law to people who cannot afford legal counsel. Legal professionals may also benefit from expertise automation as a means to streamline common tasks and free up more time to think deeply about their clients' cases.
- Some of these tools include drafting a will. Such services often rely on "expert systems," which embed specific legal knowledge in rules and decision trees that can include calculations or factor weighting, among other techniques.

Various areas of AI in the legal sector can be discovered with adequate research and careful comprehension of the legal industry by IoT app development companies. The current Artificial Intelligence applications in the industry can be categorized into six main parts:

- **Due diligence:** Lawyers use Artificial Intelligence tools to perform due diligence and uncover background information. In light of the current scenario, developers have opted to integrate a slew of new features, including agreement review, legal inquiry, and electronic media for this section of the industry.
- **Prognostication technology:** Artificial Intelligence (AI) aids in the generation of outcomes for legal investigations and agreement evaluations. This characteristic of AI programming appears to be extremely beneficial to legal firms and industries.
- **Legal mechanism:** Lawyers can obtain information points from prior or past instances using Artificial Intelligence technologies. They can also utilise this data to keep track of the judge's instructions and forecasts. This technology is likely to become increasingly important on a global scale in the near future.
- **Documenting mechanism:** Different types of software arrangements are used in the legal industry to develop papers that aid in the collection of data and information. In the law firm industry, there are numerous documents that are useful. As a result, it is really beneficial.
- **Intellectual possession:** Artificial intelligence algorithms demonstrate lawyers how to examine massive IP files and extract meaning from a variety of attractive texts.

- **Electronic receipt:** Lawyers used to make their own receipts for a long time. The billings of lawyers were turned electronic after AI software development technology was applied in these businesses.

## **FACE OF FUTURE LAW FIRMS :**

Future law firms would be very different from what we see now. Let's have a look at some of the qualities that advance legal companies would have:

### **1. Client service innovations:**

In future, the way clients are served and handled will significantly change. Law firms would approach their clients with fresh ideas and more genuine and cost-effective legal solutions. Currently, law firms in India bill their services based on the billable hour technique; however, this billing method will become outdated in the future. To better serve their clients, law firms should consider rethinking their pricing practices and implementing a Performance-Based Pricing Strategy [PBPS]: As the name implies, this price plan is client-friendly, as clients will only be charged once they meet their goals and same would strengthen the professional relations between the clients and Law Firms.

### **2. Focus on higher profits:**

Nowadays, law firms are concerned with raising income, and if we look closely, we can see that competition among law firms has been expanding steadily, but demand for legal services has remained stable, making revenue growth extremely difficult. As a result, law firms will focus on better profitability and margins in the future rather than revenue.

### **3. Making technology the foundation for growth:**

We've seen a considerable increase in the introduction of new AI-based solutions targeted at making the legal sector more efficient and client-friendly in recent years. Various legal tech startups have emerged to better the lives of lawyers and law firms, ranging from E-Discovery tools to contract drafting automation. AI -based legal solutions assist law companies in becoming more efficient, lowering expenses and increasing revenues. The future law firm will incorporate these technologies, and collaborate with other businesses to develop AI-based solutions that'll benefit the legal industry.

### **4. Focus on brand value:**

In the future, law firms will place a greater emphasis on their brand presence. A single piece of negligent advice from a few employees can ruin a firm's reputation, thus law firms must rely on AI-based legal solutions and platforms, as well as tech-savvy lawyers, to grow their brand value. On the other hand, law firms must increasingly host conferences and participate in cross-border seminars and workshops.

# **AREAS IN THE REALM OF LAW STAND OUT AS POTENTIAL FOR AI USE :**

## **1. Contract review**

Contracts are the lifeblood of the economy; without them, no business transactions can take place. Nonetheless, the process of concluding a contract is excruciatingly time-consuming. It may delay negotiations and prevent companies from achieving their goals. Human mistake is common, no surprise given that attention to minutiae is essential and the fact that contracts can be thousands of pages lengthy. The idea of automating this process is being pursued by startups such as Lawgeex and LexCheck. These firms are working on AI systems that can automatically ingest proposed contracts, evaluate them in detail using natural language processing (NLP) technology, and determine which parts are acceptable and which aren't.

## **2. Contract analytics**

The first step is to sign a contract. Staying on top of the agreed-upon conditions and obligations after the parties have signed a contract may be a major problem. This problem is especially serious for large firms, which will have millions of outstanding contracts with thousands of distinct counter-parties spread over multiple internal divisions.

Companies currently operating in the dark about the nature of their contractual ties to an alarming degree. AI can help tackle this problem. NLP-powered solutions are being developed that extract and contextualize critical information across a company's full body of contracts, making it simple for all stakeholders to grasp the nature of the company's commercial commitments.

Sales teams will be able to track when contracts are up for renewal, allowing them to take advantage of revenue opportunities. Procurement teams may stay on top of existing agreements' details, giving them the power to renegotiate as necessary. Regulatory teams might keep a broad view of a company's operations in order to ensure compliance. Finance teams can make sure they are always ready for M&A and due diligence.

## **3. Litigation prediction :**

A few AI teams are developing machine learning models to anticipate the outcomes of pending cases, using the corpus of relevant precedent and the facts of the case as inputs. As these forecasts become more precise, they'll have a significant impact on legal practice. Law firms are beginning to utilize them to plan ahead of time their litigation strategy, expedite settlement negotiations, and reduce the number of cases that need to go to trial.

Blue J Legal, based in Toronto, is one such company working on an AI-powered legal prediction engine, with an initial concentration on tax law. According to the business, its AI can accurately anticipate case outcomes 90% of the time.



#### **4. Legal research :**

Legal research is an area where machine intelligence is making headway. Legal research used to be a labor-intensive procedure, with law students and firm associates searching case law volumes for relevant precedent. With the introduction of personal computing recently, this procedure has gone digital, and lawyers increasingly undertake research using computer applications such as LexisNexis and Westlaw. These outdated technologies lack intelligence beyond rudimentary search functionality. In recent years, a new wave of firms has developed, all aiming to use improvements in natural language processing to transform legal research. These platforms go beyond mechanical keyword matching to bring up the most relevant existing legislation.

#### **IMPACT OF AI ON THE INDIAN JUDICIAL SYSTEM :**

When we look at the Indian court system, we can see that there are judicial delays. The judiciary is overburdened with over 3 Cr. pending cases, which causes unwelcome delays in administering justice to the people, and as the phrase goes, justice delayed is justice denied. As a result, various efforts are being taken to improve the current situation, such as cutting vacation duration and improving judging strength, but it is time to do more, which is where Artificial Intelligence comes into play . Every year, a large number of cases of a similar character are filed, necessitating the use of data science and artificial intelligence (AI) to assist courts by employing predictive technology to provide critical information about ongoing cases based on prior cases of a similar nature.

#### **CHALLENGES OF AI IN LAW :**

- **Not completely accepted by legal professionals:**

When we look at India, artificial intelligence in law is still in its infancy. Lawyers are hesitant to adopt this technology because they believe it will have a negative impact on employment. They fear that technology will supplant a lawyer's or a legal clerk's primary source of income, resulting in increased unemployment across the country. Most senior legal professionals are hesitant to change their routines and want to practice in the traditional way, without the use of artificial intelligence.

- **The legal personality of ai is not defined:**

Artificial intelligence's legal personality is not explicitly defined elsewhere in contemporary law, and robots are complicated in nature, making it impossible to determine whether ordinary laws and norms would apply in the same way. As a result, unless the rights and obligations of AI-driven devices and tools are clarified, there will be misunderstanding, because the current legal system does not hold a robot liable for its own actions or omissions.

- **Lack of proper systems and data:**

Machine learning is based on algorithms that are fed into computer systems, and the machine then acts on them. One of the major barriers to using AI technology in India is that there is outdated technology and machines being used, the data is frequently incomplete, and the machine will not be able to perform accurately unless a large chunk of reliable data is provided to it.

- **Costly:**

AI machines are sophisticated machine systems capable of learning and responding on their own, which necessitates a significant financial commitment. The majority of AI-driven machines are manufactured by foreign corporations, making it even more difficult for small and mid-sized law firms to obtain them; only large law firms can afford them.

- **Privacy and protection of personal data:**

It's critical that AI-driven machine learning robots are built in such a way that the parties' personal information is kept safe and secure. Because machine learning works with large amounts of data, it is even more critical that the legal framework ensures that the data is not misused, that confidentiality is maintained, and that a fair due process is followed, and that a security layer to prevent privacy breaches is implemented.

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. 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.

- Big legal data Handling and exploring large amounts of legal texts.
- Document comparisons : Find similarities and differences between legal texts.
- Information extraction : Finding information in unstructured text documents.
- Predictive coding : Automating legal document analysis through artificial intelligence.
- Legal network analysis : Map the law through citation and issue networks.
- Prediction : Predict the outcome of court decisions.

## **CONCLUSION:**

The use of AI in the legal profession has only just begun. While we have already seen its impact, its continued use and growth will shape legal strategy in the years to come. Just like the self-driving car, just because lawyers aren't being replaced by machines, doesn't mean that technology isn't already making its mark on the legal profession. AI helps augment human expertise, it does not replace human expertise, and incremental innovation through AI will continue to combine with human intelligence to enhance the pursuit of justice.

## **SOME OF THE MOST ANTICIPATED LEGAL TECH TRENDS:**

**Trend No. 1:** By 2025, legal departments will increase their spend on legal technology threefold

**Trend No. 2:** By 2024, legal departments will replace 20% of generalist lawyers with non-lawyer staff

**Trend No. 3:** By 2024, legal departments will have automated 50% of legal work related to major corporate transactions

**Trend No. 4:** By 2025, corporate legal departments will capture only 30% of the potential benefit of their contract life cycle management investments

**Trend No. 5:** By 2025, at least 25% of spending on corporate legal applications will go to nonspecialist technology providers

## **KEYWORDS:**

- Branches of AI
- Current Technical Legality
- Future law firms and trends

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