Integrating Artificial Intelligence in Court Processes: Challenges/Opportunities and Issues/Possibilities

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Courtroom

"The Courtroom is a place of adjudication, but it is also an information hub. Outside information is assembled, sorted and brought into the courtroom for presentation. Once presented, various theories of interpretation are argued to the fact-finder who then analyses the data according to prescribed rules (determined by the Judge through research, analysis and interpretation) and determines a verdict and result. That result, often with collateral consequences is then transmitted throughout the legal system as necessary. The courtroom is thus the centre of a complex system of information exchange and management. Ultimately, because lawyers and Judges deal continuously with 'data', high technology courtrooms exist and virtual courtrooms are possible. Litigation is a dispute between two or more parties, resolved by a Judge, jury or arbitrator following argument, usually by counsel. To prove facts in dispute, counsel present evidence. Witnesses are called, their accounts listened to and their demeanor studied. Physical evidence is considered – physical items, photographs, plans, schedules and video evidence considered."

- Professor Frederick I Lederer wrote in 1997 – he is now the Chancellor William and Mary university

Context

Administrative inefficiencies for the judiciary is probably the red tape of bureaucracy.

Systems and processes, when implemented, could remove Administrative inefficiencies bringing about Judicial efficiency.

Whatever a human mind can conceive and imagine – it can ACHIEVE.

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District Courts – Stagewise Pendency



Use of AI in AI in Knowledge Management

| The KM process | Possibilities created using AI systems | Examples of use cases |
|--------------------|--|---|
| Knowledge creation | Fostering predictive analytics via self- learning analytical capacities Recognizing previously unknown | Preparation of draft Issues and Charges |
| | patterns | Discover organization inefficiencies |
| | Sifting through organizational data and discovering relationships | Data reports as regards various activities of the court |
| | Developing new declarative knowledge | |

| The KM process | Possibilities created using AI systems | Examples of use cases |
|----------------------------------|---|--|
| Knowledge storing and retrieving | Harvesting, classifying, organizing, storing, and retrieving explicit knowledge | Organize and summarize legal precedents relevant to a new case |
| | Analyzing and filtering multiple channels of content and communication | Preparation of Table of dates and events |
| | Facilitating knowledge reuse by teams and individuals | Retrieve dispersed nuggets of information |

| The KM process | Possibilities created using AI systems | Examples of use cases |
|-------------------|--|--|
| Knowledge sharing | Connecting people working on the same issues by fostering weak ties and know-who | Sharing of precedents in the enterprise |
| | | Facilitate real-time smart sharing between |
| | Facilitating collaborative intelligence and | judges, staff etc |
| | shared organizational memory | |
| | Generating a comprehensive perspective on | |
| | knowledge sources and bottlenecks | |
| | Creating more coordinated, connected | |
| | systems across organizational silos | |

| The KM process | Possibilities created using AI systems | Examples of use cases |
|-----------------------|---|--|
| Knowledge application | Enhancing situated knowledge application by searching and preparing knowledge sources Offering more natural and intuitive system | Find and apply question-answer pairs in online manuals to manage service knowledge |
| | interfaces (e.g., voice-based assistants) | Provide more human-centered and accessible applications of knowledge |
| | Promoting equitable access to knowledge without fear of reprisal or social cost | through chatbots Natural language questions can be asked |
| | | Natural language questions car regarding facts of a matter |

Use of AI in AI in Process Management

- What is Business Process Management?
- BPM is a structured strategy that helps one analyze, control, and optimize business processes with effective workflows to improve efficiency.
- BPM allows enterprises to manage and plan business processes such as onboarding, new hiring, customer service, etc.
- Enable Predictive Analysis
- Identifying patterns with AI makes it easier to observe and analyze data sets collected through various channels, which can be preselected.
- Automate Redundant Tasks and Reduce Errors
- Data redundancy is one of the most common problems in almost every workplace requiring a dedicated human workforce to sort data, which is time-consuming and prone to manual error.
- Al automates repeated time-consuming processes so that employees can focus on other essential tasks which require human attention. This saves time and reduces errors.

• Improve Advocate/Litigant Experience

• Advocate/Litigants should be every court's top priority, and providing them a better experience is a crucial objective. Al-embedded chatbots can improve satisfaction by providing prompt responses and solutions while creating a transparent, user-friendly environment.

• Enhance Decision-Making Capabilities

• Al uses advanced Machine Learning (ML) algorithms to help managers across departments and business leaders solve problems and make decisions.

• Al provides valuable insights, and various decision-based models using previously unused and wasted data from business processes. Algorithms use the data and can run through an infinite number of scenarios to uncover the best possible strategies. Based on the findings suggested by Al, teams can make informed decisions backed by data.

• Detect Anomalies

• Anomalies in listing, delay in copying, service of process etc., can be detected on analysis of data

• Refine Recruitment Process

• Recruitment is an essential process and a fundamental need. From the first interview to submitting an offer letter, the recruitment process is challenging as recruiters must handle different candidates for different positions on any given day. Another recruiting challenge is selecting the right candidate without any personal or cultural bias. Al can improve and streamline the recruitment process by

- Scanning and analyzing significant volumes of resumes
- Evaluating candidate portfolios against job descriptions
- Prioritize candidates without bias
- This way, AI helps teams narrow down candidates and ensures that the best talent fills the vacancies.

Implementation of AI by Judiciary in various countries

Estonia

- A "robot judge" that could adjudicate small claims disputes of less than €7,000 (about \$8,000) using artificial neural network. The two parties will upload documents and other relevant information, and the AI will issue a decision that can be appealed to a human judge.
- A single criminal case with total hearings of about 14 hours of audio recording could take an average of 112 working hours to transcribe. Salme, a speech recognition tool developed in partnership with IT company CGI Estonia and language-tech company Tilde, has been introduced to Estonian courts to simplify and optimise this operation.
- With <u>92% precision, the programme is designed to increase efficiency and accuracy in court sessions transcription.</u> Whether the court hearing takes place in a physical courtroom or online, Salme's duty remains the same. This solution was introduced to help save transcription time, particularly in the case of long court hearings that last well over six hours.

USA

- Judges Replacing Conjecture with Formula for Bail. <u>The algorithm gives defendants two scores one</u> for their likelihood of committing a crime and one for their risk of failing to appear in court — and flags those with an elevated risk of violence.
- After crunching data on one and a half million criminal cases, researchers found that fewer than <u>10</u> objective factors — basically age, the criminal record and previous failures to appear in court, with more recent offenses given greater weight — were the best predictors of a defendant's behavior.
- I-CAN!, the Interactive Community Assistance Network in Orange County in the United States provides interactive modules addressing the legal issues which self-represented litigants often find themselves working through. Self-represented litigants are taken through the modules to find the appropriate forms to file in court. Not only does this mean <u>self-represented litigants are able to better understand</u> <u>legal processes, but it also saves time and money for under-funded legal aid centres. 4000</u> <u>pleadings/month.</u>

United Kingdom

- Harm Assessment Risk Tool' (or 'HART') uses algorithmic tools in a policing context that result in a 'better' outcome from the following perspectives: public safety, legal, and cost/resources. It does this by focusing upon an algorithmic risk-assessment tool the HART model uses behavioural predictors, in combination with age, gender, residential postcode etc which could 'be viewed as indirectly related to measures of community deprivation.'
- It makes predictions based on historical offender data, and so will be affected by past arrest history, force targeting decisions, social trends and prioritisation of certain offences (such as, recent child sexual abuse offences, domestic violence and hate crime).

- The algorithm deployed was constructed using random forests, which is one of many different forms
 of machine learning. This technique offers desirable features such as an ability to detect relatively
 rare but dangerous outcomes, to model relationships in non-linear ways, and to balance the
 differential costs of different kinds of errors.
- It uses 34 different predictors to arrive at a forecast, most of which focus upon the prior offender's history of criminal behaviour. The random forest is constructed from 509 separate classification and regression decision trees (CART), which are then combined into the full forecasting model. Essentially, each tree is a model in and of itself, and produces a forecast which is then used as one vote out of 509 total votes. The votes are counted, and the overall forecast for the full model becomes the outcome which receives the most votes.

CANADA

- In Canada the Action Committee recommended that the civil and family justice system be reformed to avoid, manage, and resolve disputes in ways that are as timely, efficient, effective, proportional, and just as possible:
 - by preventing disputes and by early management of legal issues;
 - through negotiation and informal dispute resolution services; and
 - where necessary, through formal dispute resolution by tribunals and courts.

- The CRT(Civil Resolution Tribunal) involves four stages, each part of a seamless, end-to-end process focused on early, participatory ODR. Before beginning a claim with the CRT, <u>a person with a</u> <u>dispute can access a free online tool called the **Solution Explorer**, which uses guided pathways to <u>help a person learn more about their dispute so that they can make informed choices about how to</u> <u>resolve it.</u>
 </u>
- <u>The Solution Explorer asks a series of questions about the dispute and then provides information</u> <u>and resources tailored to that dispute</u>. For example, someone contesting a condominium bylaw fine might be given information about the applicable provisions of the Strata Property Act as well as a template letter to edit and send to their condominium council. <u>At the end of the pathway, the Solution</u> <u>Explorer provides a summary of the person's claims as well as recommended resources and next</u> <u>steps.</u>

• If someone is not able to resolve their dispute using the Solution Explorer, the next step is to start a CRT claim, using the online intake process. A key design feature of the CRT is that, wherever possible, a user should only have to enter information once, and the system should carry this information forward to other stages of the CRT process. Finally, the CRT process incorporates relevant parts of the tribunal's rules on an as-needed, when-needed basis, to avoid overwhelming parties with inapplicable rules. After serving the others in the dispute with notice of the claim, the parties have a brief opportunity to negotiate directly with each other. While the parties will be given some resources to help them do this, this is a low intervention area for the CRT. The intention is to resolve a modest number of "easy" disputes very early and very inexpensively so that the parties can move on with their lives. If negotiation is not successful, the parties will enter a facilitation phase where an expert facilitator will help the participants to reach a consensual agreement. The facilitator can use a variety of communication channels to work with the parties, including the CRT platform, email, text, phone, video conferencing, fax, and mail.

- The Solution Explorer is a simple, web-based expert system that carries out several functions to assist a user in understanding and resolving their dispute. It does not collect any personal information, and is available for free to the public, regardless of whether they have a CRT claim. An expert system is a technology-based platform that imitates or emulates the feedback, guidance, or reasoning of a human expert. This knowledge is structured in a specific way to make it computer readable, and accessible to the expert system user through the system's user interface.
- This is one of the ways to achieve artificial intelligence. An expert system is a tool capable of reproducing the cognitive mechanisms of an expert in a particular field. More precisely, it is software capable of answering questions, by reasoning based on known facts and rules. It consists of 3 parts: a fact base; a rule base; an inference engine. The inference engine is able to use facts and rules to produce new facts, until it reaches the answer to the expert question asked. Most existing expert systems are based on formal logic mechanisms (Aristotelian logic) and use deductive reasoning.

Singapore

- <u>A Speech Transcription System (STS) has been developed for the State Courts for the transcribing of</u> <u>oral evidence and delivery presented in the Courts.</u>
- <u>The tool utilises neural networks trained with language models and domain-specific terms to</u> <u>transcribe court hearings in real-time, thus, allowing judges and parties to review oral testimonies in</u> <u>court instantaneously</u>
- Applying this speech recognition technology that provides automatic speech transcription of the English conversations, this <u>STS allows real-time transcription of the oral evidence and delivery presented, without the use of court reporters or transcribers</u>.
- With the STS, <u>active participations of all parties can be encouraged with immediate access to the recorded evidence</u>. Any clarifications needed can be sought immediately when the speaker is not audible or unclear and inconsistent.

The STS recognises human voice and transcribes the speech into text in real time, will redefine the recording of evidence, will provide instant access to the recorded evidence The Judge and parties to the case would be able to review the oral testimonies and evidence presented in Court immediately. Court reporting services will include real-time transcription.

• There are many benefits of real-time transcription. Judges, prosecutors and defence counsel in criminal hearings can access the recorded evidence immediately, which allows for more effective participation by the parties, especially the party that is questioning the witness on the stand.

Brazil

VICTOR

- the AI tool is the result of the initiative of the Brazilian Supreme Court (STF). In the initial phase, <u>VICTOR can read all the extraordinary appeals that go up to the STF and identify which ones are linked to certain topics of general repercussion.</u> This action represents only a small but important part of the initial stage of processing appeals in the Court, but <u>it involves a high complexity level in machine learning</u>. VICTOR <u>is in the phase of building its neural networks to learn from thousands of decisions already made in the STF regarding the application of several themes of general repercussion. The objective is to achieve high levels of accuracy, which is measuring the program's effectiveness to assist the servers in their analysis.
 </u>
- The object is to apply machine learning methods to use its potentials in pattern recognition in legal processes related to judgments of general repercussions of the STF. Pragmatically, it aims to develop a system composed of deep machine learning algorithms enabling the automation of textual analyses of these legal processes. This will be done by creating machine learning models for analyzing the STF's resources regarding the most recurring general repercussion themes and integrating the Court's solutions to assist the servers responsible for analyzing the resources received and identifying related topics.

- VICTOR will not be limited to its initial objective. Like any technology, its growth can become exponential, and several ideas for expanding
 its skills have already been discussed. The initial objective is to increase the speed of processing cases through technology to assist the
 STF's work. The machine does not decide, does not judge; this is historically a human activity. It is being trained to act in layers of
 process organization to increase judicial evaluation efficiency and speed. The researchers and the Court intend that all courts in Brazil can
 use VICTOR to pre-process extraordinary appeals right after they are filed (these appeals are brought against court judgments), which
 aims to anticipate the admissibility judgment addressing issues with general repercussions, the first obstacle for an appeal to reach the
 STF.
- Among the robot's functions is to separate and classify the procedural parts. At this point, the machine can do a job in 5 seconds that was
 previously done by servers in approximately 30 minutes, representing great savings in allocating working time for specialized servers.
 Another function performed by the robot is to identify the most common themes of general repercussion. The robot assists in resolving
 about 10,000 extraordinary appeals that reach the STF per year. There is another important example. In the Judiciary of Pernambuco, an
 AI system examines new tax enforcement actions and decides which ones are in accordance with procedural rules and which ones are
 dismissed due to the statute of limitations.

1. SOCRATES

At the Superior Court of Justice (STJ), the AI system SOCRATES was "trained" using data from 300,000 court decisions. AI "reads" new cases and groups those with similar issues together so that they can be judged in blocks. The software is also used in screening to bar the entry of some types of cases that are unrelated to the court's duties. This digital barrier is important because the Brazilian Justice has created a category called repetitive demand, which applies to the entire process. Its theme is a legal issue common to thousands of other cases. These are legal issues that involve millions of people, such as readjustments in health plans or indexes for the correction of public rates. In this situation, identifying an appeal as a repetitive demand causes it to be returned to the court of origin. When the STJ decides on the matter, each state court will apply the judicial decision to each case.

SIGMA

 SIGMA is an intelligent system for the use of models for the production of decision drafts. The program sorts stored texts, comparing information extracted from procedural documents with how each unit uses its models. AI generates inputs for the report's writing. Observing the procedural documents suggests models already used for the same type of process, accelerating magistrates and civil servants' productivity to avoid conflicting decisions. The program facilitates and accelerates the search in the collection of the justice body. It uses information technology tools, which, unlike conventional systems, can perform tasks faster than human reasoning.

- SIGMA was created in collaboration with several federal justice bodies of the 3rd Region:
 - The Vice-Presidency of the TRF3,
 - the Secretariat of Information Technology (SETI),
 - the Laboratory of Applied Artificial Intelligence of the 3rd Region (LIAA-3R) and
 - the Electronic Judicial Process Systems Division (DSPE).
- The tool was already being used, on an experimental basis, by the Office of the Vice-Presidency to improve the flow of cases underway and to speed up the judicial provision. It started with the centralization of draft models in the AI system for conformity and appeal admissibility judgments. It is done through Synapses, a virtual platform that centralize technology initiatives.

<u>Austria</u>

- <u>AI technologies constitute a key technology in some areas of the Austrian Justice Digitization Strategy</u>. Potential areas of application range from legal research based on facts and circumstances, recognition of meta data and structures in briefs, correct allocation of incoming documents and cognitive analysis of investigation data up to the intelligent analysis of video data (e.g. recordings of hearings) and a predictive analysis of movement data of prisons.
- <u>Currently</u>, AI (machine-learning and deep-learning algorithms) is used in some subareas, in particular:
 - 1. to facilitate recording of data and to structure files (creating recording proposals or adding structure to scanned/incoming documents; recognition and creation of meta data);
 - 2. to optimize internal workflows (i.e. identifying the person(s) in charge);
 - for criminal proceedings or investigations (i.e. to structure and process large files efficiently, courts and public prosecutors' offices may use software which is intended to facilitate coping with large amounts of data [keeping an overview, creating and identifying links, compiling information on a topic, etc.]);
 - 4. to anonymize court decisions before they are published.

• The following projects are in planning/currently implemented:

- a) <u>Rapid AI-based Detection of Aggressive or Radical content on the Web, aiming at providing a forensic platform</u> for automated analysis of text and image content, that can support authorities in detecting aggressive or <u>radical content in large unstructured databases, such as seized hard drives or internet portals.</u>
- b) Machine Learning of motion patterns in the penal system: With the help of new technologies of 3D-image analysis, behavioral patterns of people are registered with the help of a 3D sensor and analyzed in real time in order to identify corresponding critical movement patterns. This aims at increasing security of inmates and prison staff.
- c) <u>Multimodal detection of risk situations: Endangering behavior in prisons will be assessed with the help of a</u> <u>multimodal model, accompanied by a detailed legal and ethical examination in order to protect inmates and</u> <u>prison staff. In particular, an analysis of behavioral patterns, such as covert acts of aggression, impaired vital</u> <u>functions and separation of accomplices, shall be enabled.</u>

- a) <u>Digitalization of analog inmate documentation: The current status of inmate-related</u> processes is assessed with regard to its digitalization potential.
- b) Digitally supported Resocialization in the penal system: This project aims at establishing a basis for a broadened access for inmates to the internet and digital tools. Perspectives and needs of inmates, in particular with a view their resocialization, are examined, in order to provide for secure access to modern communication and information technologies. A model project is supported by sociological studies.

Argentina

- <u>Prometea</u> is a predictive artificial intelligence system created in Argentina, developed by the Public Prosecutor's Office of the City of Buenos Aires. Under the technique "supervised learning," Prometea is an exponential optimizer of bureaucratic processes.
- It allows to drastically cut times in justice administration. For example, in the paradigm of the "paper and digital" bureaucracy, producing 1000 rulings about housing rights required 174 work days. With Prometea they are done in 45 days.
- The same occurs with cases related to labor rights. Without Prometea it took 83 days to produce 1000 rulings. With Prometea, it's done in 5 days. Prometea also helps control that filings comply with all formal requirements. It cuts time from 160 to 38 work days per 1000 filings.
- At first, Prometea was designed with the optimization of the justice system in mind. The goal was to exponentially streamline judicial processes for the benefit of the citizen. Later, it was noted that the benefits it generated could be exploited by any public organization.

- Since the beginning of the project, in August 2017, there has been an interaction with over 60 national and international organizations and institutions (the United Nations, the Organization of American States, the University of Oxford, Sorbonne University, etc.) and Prometea has helped in automating a number of tasks for these organizations.
- Proofs of concept were done in the justice systems and public administration with the following results:
 - 1. Prometea predicted court rulings in less than 20 seconds, with an accuracy rate of 96%.
 - 2. It allowed 1000 rulings about housing rights to be done in just 45 days; while it takes 174 days with traditional methods.
 - 3. It produced 1000 rulings about suspending probation for drunk drivers in 26 days. It takes 110 days to do manually.
 - 4. In the Colombian Constitutional Court, which receives thousands of filings per day, it was possible to reduce the time allocated to the selection of urgent cases from 96 days to 2 minutes.
- 1. Prometea reads, analyzes, detects and suggests high priority health cases in a few seconds. All this under human supervision.
- 2. The tool can also automate the creation of documents. Thus, 14 documents can be created in 16 minutes, while it takes 2 hours and 40 minutes to humans. The efficiency in this case is increased by 937%.
- 3. In the Inter-American Court of Human Rights, Prometea works as a virtual assistant for document creation.
- 4. In the Civil Registry Office of the City of Buenos Aires, 6,000 rectifications of administrative items are carried out in 2 months with Prometea. This previously took 8 months.
- 5. In the field of public contracting, Prometea allows to control the prices of the goods to be purchased. Prometea can create a specification in just 1 minute, while manually drafting the document takes 2 hours.
- 6. Prometea reduces the number of typing errors by 99%; and it allows an exhaustive control of formal aspects of the documents involved.

One of the most relevant sectors that civil courts are called to assist to is trials invoked by traffic accidents. in order to put Prometea into operation so that it could collaborate in the bureaucratic processing of civil procedures around traffic accidents, with the aim of reducing judicial response times.

A great number of the traffic accidents trials is affected by the determination of a causal link (or chain of causation). The causal link is a cause-effect relationship that allows establishing the facts that could be considered determinants of the damage and which of them caused the tangible damage. This causal relationship is essential to claim damages. Determining whether the trial is affected or not by causal link requires the justice system a lot of time, resulting in a delay in resolving the case. According to the data-collection done by the research team, out of 400 files from different Argentinian jurisdictions, in 84.8% there was a causal link and in 15.2% of the cases, there was a rupture of the causal link. Doing the same analysis in the Province of Buenos Aires demonstrated that there was a causal link in 70.9% of the files, while the rupture of the link occurred in 29.1% of the cases. Prometea here works as a predictive assistant that allows to analyse in a few seconds, that projected document. This means that the Artificial Intelligence performs the task of control and contrast with the story described in the file, in a few seconds, which allows the judge to increase the knowledge base to make a better decision.

Prometea is characterized by three major aspects:

- 1. It has an intuitive and friendly interface that allows "talking" to the system or chatting from a natural language recognizer. It uses the integrated screen approach, eliminate clicks and open multiple windows on the computer. On a single screen, the user has all the resources available to do his work;
- 2. It operates as an expert system with a multiplicity of functions, which allow to automate data and documents as well as perform intelligent assistance;
- 3. It uses supervised machine learning and clustering techniques, based on manual labelling and in machine dataset training.

Prometea's functionalities can be described in four main groups:

Intelligent Assistance: the assistance involves the transmission of knowledge and processes for algorithm development that simplify, fasten and reduce their mistakes. Prometea guides users with his voice or through a chatbot[3], in obtaining a result, the same way in which Apple's Siri works. In this way, the AI automates tasks related to the deadline control of judicial appeals filed and self-sufficiency controls; this implies analysing the documentation accompanied by the file, which is essential for its resolution. For example, from 5 questions, you are able to complete a legal opinion by which you must reject an appeal by extemporaneous.

Automation: the concept of automation presents several nuances according to multiple variables. Mainly, there are two big groups:

Complete Automation: the algorithms connect data and information with documents automatically. The document is generated without human intervention.

Automation with Reduced Human Intervention: in many cases, it is necessary that the persons interact with an automated system, in order to complete or add value to the creation of a document. • **Intelligent Classification and Detection:** this complex task is performed using supervised machine learning techniques. The detection comes from the reading and analysis of a large volume of information, in which Prometea can identify documents within the multiple combinations of criteria used, even if the documents do not have a homogeneous language. Then, Prometea segments information based on shared patterns (keywords) in the documents. The more precise the keywords, the highest the number of documents that can be covered with a certain criteria.

Prediction: is the most sophisticated function that Prometea presents. It consist in one or several algorithms which reveal a lot of data in order to establish patterns that are translated into predictions, based on some statistical criteria. It is training based on patterns identified in previous cases. When a data is introduced, that data will be identified and compared with similar ones analysing the answers that were given in each case. As a result, a prediction based on historical responses will be obtained. When Prometea matches the current document with a previous one, it tracks the solution given in previous cases and proposes the same solution by understanding that the circumstances are analogous. For example, in 20 seconds on average, you can obtain the applicable solution from entering only the case number to solve. This task is developed from the reading and recognition of patterns of judicial decisions of the previous instances that are available on the web. Once Prometea detects the solution, it allows the user to complete the legal opinion based on a few questions and then, it shows a preview of the final document, which can be edited online. In short, the first draft document is automatically generated by the AI.

Abu Dhabi

- An <u>Artificial Intelligence-backed Interactive Case Registration (ICR)</u> service has been rolled out at Abu Dhabi courts to ease services for residents. It <u>enables court users to file their cases without the need</u> to be fully conversant with the applicable laws and court procedures. The service permits users to complete proceedings by interacting with the digital service. They feed data to determine the type of the case and the competent court and obtain a case number and a date for the first hearing in the <u>case.</u>
- The Interactive Case Registration service <u>relies on Artificial Intelligence to accurately and promptly</u> <u>determine the type of lawsuit, the competent court, and the applicable fees, through easy steps. A</u> <u>user-friendly interface ensures accuracy and speed, using the connection with other government</u> <u>databases to retrieve case party details, handle the digital payment and other procedures to complete</u> <u>the registration such as verifying the details of the parties and legal notices</u>

Role of AI in Summary Offences, MACT Cases and Traffic Offences

- MACT
 - Classification
 - Co-relation with decided cases
 - Assessment of Injury Medical reports AI Doctor
 - Calculation
 - Draft Judgement
 - Similar in Appeal

- Traffic Offences
 - Virtual Courts
 - Appearance and Plea virtual
 - Draft order on the basis of the provision
 - Imposition of fine
 - Collection electronically
 - Entry to be made in the licence or registration

- NI Act
 - Oral evidence could be made optional
 - Documentary evidence can be analysed through AI
 - Co-relation of complaint and defence with pre decided cases
 - Draft Judgement generated
 - Oral evidence application to be judicially decided if permitted normal procedure

Use of AI to Streamline the Process of Listing of Cases for Hearing – For Supreme Court and High Court

- Al to classify and group cases of similar nature
- For example Mandamus for Khatha could be consolidated and disposed
- Al to assign dates on the basis of the pressure of the roster and approved by the judge
- Low-hanging fruits could be disposed giving time for other matters
- Al along with smart contract could be used to automatically trigger events.

Thank You Ladies and Gentlemen for your time and Listening