Roundtable on State of Artificial Intelligence in Legal Domain in India

A collaborative effort from Industry and Academic research

jointly organised by NALSAR and IIITH

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1. Executive summary

Artificial Intelligence (AI) is transforming numerous industries, including the legal sector in India and Globe. The legal industry is extremely regulated and complex, and AI can contribute in reducing the burden of repetitive and time-consuming tasks. AI tools can perform legal research, contract analysis, and due diligence more efficiently than humans. AI can also predict case outcomes and help in dispute resolution.

According to the National Artificial Intelligence Initiative (NAII) Act 2020, “artificial intelligence” refers to a machine-based system that can make predictions, recommendations, or decisions to achieve human-defined objectives in real or virtual environments. “Machine learning” is a type of AI that allows systems to learn and improve automatically based on data or experience. Chief Justice of India D.Y. Chandrachud stated that technology is important for promoting efficiency, transparency, and objectivity in government. He also stated that AI can assist judges in evaluating their work and judgments with the ultimate goal to provide greater access to justice for the general public.

The Indian legal industry in the process of embracing AI. In 2020, CJI SA Bobde initiated the “Committee on Artificial Intelligence”. This was followed by the launch of SC’s Artificial Intelligence portal: SUPACE (Supreme Court Portal for Assistance in Courts Efficiency). Through this portal, the SC intends to leverage machine learning to deal with the vast amounts of data received at the time of filing of cases. Various law firms, and legal tech startups have also developed AI-powered tools for various legal functions. The use of AI in legal services is still in its nascent stage, however it is rapidly evolving, and there is an increasing demand for AI-powered legal services.

Although, there are also concerns about the ethical and legal implications of using AI in the legal domain. The use of AI tools for legal decision-making raises questions of bias, transparency, and accountability. Concerns about data privacy and security are always discussed.
1.1 Introduction

Artificial Intelligence (AI) has been changing the legal industry worldwide. AI-powered tools have the potential to revolutionize various legal functions, such as legal research, contract analysis, due diligence, document review, and predictive analysis. The intervention of AI in the legal industry has been growing rapidly in recent years. Many AI-powered tools for various legal functions have been tested and developed. For example, AI-powered contract analysis tools can help identify risks and compliance issues in contracts, while predictive analytics can help lawyers assess the likelihood of success in litigation.

AI can also help improve access to justice, particularly for those who cannot afford legal services. AI-powered tools can help automate legal processes and provide legal guidance to individuals who cannot afford a lawyer. The use of AI in the legal industry is expected to continue to expand as the technology matures and becomes more advanced.

1.1.1 How Countries are getting ready for the New Normal-Al in Legal Domain

Around the world, AI is playing an increasingly important role in the legal domain, helping to streamline processes and increase efficiency. In the United States, law firms are leveraging AI-powered tools for tasks such as legal research, document review, and contract analysis. In other countries like the UK and Australia, judges are using AI advisory tools to support their decision-making processes. Estonia and Singapore have implemented AI-powered chatbots to provide legal aid and dispute resolution services to citizens.

Even legal education benefits from AI-based tools, which provide students with hands-on experience in legal research and analysis. These various uses of AI are ultimately aimed at improving access to justice, increasing efficiency, and enhancing the accuracy of legal decision-making.

1.1.2 Scope of development in India for implementing AI in Legal

AI is gradually gaining traction in the legal domain in India. The use of AI in legal systems in India is still in its initial stages, however it is gradually gaining momentum. Some areas where AI is being used in legal systems in India include:
a. **Using AI to manage cases and improve efficiency**

AI-powered case management systems are being contemplated by some courts in India to manage cases and improve efficiency. These systems can help to automate case management tasks, such as scheduling hearings and managing case files.

b. **AI powered tools to assist in decision-making**

Some judges in India are using AI-powered tools to assist them in making decisions. These tools can analyze legal data and provide insights to judges to help them make informed decisions.

c. **Assistance in finding relevant information for Legal research**

As mentioned earlier, AI-powered legal research tools are becoming increasingly popular in India. These tools can help lawyers and judges to quickly find relevant legal information and improve the quality of legal research.

d. **Use of AI in Predicting outcomes**

Some law firms and legal systems in India are using predictive analytics to analyze data and make predictions about legal outcomes. This can help to inform legal strategies and improve the chances of a favorable outcome in legal disputes.

While AI is just in the early adoption stage in the legal sector in India, it carries potential to substantially improve the efficiency and effectiveness of legal work. However, there are also challenges to overcome, such as the need for technical expertise and concerns about data accessibility, privacy, and security.

Nonetheless, the use of AI in legal systems in India is likely to continue to grow in the coming years, as more organizations see the benefits of this technology for improving efficiency and effectiveness in the legal sector.

2. **How do the judiciary see the use of AI in legal systems in India?**

The judiciary in India is starting to see the potential benefits of using AI in the legal system. While there are certain concerns about the impact of AI on the legal profession, such as the possibility of bias and the potential for AI to replace human judgement, there are also many potential benefits to using AI in the legal system, such as:

a. **Improving efficiency by automating tasks**

AI-powered tools can help to automate routine tasks, such as document review and contract analysis, freeing up judges' time to focus on more complex legal issues.

b. **Document search has become easier with the use of AI**

AI-powered legal research tools can help judges to quickly find relevant legal information and improve the quality of their research.
c. **Large data sets are analyzed at a faster pace**

AI can be used to analyze large amounts of legal data and provide insights. These data driven insights can help in legal decisions and improve the chances of success in legal disputes.

d. **Easy access of Judicial services to everyone**

AI-powered chatbots and virtual assistants can be used to provide legal information and guidance to individuals who may not have access to traditional legal services, improving access to justice and reducing the burden on the court system.

While the use of AI in the legal system is still in its early stages in India, there are already some examples of its use in the judiciary, such as the use of AI-powered case management systems in some courts. As AI technology continues to develop, it is likely that we will see even more innovative applications of this technology in the legal system in India and around the world. However, it is important to ensure that the use of AI in the legal system is carefully regulated and monitored to ensure that it is used in a fair and unbiased manner.

**3. How law firms in India see growth in AI in Legal ?**

Many law firms in India are recognizing the potential benefits of AI in the legal sector and are investing in this technology to improve their services and stay competitive. And apart from the use cases mentioned above, firms are also looking to use AI for an Improved client experience: AI-powered chatbots and virtual assistants may be used by law firms to provide 24/7 customer support, improving the client experience, and increasing client satisfaction.

While there are certain challenges to implementing AI in the legal sector, such as the need for technical expertise and concerns about data privacy and security, many law firms in India see growth in AI as a way to stay competitive and provide better services to their clients. Some use cases that may be explored in this area identified in collaboration with NALSAR university are:

- Access in vernacular languages for Legal Form filling
- Legal process related
  - Increasing efficiency in terms of speed
  - Applicable acts and prior case retrieval (smart search)
  - Process streamlining
  - Pro-bono setting assistance
- Digitization of data records
  - Collation and access interface
  - Smart search
- Due diligence in corporate law
- Public Awareness models
- Creating Legal Ontologies
4. Challenges around AI in Legal Domain

While the legal community and industry are upbeat about the application of AI in this domain, several challenges remain. Many of these challenges centre around the effective use of AI in the field of justice dispensation. The challenges in this field can be broadly categorised along the following themes:

a. Issues around Bias, Privacy and Transparency

The use of AI in legal processes raises ethical and legal implications, including issues related to bias, privacy, and transparency. There is a need for clear guidelines and regulations to ensure that the use of AI in legal processes is ethical and transparent.

b. Lack of ample data to train the AI Models

The development and implementation of AI models require large amounts of data. However, there is a lack of legal data in India, which makes it difficult to train and validate AI models.

c. Lack of trust and resistance to change

The legal profession is generally slow to adopt new technologies, and there may be resistance to the use of AI in legal processes. People are wary of the fact that their data may be publicly available.

d. Higher Cost of development and implementation

The development and implementation of AI models require significant resources and investment, which may be a barrier to adoption, particularly for smaller law firms and legal aid organizations.

e. Lack of skilled expertise

There is a shortage of AI experts in India with the necessary legal knowledge to develop and implement AI models in the legal domain.

The challenges associated with the use of AI in the legal domain in India highlight the need for careful consideration for investment in data, expertise, and infrastructure. By addressing these challenges, the legal professionals can harness the power of AI to improve legal outcomes and increase access to justice.

5. Bird eye view of applications of AI in Legal Domain

5.1 Judiciary/Law

There are multiple facets to application of AI in judiciary. The applications of AI in Judiciary may be wide ranging but each come with their own challenges.
a. **AI assisted Judgements opens door to greater efficiency**

There seems to be a growing consensus that AI can be used in delivering judgments in India, but there are several challenges that need to be addressed before its widespread adoption.

One potential application of AI in delivering judgments is to use machine learning algorithms to analyze previous judgments and legal precedents to help judges make more informed decisions. AI can also be used to streamline the legal process by automating routine tasks such as document review and legal research.

The integration of AI in delivering judgments brings forth several ethical and legal considerations, encompassing matters related to privacy, bias, and transparency. Therefore, it is crucial to establish clear regulations and guidelines to ensure that the implementation of AI in judicial decision-making is transparent and ethical.

Assistance of AI in delivering judgments has the potential to improve efficiency, accuracy, and access to justice. The utilization of AI in the legal domain holds great potential, but it is crucial to carefully assess the ethical and legal ramifications of its implementation. Additionally, addressing challenges such as the availability of data, expertise, and transparency will be imperative for the successful integration of AI technology in the legal sector.

b. **Bail Bot carries potential to reduce burden of long awaited decisions**

"Bail Bots" is a term used to describe AI-powered tools that are designed to assist judges in making decisions about bail. These tools use data analysis and machine learning algorithms to predict the likelihood that a defendant will show up for trial if released on bail, as well as the likelihood that the defendant will commit another crime if released.

The use of Bail Bots has become more popular in the United States, where they are used to supplement traditional bail determination procedures. Advocates of Bail Bots argue that they can reduce bias in the bail determination process and help judges make more informed decisions. However, critics have raised concerns about the potential for these tools to perpetuate bias, as well as the lack of transparency and accountability in their decision-making.

In India, there have been discussions about the potential use of Bail Bots in the judiciary, but their implementation is still in the early stages. One of the main challenges of using Bail Bots in India is the lack of reliable and comprehensive data, which is necessary for developing accurate and unbiased models. Additionally, there are concerns about the potential impact of these tools on the role of judges and the overall fairness of the legal system.
c. Legal Information available easily to make judicial decisions

Judges' advisory tools are powerful AI tools that are designed to assist judges in making decisions. In India, there have been some discussions about the potential use of judges' advisory tools in the judiciary.

One example of a judges' advisory tool is the eCommittee Supreme Court of India's Integrated Decision Support System (IDSS). IDSS is a web-based platform that uses AI and natural language processing to analyze case law and provide judges with recommendations based on previous judgments and legal precedents.

Another example of a judges' advisory tool is the Delhi High Court's Judicial Case Analytics and Research System (JCAR). JCAR is an AI-powered platform that provides judges with analytical insights and recommendations based on data from previous judgments. The use of judges' advisory tools has the potential to improve the efficiency and accuracy of the judiciary, but careful consideration must be given to the ethical and legal implications.

5.2 Legal firms looking forward to an intelligent assistant

There are several AI-powered tools available for law firms that can assist with various legal tasks to improve the efficiency and accuracy of legal services.

- **Case management software**: These tools use AI-powered algorithms to manage and track cases, deadlines, and documents.
- **Legal document automation**: These tools use AI-powered algorithms to automate the creation and assembly of legal documents.
- **E-Discovery software**: These tools use AI-powered algorithms to help law firms manage large volumes of electronic data and identify relevant evidence for legal cases.
- **Legal research tools**: These tools use AI-powered algorithms to help lawyers quickly find relevant case law and legal precedents.
- **Contract review and analysis tools**: These tools use natural language processing and machine learning algorithms to analyze contracts and identify potential issues or areas of concern.

a. Gauging the effectiveness of present tools

The effectiveness of AI powered tools varies depending on the specific use case and the quality of the underlying algorithms and data. However, these tools have the potential to improve the efficiency and accuracy of legal services and enable law firms to better serve their clients.

It is important for law firms to evaluate and select the most appropriate AI-powered tools based on their specific needs and requirements. Additionally, lawyers must ensure that the advice provided by these tools is accurate, reliable, and in compliance with ethical and professional standards.
b. Lawyer Bots tools for simplifying the complexity
There have been some developments in the use of lawyer bots, particularly in the area of legal research. For example, several startups have developed AI-powered legal research tools that use natural language processing to help lawyers quickly find relevant case law and legal precedents.

The use of lawyer bots in India is still in the nascent stages, and there is a need for clear guidelines and regulations to ensure that their use is ethical and transparent. While lawyer bots have the potential to improve the efficiency and accessibility of legal services, it is important to balance these benefits with concerns about the quality and accuracy of legal advice provided by AI-powered tools.

6.3 ADR/ODR Eyeing big on AI
AI is being used to improve the efficiency and effectiveness of Alternative Dispute Resolution (ADR) and Online Dispute Resolution (ODR). Following are some examples

a. Chatbots assistance in resolving disputes
It can assist parties in resolving disputes online. These tools can provide guidance and support throughout the process, answer questions, and provide information on relevant laws and regulations.

b. Aids in analysing large chunks of data
Data analytics tools can assist in the analysis of large volumes of data, such as dispute resolution outcomes and settlement agreements. This can help parties to identify patterns and trends, and to make more informed decisions about the resolution of disputes.

c. Use of AI in Natural Language Processing (NLP) tools
NLP tools can assist in analyzing legal documents and extracting relevant information. To help parties in identifying key facts and issues in a case more efficiently.

d. Helps in making more informed decisions
It can assist parties in making more informed decisions during the resolution of disputes. These systems can provide recommendations on potential settlement options and outcomes, based on data analysis and other factors.

AI has the potential to significantly improve the efficacy of ADR and ODR processes, by providing parties with more accessible, efficient, and informed solutions to disputes. However, it is important to understand that any use of AI in the dispute resolution process must be dealt with great care and consideration for ethical and legal implications and must not compromise the impartiality and fairness of the process.
6.4 Educational Institutions harnessing power of AI

a. Lot more collaborations between technology and law universities

The collaboration between technology and law universities has the potential to significantly enhance legal education and the legal profession. By leveraging the power of technology, law universities can provide students with access to cutting-edge tools and resources and enable them to develop the skills and knowledge needed to succeed in the rapidly evolving legal landscape.

Some of the potential benefits of teaching collaboration between tech and law universities are:

- Improved learning outcomes: Technology can provide students with a more engaging and interactive learning experience, enabling them to learn and retain information more effectively.

- Access to new tools and resources: Technology can provide students with access to a vast array of legal resources, including legal research platforms, case analysis tools, and virtual assistants, which can help them develop the skills needed to succeed in the legal profession.

- Enhanced collaboration: Technology can facilitate collaboration between students, professors, and legal practitioners, enabling them to work together more effectively and share knowledge and expertise.

- Increased efficiency: Technology can help law universities streamline administrative tasks, such as grading and feedback, enabling professors to focus more on teaching and research.

- Improved employability: By providing students with access to cutting-edge tools and resources, law universities can help them develop the skills and knowledge needed to succeed in the legal profession and increase their employability.

The collaboration between tech and law universities can play a significant role in shaping the future of legal education and the legal profession. By leveraging technology, law universities can provide students with a more engaging and effective learning experience.

b. AI based E-Learning for research based learning

The field of law is witnessing a growing demand for the development of e-learning tools that can enhance the learning experience of students and provide continued education and training for legal professionals. With the increasing use of AI and other technological advancements in the legal domain, it is imperative for students and professionals to have access to the latest and most relevant information and training on effectively utilizing these tools.
E-learning tools can offer a flexible and accessible way for individuals to improve their legal knowledge and skills, bridging the gap between theoretical legal education and its practical application. Moreover, e-learning tools can enable individuals to learn at their own pace and convenience, making it particularly beneficial for working professionals who may not have the time or resources to attend traditional classroom-based courses.

Additionally, these tools often provide students with access to experienced faculty members and a range of learning resources, such as videos, podcasts, and interactive quizzes, making the learning experience more engaging and interactive.

7 Ethical concerns in using AI in legal India and the world

The use of AI in the legal domain raises several ethical concerns, both in India and around the world.

a. Bias: AI systems can perpetuate or amplify existing biases in the legal system, such as racial or gender bias. This can lead to unfair outcomes and discrimination.

b. Transparency: AI systems can be difficult to understand and interpret, making it difficult for individuals to challenge or appeal decisions made by these systems.
c. Privacy: AI systems often rely on large amounts of data, which can raise privacy concerns if the data being used is personal or sensitive.

d. Accountability: AI systems can make mistakes or produce unintended consequences, but it can be difficult to hold them accountable for these errors.

e. Security: AI systems can be vulnerable to cyber-attacks, which can compromise the integrity of the legal system.

To address ethical concerns related to the use of AI in the legal domain, it is crucial to implement regulations and monitoring mechanisms for AI systems. This would involve ensuring transparency, explainability, and fairness in AI systems, and safeguarding individuals' privacy and rights. Legal professionals and technology experts must collaborate to establish ethical guidelines and best practices for using AI in the legal domain. Continual monitoring and evaluation of AI systems can also help identify and address ethical concerns that may arise over time.

8. Present status of Research and technology Enabling AI in Legal

AI technologies that are being used in the legal domain:

   a. Natural Language Processing (NLP):
   NLP is used to extract and analyze information from legal documents, contracts, and other legal texts. It can also be used to develop chatbots and virtual assistants for legal services.

   b. Machine Learning (ML):
   ML is used to develop predictive models that can analyze large amounts of legal data and provide insights that can inform legal decisions and improve the chances of success in legal disputes.

   c. Predictive Analytics:
   Predictive analytics is used to analyze data and make predictions about future outcomes. In the legal domain, it can be used to predict the likelihood of success in legal disputes and to help lawyers develop effective legal strategies.

   d. Document Analysis:
   Document analysis tools use AI to analyze legal documents and identify important information, such as key clauses and potential legal risks.

   e. Case Management Systems:
   Case management systems use AI to manage legal cases and automate routine tasks, such as scheduling and document management.
f. **Legal Research:**
AI-powered legal research tools use machine learning to analyze large amounts of legal data and provide insights that can inform legal decisions.

g. **Sentiment Analysis:**
Sentiment analysis is used to analyze the sentiment expressed in legal documents and social media posts, which can help lawyers and legal researchers to better understand public opinion and develop effective legal strategies.

AI technologies are playing a significant role in the legal domain by improving efficiency, lowering expenses, and delivering superior legal outcomes.

**Conclusion**
Technology and Academia have a crucial role to play in making better use of AI in the legal domain. Collaboration between legal professionals, technology experts, and academic institutions can help to develop innovative AI tools which can enhance the efficiency, accuracy, and fairness of legal processes. In order to make better use of AI in the legal domain, it is extremely important to focus on creating tools that are transparent, explainable, and unbiased. This demands careful regulation as well as monitoring of AI systems to prevent any possibility of bias or other unintended consequences.

Academic institutions can be instrumental in designing AI tools that cater to the unique requirements of the legal field, as well as imparting knowledge and expertise to legal practitioners to enable them to effectively leverage these tools. The successful use of AI in the legal domain commands collaboration between legal professionals, technology experts, and academic institutions. By working together, we can develop AI tools that are both effective and ethical, and that can help to improve the efficiency, accuracy, and fairness of legal processes.