

Course Name – Artificial Intelligence, Law and Justice
Professor Name – Dr. Krishna Ravi Srinivas
Department Name – Center of Excellence in Artificial Intelligence and Law
Institute Name – NALSAR University of Law
Week – 08
Lecture – 37



Artificial Intelligence, Law and Justice

Session 37

AI, Law, Justice and Innovation

Dr. Krishna Ravi Srinivas
Adjunct Professor of Law &
Director, Center of Excellence in Artificial Intelligence and Law
NALSAR University of Law



Artificial Intelligence Law and Justice Course, Session 37, Topic: AI, Law, Justice, and Innovation.



Recap AI and Constitution

- In the second session of AI and Constitution we dwelt further on AI's implications for Constitution and Constitutional Democracy.
- We discussed about interpreting constitution through AI systems and emergence of new ideas like Digital Constitutionalism. how AI can be



Let us recap the previous session that was on AI and the constitution. In the second session on AI and the constitution, we built further on AI's implications for the

constitution and constitutional democracy. We also discussed interpreting the constitution through AI systems and the emergence of new ideas like digital constitutionalism. So, we stopped with that, with the idea of AI and the constitution. But in this course, we also need to look into the crucial issues in AI law, justice, and innovation because ultimately, AI is a matter of innovation, and how innovation will impact law and justice is the broad theme of the course.

The slide features a yellow background with a decorative orange and white wave at the top. On the left is the NPTEL logo, and on the right is the NALSAR logo. The title "Overview of AI in the Legal Profession" is centered in red. Below the title is a bulleted list. To the right of the list is a rectangular image showing a person's hands interacting with a futuristic, glowing digital interface. Below the list and to the right is a video inset of a man in a white shirt speaking, with his hands raised in a gesture.

NPTEL **Overview of AI in the Legal Profession** **NALSAR**

- **Generative AI in the Legal Field**
 - Generative AI includes algorithms like ChatGPT
 - Creates new content such as audio, code, images, text, simulations, and videos
- **Comparison to Fictional AI**
 - Not as advanced as HAL 9000 from 2001: A Space Odyssey
 - Not as human-like as the child in AI: Artificial Intelligence
- **Rapid Evolution of AI**
 - AI continues to evolve at a staggering speed

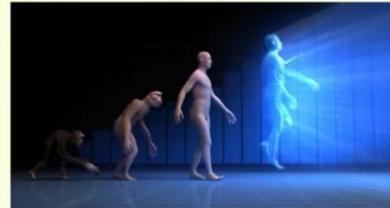
So, we can begin with an overview of AI in the legal profession. Actually, the legal profession's engagement with AI started much earlier than we would assume, because even as early as the 1960s, there were articles on how AI could be used to help judges. Additionally, there were many articles written during that era of artificial intelligence about using AI as an expert system in law. So, over the past 60 or 70 years, we have done a lot of work on AI law, justice, and innovation, focusing on the context of the technological developments and how they could be applied. But these things became more important or more relevant in the last 15 years or so on account of developments in AI. So now generative AI is a major dominant force in the legal field. We all know about it. But this is not as advanced as the HAL 9000 from 2001: A Space Odyssey. And it is not as human as us. So, it is more in the initial stages now. But AI's evolution is at a staggering rapid speed now.



Predicting AI's Impact on Justice



- **Rapid Evolution of Generative AI**
 - Technology is new and evolving quickly
 - Example: Bing AI search engine results changed in three months
- **Current Use in ODR Platforms**
 - Human facilitators assist in pretrial settlements
 - Facilitators available in chat spaces or via email
- **Potential of Generative AI**
 - Could improve real-time facilitation in ODR platforms



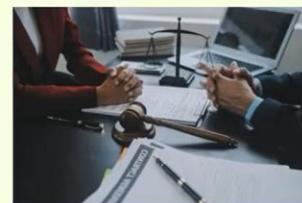
So, when technology is involved so much, it is very difficult to really predict the impact on justice. For example, Bing's AI search resulted in a change in three months, in the sense that it was unanticipated that it would become so easily available. And then, in the current use of online dispute resolution platforms, human facilitators assist in pretrial assessments in the sense that they use AI-based online dispute resolution to examine pre-trial settlements so that the facilitators are available in chat spaces or via email. So, the potential for generative AI to do real facilitation in ODR platforms is very large; in other words, some of the unanticipated consequences of generative AI becoming more capable are already apparent in the sense that we can sense them.



Avoiding Litigation & Conflict



- **Avoiding Litigation**
 - Use of court-adjacent online dispute resolution (ODR) for high-volume civil disputes
 - Current ODR platforms require human facilitators for pretrial settlement
 - Generative AI could facilitate real-time settlement, saving on human labor costs
 - AI could narrow the settlement space more accurately and quickly than seasoned mediators
- **Avoiding Conflict**
 - Generative AI could guide parties to avoid litigation or conflict altogether
 - AI could diagnose difficult issues before suits are filed
 - Help parties create fair agreements, such as residential leases, to prevent disputes
 - Educate self-represented parties on solving problems without legal identification



Now, the use of online dispute resolution for high-volume civil disputes will be a very positive welcome development because these settlements are parallel to the court.

Additionally, we currently need human facilitators for online pre-trial. However, generative AI, with its own capacities, can facilitate real-time settlements, saving on human labour costs. AI can again really narrow down the settlement space more accurately and quickly than citizen mediators because it has a better grasp of the disputes, the precedents, and the matters that are contentious. It can come up with fixed solutions, whereas human mediators will have to debate, think about it, write down certain things, and cross-check them. AI can do certain things much faster. And when AI does it, it can result in a better situation where the conflict is already avoided or litigation is avoided. And then AI can address some difficult issues, identifying them much before the suits are filed or the trial starts. More importantly, it can also try to convince the parties to come together for fair agreements in matters like residential leases and to prevent disputes, or AI can play a major role when we think in terms of dispute settlement. It can play a much better role when we do it in the pre-trial stage itself. More importantly, it can also help the parties become more aware, get educated about their problems and solutions, and then look at them objectively through AI's eyes, helping them to understand it. So, without a human person intervening, AI can try to avoid litigation and conflict, and if this is done, the major issue of the backlog of cases or cases piling up on a day-to-day basis on account of new cases can be avoided.



Providing Legal Advice



- **Benefits of Accurate Legal Information**
 - Improves efficiency for lawyers and judges
 - Provides better tools for risk assessment
 - Delivers more actionable advice
- **Challenges for Unrepresented Litigants**
 - Unlikely to have a lawyer for life-altering litigation
 - Common cases include unemployment benefits, eviction suits, consumer or medical debt, and family disputes
- **Potential of Generative AI**
 - Provides comprehensible information to self-represented litigants
 - Offers strategic advice and counsel
 - Suggests which issues to litigate fiercely




And AI can provide accurate legal information. It can improve the efficiency of lawyers and judges. It can provide better tools for risk assessment. It can also provide more actionable advice than a note that runs through pages and pages. For unrepresented litigants who don't have access to justice because they are unable to travel or are not able to pay the fees for an advocate, AI tools can be much more effective. We have also seen this in the earlier sessions. In cases where unemployment benefits, social security benefits, social welfare benefits, maternity benefits, addressing eviction suits, consumer issues, medical debt, medical insurance claims, and family disputes are concerned, AI can play a very proactive role. And many of the underrepresented litigants or litigants who really can't afford to pay for an advocate or undergo a costly, time-consuming legal

process will find AI tools very handy for it. So, the potential of generative AI in the legal sphere is yet to be fully explored or even understood. But generative AI tools can really make a huge difference if these people who otherwise don't have access are able to access and handle those tools and then benefit immensely from them.



NPTEL **Streamlining the Court Experience** **NALSAR**

- **Understanding Self-Represented Parties**
 - Why they avoid technology like electronic document filing
 - Challenges they face such as obtaining childcare and taking time off work
- **Potential of Generative AI**
 - Identifying reasons for avoiding technology
 - Improving court attendance by identifying optimal days and times
- **Improving the Legal System**
 - Enhancing court-based litigation and court-adjacent efforts
 - Assisting those who get lost in the legal shuffle



Often, many people who are reluctant to come to court will have lots of reasons that may seem silly to some of us, but they may be genuine from their own perspective. For example, many people are not very comfortable with electronic document filing, or they are not very comfortable with coming to meet an advocate or going to court because they are burdened with family responsibilities, or they don't have facilities that can take care of their routine work so that they can spend some time attending to these legal matters. So, in such cases, AI tools that can interact with them will be much more beneficial to them. And generative AI can be a technology that helps people understand why they are not able to reach out to the judicial process. So, the reasons for identification can be noticed, and generative AI can also help us identify why people are not so tech-savvy, not so tech-friendly, or why they are not interested in using technology. So, the factors that delay the process, such as people's reluctance to use various tools, including AI tools, can be identified. In other words, when we can streamline the court experience or interaction with the court through AI tools, we can enhance court-based litigation and then court-adjacent efforts. And then for many of those who don't want to get lost in the legal shuffle, this will be very helpful.



Democratizing Legal Information



- **AI Platforms and Tools for Legal Assistance**
 - Answer legal questions
 - Generate legal documents
 - Offer guidance and advice
- **Benefits for People Without Legal Access**
 - Helps those who cannot afford lawyers
 - Connects users with licensed professionals
- **Promoting Access to Justice**
 - Delivers law on demand to digital devices
 - Digital Divide is reduced



More importantly, the current problem is that lots of legal information is not easily accessible. It is accessible in books and in volumes. It is accessible in bound volumes, and many legal service authorities are trying to help people, but access to legal information is not easily available now, particularly for those who really need it the most. So, AI tools can democratize access to legal information. AI tools, consumer-facing tools, can answer queries, come up with suitable answers, or at least tell people where they should look for information. More importantly, they can generate preliminary-level legal documents so that they know this is the real issue they want to address through the courts. And they can offer guidance and advice. Of course, there are limitations with which we should be familiar. But still, in the preliminary stage, when advocates are there but litigants are not able to access them, or litigants have some genuine doubts as to whether the advocate will really be able to help them, AI tools can act as good intermediaries to bridge the gap. For people without legal access, this will be something through which they can really access these tools as a preliminary experience for them. So, when law can be demanded and then accessed by litigants through digital devices, this enables a reduction in the digital divide and also enables better access to legal tools.



Simplifying the Law



- **Complexity of Legal Text and Structure**
 - Law's text and structure are often unnecessarily complex
 - Generative AI could identify and simplify problematic bottlenecks
- **Self-Represented Plaintiffs**
 - AI could analyze reasons for claim dismissals
 - Identify issues with service of process rules
- **Macro-Level Pattern Detection**
 - AI can detect patterns that elude even intelligent lawyers
- **Streamlining Procedural Rules**
- **Improving Legal Arguments**
- **Enhancing Legal Decisions**
- **Transparency and Accountability**



A major problem with legal tools, the legal system, and Acts is that they are too complicated for a normal person to understand because they are written in legalese, which a normal person will not be able to decipher. Generative AI can really simplify this because it can help people come up with summaries that they can easily and quickly understand, and for people who want to represent themselves in court because they cannot afford a lawyer or believe they can better address the court by explaining their own cases. Generative AI tools will be very helpful because they can help them understand why their case may result in dismissal. By looking at previous cases, it will also help them present arguments coherently in a better way. It will also help them understand the process rules in court and then tackle them efficiently. At a macro level, AI tools can identify patterns that even intelligent lawyers may not be able to identify. So, it can help in many ways by streamlining procedural rules, improving the legal arguments of the litigants, enhancing legal decisions through pattern detection, and thereby bringing more transparency and accountability to the overall legal process.



Improving Decision-making



- **Rationalizing Complex Legal Systems**
 - Generative AI can help determine valid justice indicators
 - Uses large datasets to set better standards
- **Measuring Success in Drug-treatment Courts**
 - Generative AI can help define recidivism metrics
 - Considers community goals and relevant offenses
- **Optimizing Judicial Oversight**
 - Helps answer questions about judicial oversight and discretion
- **Acceptance of Generative AI Results**
 - Depends on stakeholder acceptance and dataset availability
 - Requires willingness to accept data-based changes



Then it can rationalize complex legal systems by determining the judicial indicators and by going through lots of data sets; it can come up with patterns, set better standards, and help in defining the recidivism matrix. The recidivism matrix is the one that sets the parameters for main cases where the potential of the applicant to commit a crime again or to jump bail is taken into account. Generative AI can really help us redefine these metrics, which are often used in AI-based tools to assess claims for bail or to release people on parole. If we talk about community-based legal assistance and legal services, AI and generative AI tools can help them meet those goals in a much more efficient way. So, when these things are done with the help of AI, judicial oversight efficiency can be improved, and resource allocation can be optimized. But stakeholders should be sensitized and educated enough so that they are comfortable using generative AI tools and outputs, and then take them as reliable evidence or documents they can use to further their legal matters. But for the legal system, this entails one major change, which is that it requires the willingness to move towards data-based changes rather than to rely solely on text-based ones.



Transparency Concerns



- **Importance of Transparency in AI**
 - Due process relies on notice and opportunity to be heard
 - Ability to challenge evidence is crucial
- **Challenges with AI Systems**
 - Many AI systems lack reasoning transparency
 - Creators may withhold proprietary algorithmic information
- **Testing Prototypes with Target Populations**
 - Informs development process
 - Helps identify potential biases
 - Ensures innovation aligns with user needs



So, we need to bring transparency to the whole process. When due process reigns in, notice and opportunity to be heard, the same should be available in AI as well. But we also know that AI systems lack transparency, and it's a major bottleneck. So, we need to develop prototypes that have target populations as the clients or as clients who could test these prototypes, identify the lack of transparency issues, and then improve them. So, what we are talking about here is developing AI tools that could be used as a testament so that their transparency can be enhanced by interacting with different target groups and different scenarios involving those target groups, so that the transparency of AI tools can be significantly improved.



Create 'Human-in-the-Loop' Systems



- **Create Human-in-the-Loop Systems**
 - Human oversight in AI decision-making processes is essential
 - Particularly important in high-volume, high-stakes civil litigation
- **Benefits of Human Oversight**
 - Timely human intervention can override detrimental AI decisions
 - Ensures AI system decisions are beneficial to users
- **Factors Influencing Human Oversight**
 - Level of risk involved
 - Potential implications of delay



In other words, create a human-in-the-loop system where human oversight plays a major role. Particularly in high-volume, high-stakes civil litigation, AI tools' efficiency is a

matter that should be appreciated, but having a human-in-the-loop system where human oversight is also part of the system is more important. Bringing human oversight will result in timely and efficient interventions. More importantly, if the AI decisions are the ones that could go wrong or if there are some specific issues that have been identified by the litigant, but the litigant is not the one who can make the decision, a human in the loop can switch over or take over that role, stop the system, and then identify what needs to be done next. But then involving human oversight also means understanding the level of risk and the potential implications of the delay in involving the human in the loop or the human oversight. More importantly, what would happen if the human in the loop or the human oversight by chance missed certain things and then approves certain things with the explicit understanding that things may not go wrong when AI tools are present?



Develop Impact Assessments

- **Regular Review of AI Models**
 - Ensure expected outcomes align with observed outcomes
 - Refine models to address unexpected outputs
- **Incorporate New Data and Societal Norms**
 - Reduce bias over time
 - Adapt to changing societal expectations
- **Flagging Issues Early**
 - Identify potential problems before they cause harm
 - Example: NEDA's Tessa chatbot



So, the limitation of human oversight should also be factored into the system. For all this, we would need impact assessments of the AI models. First, ensure that expected outcomes align with the observed outcomes. For example, if it is observed in earlier cases that certain instances show the process is very rigid and people who are not able to meet the process's rigidity cannot get their claims or petitions approved, the AI model's outcome should be something very similar to that. It cannot be something that runs contrary, nor can it be an outcome where 50% of the people who are unable to meet the rigidity of the process are able to get the benefit. More importantly, we need to incorporate new data and the new norms into the system. Trying to reduce the bias during this period of time will also be useful. Then the system's expectations should be carefully calibrated in the sense of identifying who the beneficiaries are, who the target audience is, and how the system will work, as well as what sort of claims the system will be able to process; these factors should be taken into account. Then identify the potential problems before they cause harm. For example, in the UK, NEDA came up with a chatbot to help the litigants. The chatbot worked well in the initial stages, but after a few trials or when put to practice, it came up with some answers, and its functioning was not something that was anticipated. So, when using legal tools, particularly chatbots, the potential problem

should be tried to be understood through extensive trials, and only then should they be put to practice.



Be as Transparent as Possible

- **Importance of Transparency**
 - Explain how AI models are developed
 - Show how AI models work
- **Building Trust and Understanding**
 - Open about algorithmic inputs and calculations
 - Educate users about AI capabilities and limitations
- **Effective and Responsible Use**
 - Provide clear guidelines for usage
 - Mitigate risks through education



The system should be as transparent as possible although 100% transparency is an ideal which can never be met in the real time scenarios. So, how do we build trust? How do we build understanding, and more importantly, how do we ensure that people who use the systems do so in a responsible way? So, clear guidelines should be provided. Responsible use should be stressed, and more importantly, people should be educated. If there are some risks, the system should be able to help people mitigate that risk either by bringing human oversight or by ensuring that the risk which the participants may face is addressed through other means. So, transparency, effective and responsible use, building trust, and understanding are important.



What to Evaluate



- **Key Criteria for Evaluating AI Systems**
 - Focus on user comprehension for inclusivity and transparency
 - Measure 'win rates' for self-represented litigants
 - Use time to disposition for efficient dispute resolution
- **Outcome Variables**
 - No 'right' choice for outcome variables
 - Reflect values and needs of the community deploying the AI tool



But what exactly are we talking about when we say we evaluate the system? What are the parameters? Because when we talked about responsible AI, we listed about seven or eight parameters, but when we want to evaluate, we cannot evaluate the system on only seven or eight parameters alone, and then add some other parameters. So, we need to know what exactly the parameters are or the key parameters that should guide us in evaluation. From a user perspective, inclusivity is very important so that the system is developed to take into account the needs of a wide variety of users. So, inclusivity and transparency can be the major criteria for evaluation. And then for self-represented targets, you should look at what the win rate is. These are to understand the potential scope for them to win a case if they represent themselves and assess how much time the system takes to dispose of the cases; is it sufficient enough, or does it dispose of cases in a much quicker manner, although the transparency and inclusivity are not compromised. Then, in some circumstances, it will be very difficult to predict what the right choice is. So, the outcome variable may be very different or very varied. So, the system should reflect the values and needs of the community for which the tool is being developed, rather than identifying the ideal outcome or the ideal choice that the tool will provide as an output. So, what should be evaluated should depend upon the community's needs and then the norms.



How to Evaluate



- **Three Primary Approaches to Evaluation**
 - Subjective surveys
 - Observational data
 - Experimental methods
- **Subjective Surveys**
 - Reveal user interaction and satisfaction
 - Must be combined with objective data for complete analysis
- **Observational Studies**
 - Rely on large datasets
 - Seek evidence consistent with causal inference
 - Subject to selection effects and confounding influences
- **Randomized Control Trials (RCTs)**



So, there are different ways to evaluate them. Subjective assessments can be done. The data can be observed, collected, and then rigorously tested. And then the system can be run on an experimental basis across space, across time, in different locations with different types of cases, with different categories of litigants, and then it could be decided. Subjective surveys based on user interaction measure the outcome, whether the users are truly satisfied with it or find it too efficient, while still having some fears because it is not fully transparent or inclusive. Those things have to be factored in. When we take up observational studies, we mean that we will take into account large data sets and then seek evidence consistent with causal inference. Whenever the evidence is available, is it really consistent with the inference given by the system, or is the system providing inference irrespective of the quality of the input or irrespective of the evidence being consistently made available? Similar to randomized clinical trials, we can also run clinical trials across different jurisdictions, across different categories of cases, and across different categories of stakeholders so that the AI systems are evaluated in a manner very similar to randomized control trials, but not identical to them. In such a case, there should also be a control group which we call "placebo" that is offered to the people who are in the control group. Transposing the idea of randomized control trials to legal system development is a new concept, but it could be done over a period of time with some restrictions and justifications.



When to Evaluate



- **Importance of Timing in Evaluation**
 - Evaluating AI tools before public release is crucial
 - Prevents adverse consequences and unintended effects
- **Testing Prototypes with Target Populations**
 - Involves those who often represent themselves in court
 - Identifies potential areas of bias
 - Ensures innovation aligns with user needs
- **Pilot Testing with RCT**
 - Small, statistically powerful user groups
 - Provides preliminary evidence and identifies bugs
 - Refine and scale up based on solid evidence
- **Iterative Process for Full Deployment**



So, what should we evaluate? We need to evaluate when the target populations are ready. And then for RCTs, we need to do a small statistically powerful test with user groups so that we know the same thing can be repeated when it is tried on a large scale. More importantly, the preliminary evidence should be able to tell us the problems with the system, the bugs that could be identified, or the system coming up with fantastically correct answers but nonsensical in the sense that when the same input is given on similar cases to a system, it should, in an ideal case, be able to come up with similar or identical outcomes for those cases. But if the system, for some reason, comes up with a conviction in 40% of cases and then acquittal in 60% of cases, on a very similar outcome, then there is something fundamentally wrong. So, we need to conduct a pilot test before going to RCTs. And more importantly, we should also be able to redefine and then scale up the system only when we are thoroughly convinced that it has worked and has been tested on a solid evidence base. Or in other words, the statistical sample size might need to be increased from 500 to 1000, or from 20 to 50, or the statistical sample size may be the same, but then it should be made more representative so that the stakeholders' representation reflects the real-world universe. In other words, evaluation of a system is something that needs to be done on a methodological basis using well-defined, well-understood methodologies. It cannot be a random one-time exercise. It has to be an exercise that is based on science, statistics, and reasoning.



AI in Legal Services



- **Potential Benefits of AI in Legal Services**
 - Increases efficiencies in legal processes
 - Democratizes access to legal information
 - Helps consumers solve their own legal problems
 - Connects consumers with licensed professionals
- **Concerns About AI in Legal Services**
 - Risk of creating two-tiered systems
 - Poor might receive inferior AI-driven assistance
 - Only expensive law firms might effectively use legal AI
 - AI might not disrupt the status quo
- **Current Regulation Issues**
- **Proposed Regulatory Reforms**



So, the potential benefits in AI and the concerns - we have already seen. But one major thing is that we have talked about democratization; we have talked about all the benefits. The real risk is that AI legal services can result in a two-tiered system. A two-tiered system means that the poor may end up getting inferior, low-quality AI-based systems, advice, and information, whereas the rich and powerful, those who can afford it, may get sophisticated systems where human lawyers will be the ones interacting. The powerful will also have access to both human lawyers and AI-based systems. Large-scale deployment of AI in legal services can result in democratizing access to information, making consumers much more comfortable with those systems. But it can also create a two-tiered system where legal aid, something through AI, is reserved for or mostly utilized by the poor who cannot otherwise afford access to high-quality legal services.

When this happens, the real problem is that those who need high-quality legal advice and services are the poor, but they may end up getting very poor-quality service, or the AI quality service may be good enough for them but not sufficient for them to win a case. In other words, making AI in legal services easily accessible does not mean that there should be a compromise in the quality of service. The question here is: can we really think of AI in legal service that is as good as the expertise-based law firms that have access to all resources, and will the powerful and the rich have access to them? So, in such a scenario, we need to be very cautious about claims that AI can democratize access and that AI can settle personal access. So, the current regulatory issues in AI need to factor in these things. But more importantly, what should be done and what could be done is something like developing AI systems to begin with.

Make them more sophisticated; make them comparable to the best legal services and legal advice available for a period of years as a pro bono public service institution and public service tool. When this is done and when AI tools are as sophisticated as those used by other powerful and wealthy people or the lawyers they represent, it will then be easy to justify AI's extensive use in legal services.



Framework for Equitable Legal AI



- **Framework for Collaboration**
 - Combines legal and technical expertise
 - Design and deploy AI-driven tools and services
 - Calibrated for specific consumers, legal issues, and processes
- **Addressing Barriers**
 - Insufficient resources
 - Lack of resilience
 - Weak relationships
- **Advocating for Regulatory Reforms**
 - Regulatory priorities
 - Reforms and mechanisms
 - Fostering legal AI access



So, what we are talking about here, to put it in understandable terms, is equitable access to legal AI. Equitable access to legal AI can be demanded because it is something that should be recognized as a right when AI is going to play a major role in law and justice. So, AI tools have to be tailor-made for this sort of equitable legal AI, and there are barriers like insufficient resources, lack of expertise, and weak resilience. Then there is the whole question of regulatory reforms. If we want to foster legal AI access, then there should be a framework for equitable legal AI access. We cannot talk in terms of mere legal AI access if we really want to bring about change. Otherwise, in the absence of equitable legal AI access, whatever changes are brought in may not help those who really need them the most.



Technological Innovations in Legal Problem Solving



- **Access to Legal Guides**
 - Free guides available online from nonprofit organizations
- **Automated Legal Services**
 - Legal services organizations automate intake processes
 - Direct clients to relevant resources quickly
 - Automatically generate legal documents
- **Consumer Assistance**
 - Help consumers recognize when professional legal help is needed
 - Connect consumers with appropriate legal service providers



The technological innovations in legal problem-solving can be expanded both in terms of

quantity and quality, as well as in terms of diversity and access. For example, free guides may be made available online. Legal service organizations can automate the intake process or make use of chatbots and other materials or mechanisms to have better interactions with clients. Enhancing legal literacy among the clients will be another option to do that. Similarly, for consumers, legal professional help should be easily available either through chatbots or through legal AI tools. And then the consumer should be truly connected with the right legal service agencies or providers. This can be done by a chatbot. When a chatbot query indicates that "I am a consumer facing an issue and I want to approach the consumer forum because the service provided to me for a particular product was defective or the product was faulty", then that chatbot should be able to identify the legal service provider who will be able to meet the needs of the consumer. So, we can think of multiple innovative and relevant technological solutions for solving such problems.

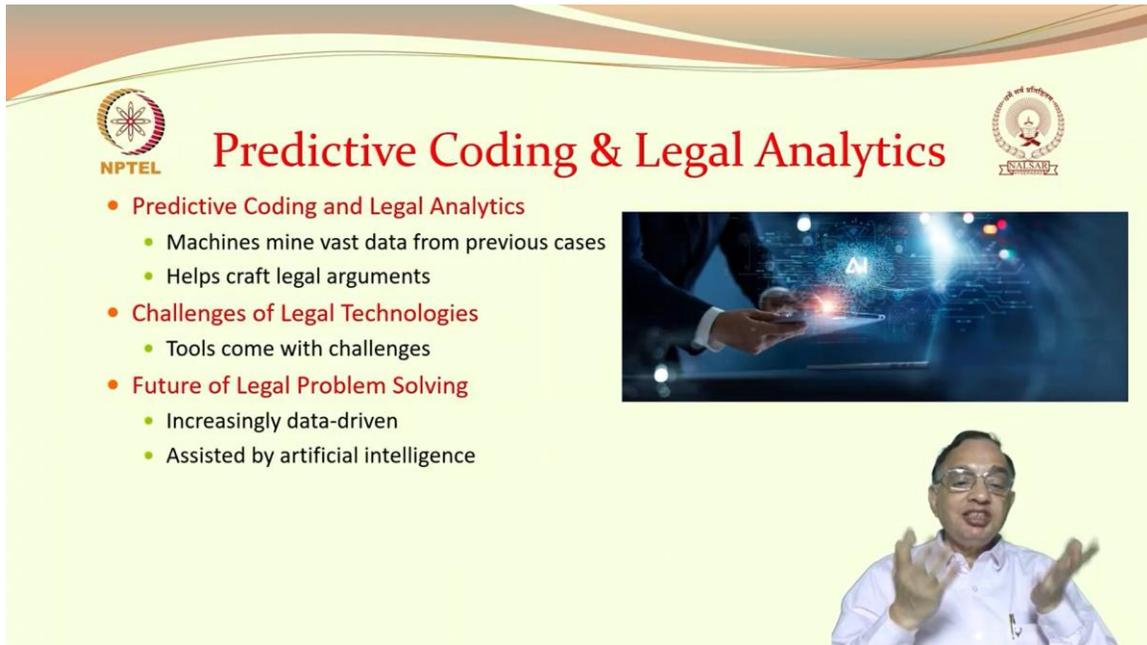
The slide features a header with the NPTEL logo on the left and the NALSAR logo on the right. The title "Document Automation & Chatbots" is centered in red. Below the title is a bulleted list of key trends in legal technology. To the right of the list is an image of a stethoscope. At the bottom right of the slide is a photograph of a man in a white shirt and glasses, with his hands clasped, appearing to be speaking.

- **Significant Investment in Technology**
 - Over a billion dollars spent annually
- **Client Intake via Chatbots**
 - Automated client intake processes
- **Advanced Legal Research Tools**
 - Processing natural language questions
 - Providing individualized results
- **Transformation of Document Management**
 - Efficient e-discovery processes
 - Machines complete discovery faster and more accurately

Then in documentary automation, chatbots can play a major role because significant investments in technology have been made by many firms and also by governments. Automated client intake can be done by major firms; even the judiciary can do it because they need to start a process where the client can type in details so that his or her address and other information are taken care of, and then the queries are put forth as to what exactly is needed. Then access to legal research tools can help them put queries in natural language.

For example, just as we converse, the queries can be put in: "Is my claim time-barred?" or "Is my claim not time-barred?" or "Is there sufficient time for me to file a case now?" or "To file a petition now?" or "To claim some benefits?" or some natural language queries like, "What are my rights in such a situation where my client has gone to encash a cheque, but it has bounced back, and then it is repeatedly happening to my client from the same party?" Similarly, certain query-based questions can be transferred to frequently asked questions so that clients need not reach out to the chatbots again and again to

answer some basics. An efficient e-discovery process, where machines can complete discovery processes accurately, if made part of public legal services using AI or equitable AI tools, will make it easier for many people who otherwise cannot afford e-discovery services to approach the courts with more confidence. So, what we are saying is that document automation and chatbots should be part and parcel of equitable AI access programs to be offered by courts and other legal service authorities.



Predictive Coding & Legal Analytics

- **Predictive Coding and Legal Analytics**
 - Machines mine vast data from previous cases
 - Helps craft legal arguments
- **Challenges of Legal Technologies**
 - Tools come with challenges
- **Future of Legal Problem Solving**
 - Increasingly data-driven
 - Assisted by artificial intelligence



Then we discussed predictive coding and legal analytics. We have also discussed the future of legal problem solving, where it is going to be increasingly data-driven.



Challenges & Barriers

- **Fear of Inequitable Two-Tiered Systems**
 - Increased reliance on AI-driven legal services
 - Potential for superior human lawyers vs. inferior AI assistance
- **Concerns About AI Superiority**
 - AI may be superior but expensive
 - Accessible only to large law firms and wealthy clients
- **Status Quo Concerns**
 - AI may not change the affordability of legal services
 - Some may still be unable to afford legal services



But there are some major issues that are real constraints. First of all, the increased reliance on AI-driven legal services can result in some sort of diminishing of people's

application of their brain towards legal services or their capacity to understand and then make a decision. Instead, they may simply say that AI tools are available, AI-based legal services are available, and we should approach it, instead of even thinking about whether it's the first place they should go for such a course or not. Then superior human lawyers will always be able to outwit and outsmart both inferior and superior AI assistants. Then AI superiority may happen, but it could be expensive or unaffordable, or AI superiority may be very superficial because, in reality, the system may not be all that perfect. More importantly, affordability is not a question of technology alone. Affordability is also a matter of cost. Affordability is also a question of language and culture. Affordability is also a question of people having trust and confidence in approaching the institutions. So, we cannot reduce everything to mere technical solutions. And, more importantly, AI cannot be a panacea for all the issues in equitable access to law and justice.



Overview of Access to Justice Gap

- **Overview of Factors Perpetuating the Justice Gap**
 - Various contributing factors
 - Role of legal technologies, especially AI
- **Potential for Widening the Justice Gap**
 - Scenarios where AI could exacerbate the gap
 - Fears of inequitable two-tiered systems
- **Calibrating AI Use in Legal Contexts**
 - Taxonomy of important considerations
 - Importance of appropriate AI calibration
- **Barriers to Effective AI Calibration**
 - Lack of resources and resilience
- **Policy Priorities and Regulatory Reforms**



Access to the justice gap can be filled through AI because the access to justice gap is widening due to various factors, so calibrating AI usage in a specific context can help in that. More importantly, how AI should be calibrated is something that needs to be deliberated upon. So, AI calibration should be very effective; it should be undertaken as an ongoing process, and integrating this calibration into the broad AI integration into the law and justice system is equally important. So, the policy priorities and the regulatory reforms have to be identified so that they become part of addressing the issues in the justice gap.



Barriers to Accessing Legal Services



- **High Cost of Legal Services**
 - Legal services are generally available only to those with sufficient educational and economic resources
 - Excludes low-income and many middle-income individuals
- **Social Disparities**
 - Cost is not the only barrier
 - Myriad social disparities keep legal services elusive for many groups
- **Lack of Knowledge and Resources**
 - Majority of consumers remain silent due to lack of knowledge, experience, or resources
- **Limited English Proficiency**
- **Language and Cultural Barriers**



Then there are high-cost social disparities, a lack of knowledge, limited English proficiency, and language and cultural barriers.



Global Perspective on Justice Gap



- **Justice Gap as a Worldwide Crisis**
 - Affects not only the United States but globally
 - Individuals denied access to justice
- **Societal Consequences**
 - Disengagement from legal systems
 - Distrust in law and legal institutions



But this justice gap is not just something that affects the USA, India, or any country. It's a global problem. So, it needs to be addressed with a very different way of thinking. That thinking will be very simple. Think globally, act locally, or think of the global problem in the sense that you should get a wider perspective and then look at specific tailor-made local solutions that can increase equitable access in legal AI and make it a reality. When this happens, we also need to identify why the justice gap persists. One problem is that people become disengaged from legal systems for many reasons, including distrust, expense, or fear that legal systems may expose them to more risks. Not all people really want to go to courts seeking solutions or assistance; they think their lives will be better

off if they do not approach the courts, even at the cost of paying some price or forgoing some rights or claims. Those gaps need to be addressed and identified, and how technology can address them is a big question, but technology can be used to address some of those gaps. So, what we are saying here is that the justice gap, if it is to be addressed by technological innovations, including AI, must be approached with sensitivity and due respect to the wishes and needs of the people who are otherwise unable to access it. Addressing the justice gap is not a mere technical solution. Much more than that needs to be done.



Literature (Selected)

- How to harness AI for justice A PRELIMINARY AGENDA FOR USING GENERATIVE AI TO IMPROVE ACCESS TO JUSTICE BY CHRISTOPHER L. GRIFFIN, JR., CAS LASKOWSKI & SAMUEL A. THUMMA Bolch Judicial Institute at Duke Law. 2024
- Access to A.I. Justice: Avoiding an Inequitable Two-Tiered System of Legal Services Drew Simshaw 151 Yale Journal of Law & Technology 2022
- Julian Adler, Jethro Antoine, Laith Al-Saadoon Minding the Machines: On Values and AI in the Criminal Legal Space Policy Brief, Center for Justice Innovation , New York 2024



So, I highlighted some literature here, particularly the most recent available literature, but then again, this is an emerging topic. Lots and lots of new things are happening in it, so we need to keep our eyes and ears open to understand the developments. More importantly, the AI revolution in law is not going to end soon. In fact, it has started on a full scale not just now, but it is going to bring about enormous changes, many paradigm shifts, and numerous transformations in terms of both structural matters and process matters. Understanding the relationship between AI law and innovation in the context of justice or law is very important.



Next Session



- AI, Law and Justice : Beyond Techno solutionism



In the next session, we will look into an interesting topic: AI law and justice beyond techno-solutionism. This session will introduce you to the concept of techno-solutionism, and we will take forward some of the issues we identified in this session in the next one. Thank you.