

Session-5

Emerging and Future Technology for Effective Judicial Governance

*Judicial Governance vis-à-vis Artificial Intelligence (AI)
-Latest Developments in Technology*

Justice A. Muhamed Mustaque
High Court of Kerala

Why do We need Digitisation?

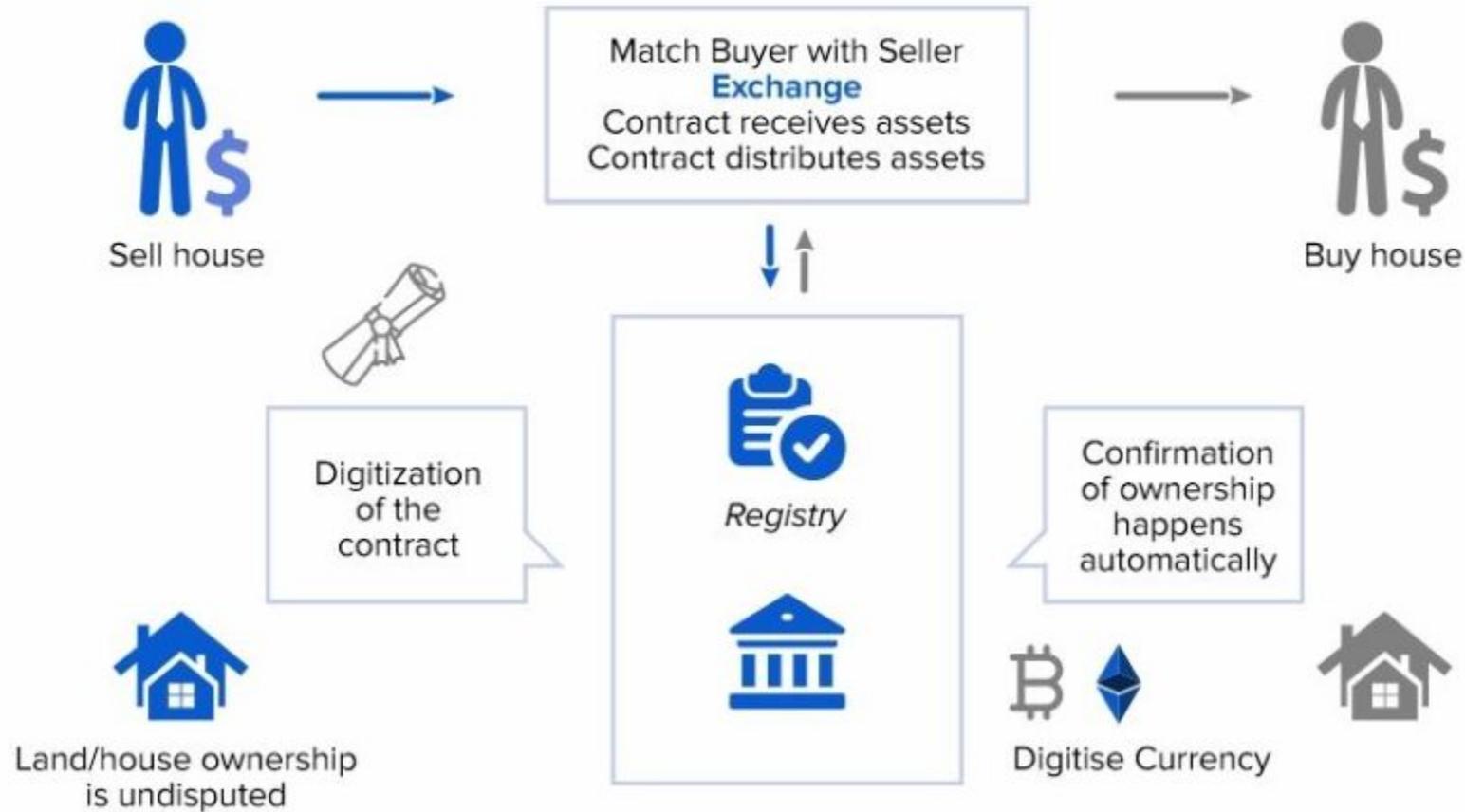
- It is the very first step in automation when we need to deal with existing cases
- Without which the system will not find it way forward
- Be it Artificial Intelligence/Machine Learning, We need machine readable and clean data



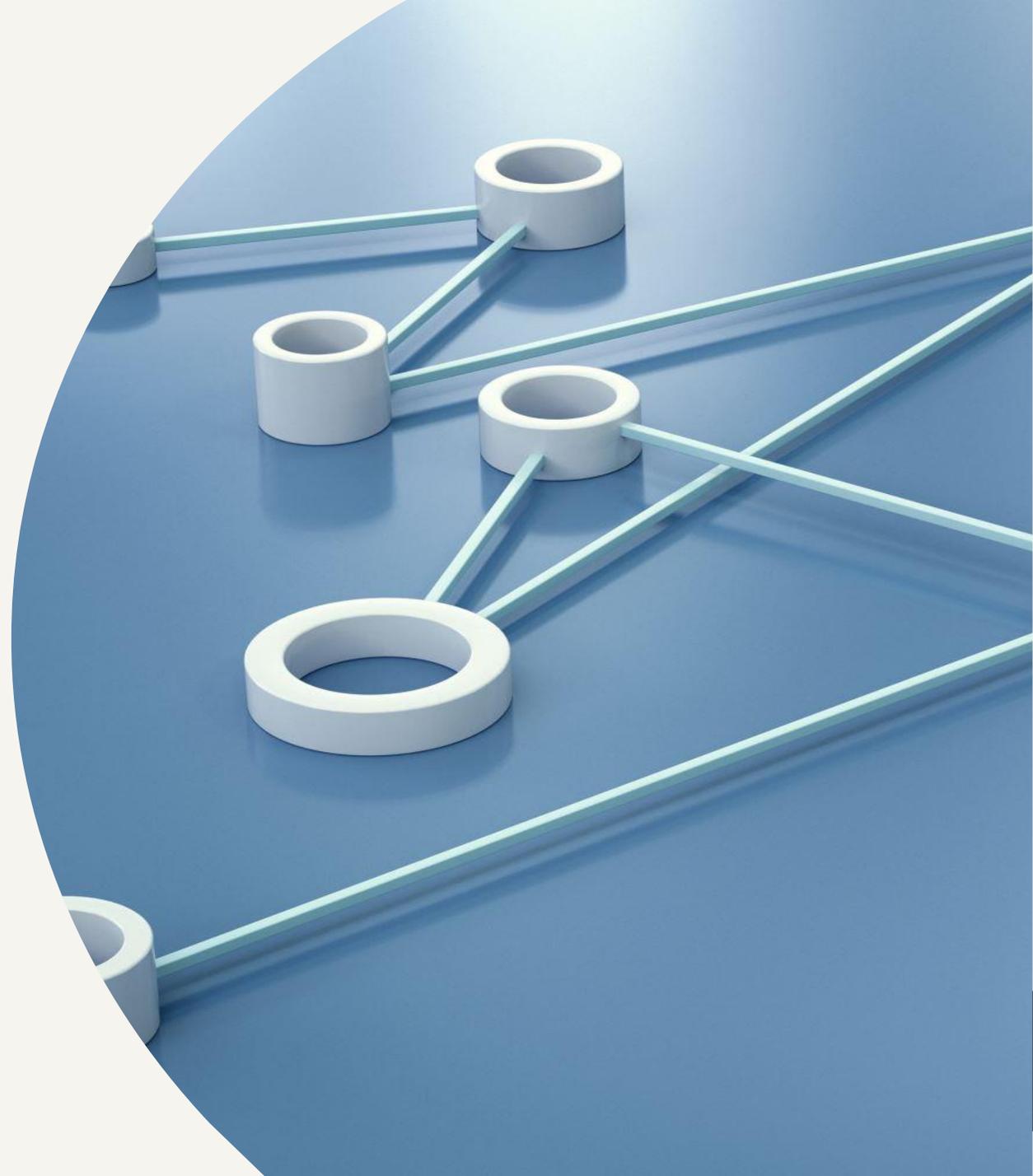
 Dogmatism
Emancipation



| How Smart Contracts Work?



Knowledge Vs. Idea



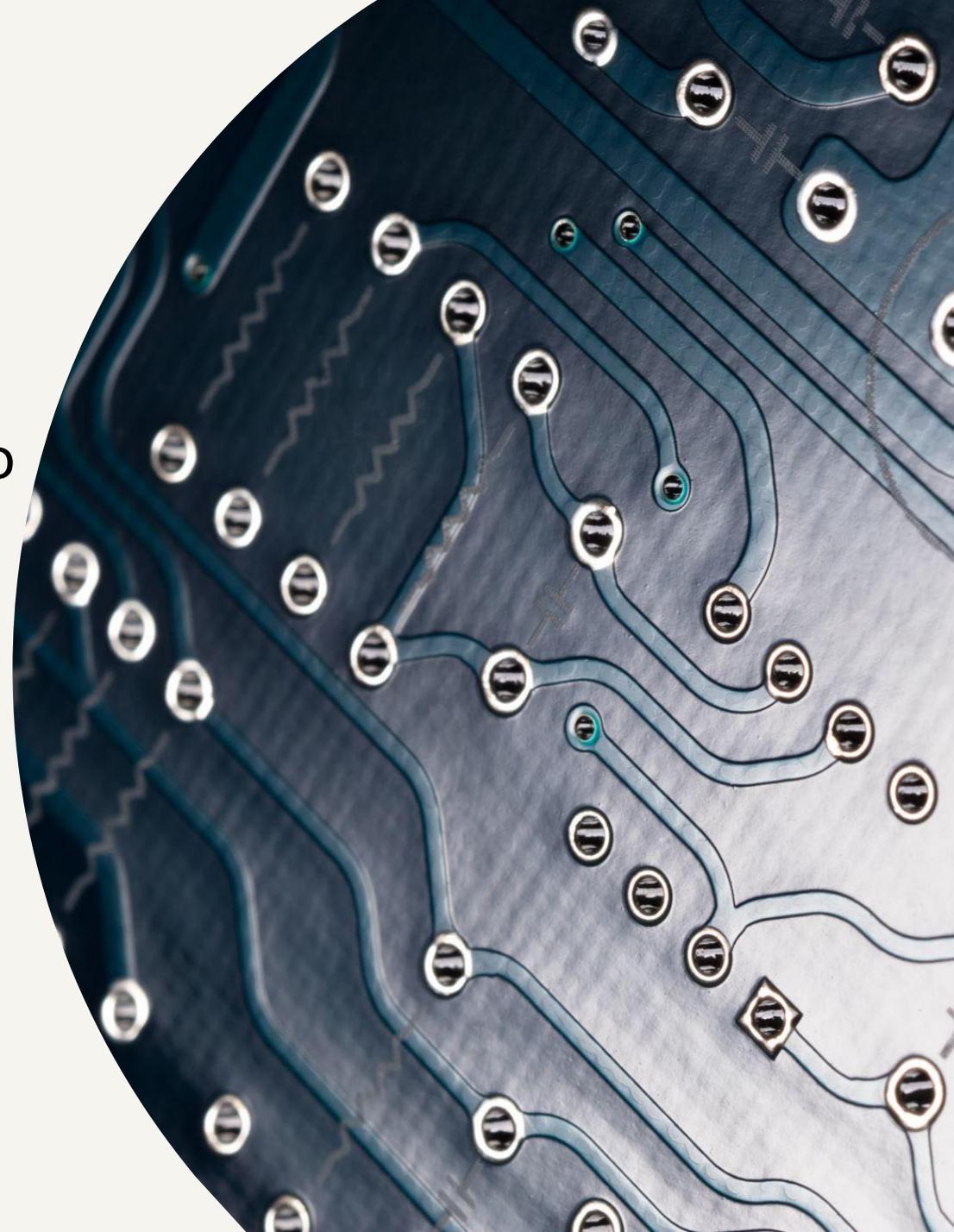
Judicial Governance Vs. Artificial Intelligence

Choice of institutional norms in preference to individual

Functional Credibility

Certainty

Expediency

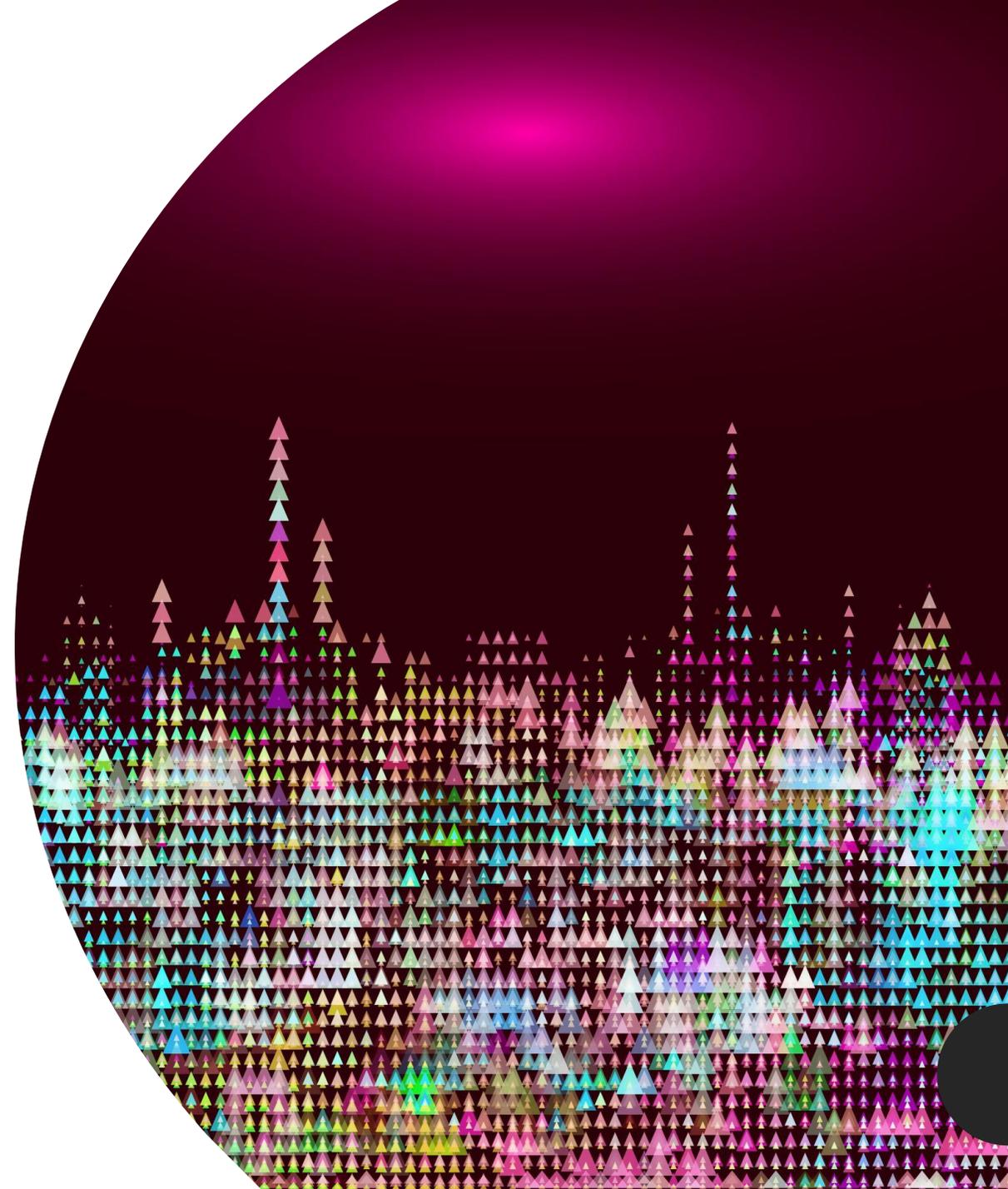


What is Artificial Intelligence?



Artificial intelligence (AI) is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings.

Artificial intelligence is based on the principle that human intelligence can be defined so that a machine can easily mimic and execute tasks, from the simplest to even more complex.



[Jugalbandi Chat Bot: Satya Nadella at Microsoft Build 2023](#)

Difference between AI and AGI

Artificial Intelligence

- Computer system designed to perform a specific task or set of task based on provided instructions
- Artificial intelligence is often trained on data to perform specific tasks or a range of tasks limited to a single context. Many forms of AI rely on algorithms or pre-programmed rules to guide their actions and learn how to operate in a certain environment.
- AI is typically focused on solving specific problems
- No self awareness, consciousness, ability to think.
- Not capable of independent decision making or problem solving beyond the assigned task
- AI is in practical use today.

en as

Artificial General Intelligence

- Theoretical development of AI, that would have human like intelligence, able to learn and understand any intellectual task without being programmed specifically for each one.
- AGI, on the other hand, is able to reason and adapt to new environments and different types of data. So instead of depending on predetermined rules to function, AGI embraces a problem-solving and learning approach — similar to humans.
- while AGI aims to perform any human task and exhibit Intelligence across various areas without human intervention, with a performance equal to or better than humans in problem-solving.
- Single, general intelligence that possess common sense and creativity and express emotions
- Would be capable of independent decision making and statement without human intervention.
- AGI is theoretical and yet to be made into reality.

<https://anuvadini.aicte-india.org/>

The background features several vertical chains of interlocking links, rendered in a wireframe style with black dots at the vertices and thin lines connecting them. These chains are set against a light gray gradient background. In the center, there is a network of scattered nodes and connecting lines, some forming simple geometric shapes like triangles and quadrilaterals. A thin white horizontal line spans across the middle of the image, passing behind the text.

Blockchain Technology in Judicial Environment



How Blockchain Helps Safe & Secure Transmission

- Record Keeping
- Chain of Custody
- Identity Verification
- Transparency and Trust among stakeholders

How Does a Blockchain Work: A Step-by-Step View



1 A user requests for a transaction



2 A block representing the transaction is created



3 The block is broadcasted to all the nodes of the network



4 All the nodes validate the block and the transaction

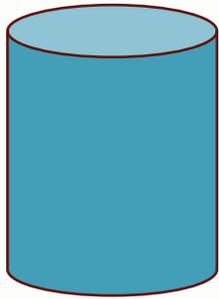


5 The block is added to the chain

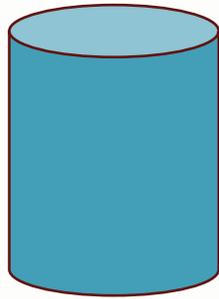


6 The transaction gets verified and executed

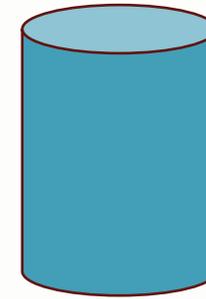
The Three Verticals



National Perspective



Court Perspective



Judge Perspective

Concept of Case Manager



Who is a Case Manager?

- CM is a professional who plays a crucial role in coordinating and managing various aspects of a case.
- His/her primary responsibility is to ensure procedural compliance, effective communication, completion of process and ensure that the case is ripe for final hearing before it reaches the bench.
- CM shall be a District Judge on deputation and will discharge functions akin and superior to that of a Registrar(Judicial) to bring in professionalism in case filings, court hearings, scheduling and adjournments.

Why a Case Manager(CM)?

- To eliminate use of judicial time spent on procedural compliance.
- To remove barriers of uncertainty and ensure certainty

To enhance productivity and outcome in judicial proceedings.

- To ensure that the cases on board are actually ready for judicial intervention.
- To avoid time spent on granting adjournments.



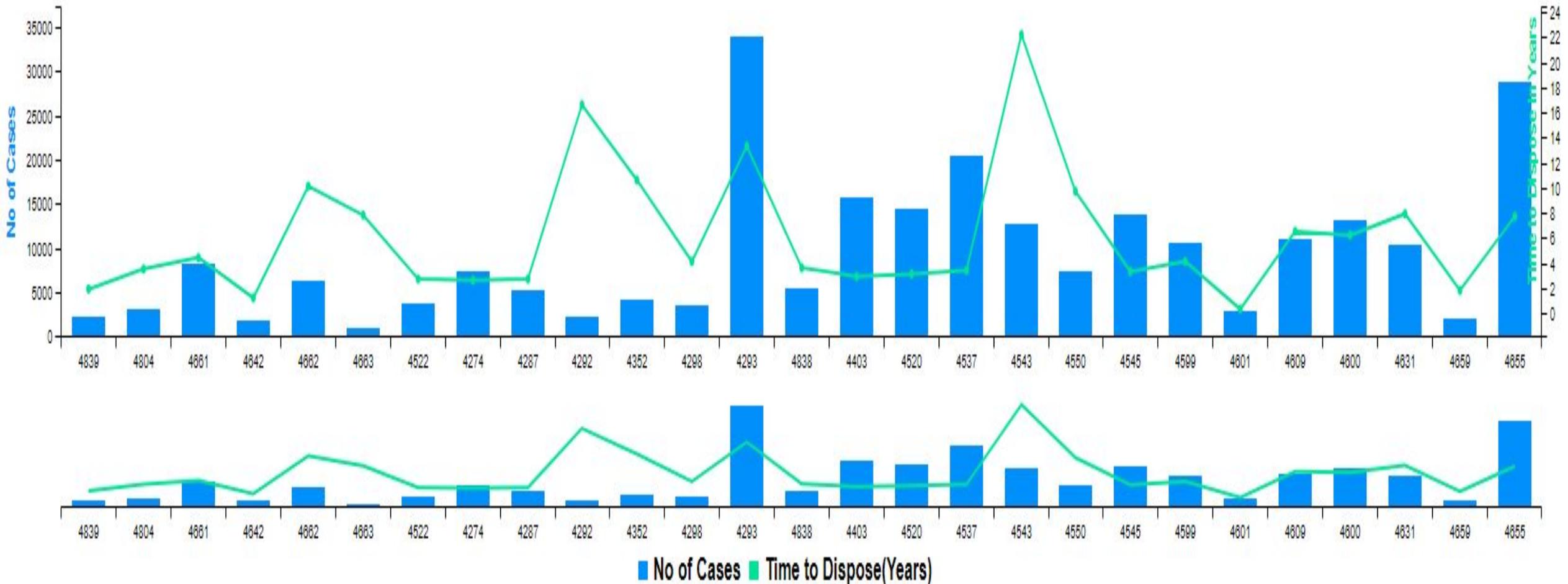
Role/Duties/Powers of a Case Manager

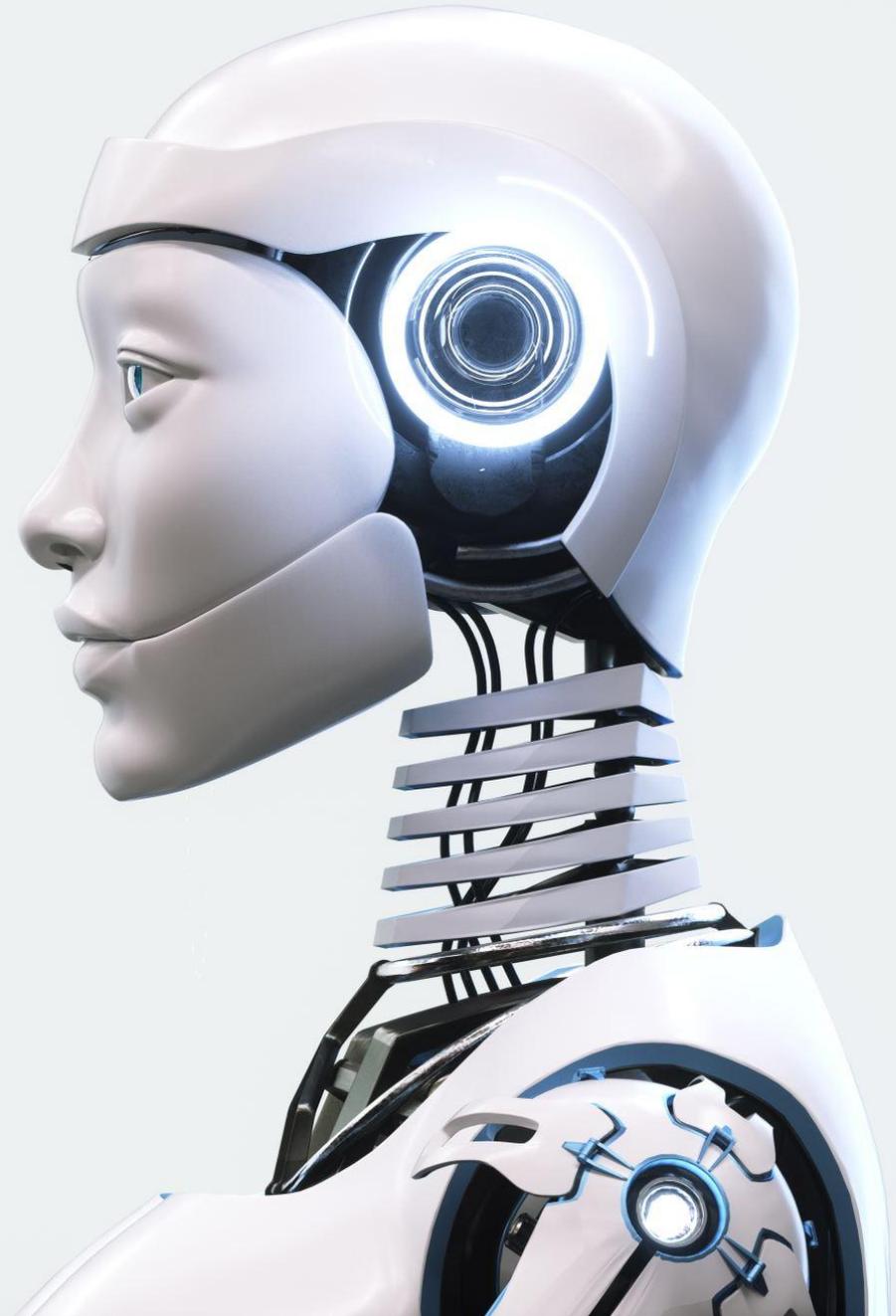
- Will decide all presentational non-compliances.
- Will decide on presentation delay and re-presentation.
- Organize and manage all aspects of the case, including scheduling appointments, arranging services, and monitoring progress.
- Will decide on request for adjournment when case is listed. Will coordinate with Courts in listing and scheduling cases.



Chief Justice Dashboard using ML in Kerala

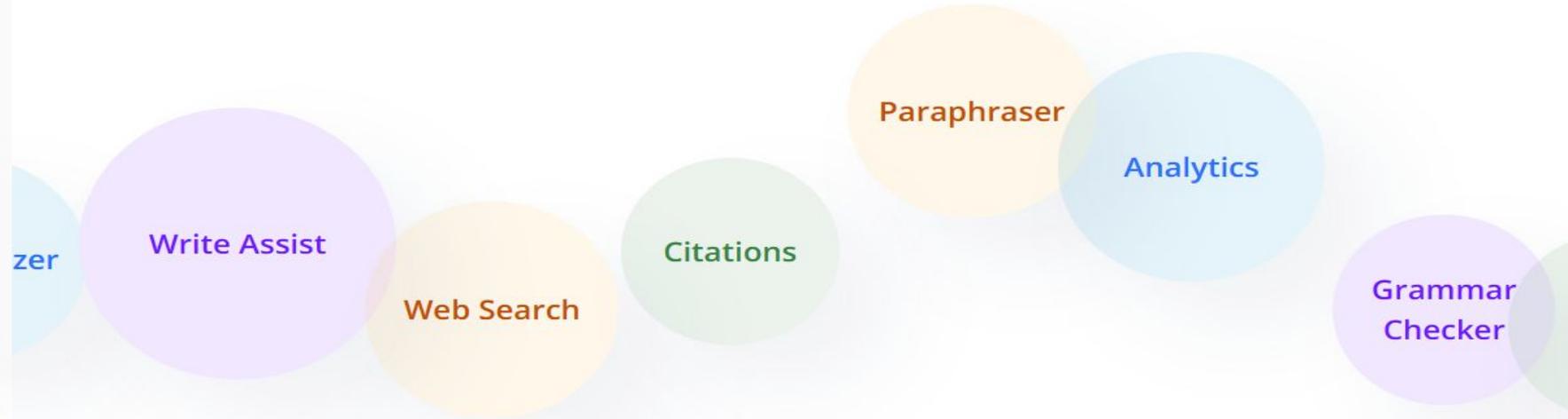
Total Pending (Registered) : 251504





Metaverse Experience in Courtrooms

In the near future, courtrooms could integrate virtual reality for a metaverse-like experience, allowing participants to join remotely, present evidence in immersive formats, and enhance overall accessibility to the legal process.



Quill Bot



Research

Browse through multiple search results without opening another tab with our built-in web search



Write

Harness AI to write faster and never worry about getting stuck ever again



Enhance

Make sure there are no mistakes with our advanced grammar checking and analytics



Jugalbandi

Jugalbandi is a free and open platform combining ChatGpt and Indian language translation models under the Bhashini Mission to power conversational AI solutions in any domain



TERES_CORD

Working on Transcription services in dispute resolution accessible in multiple languages and affordable for users leading to their widespread adoption and deployment

JIVA (Judges Intelligent Virtual Assistant

JIVA is currently being developed to assist judges in quickly identifying through voice or text conversations the laws and sections relevant to their everyday needs

Lawctopus

Aims to provide comprehensive interpretations of statutory texts and insights into how courts enforce laws.

Addressing challenges faced by legal professionals in utilizing the law effectively within the courts





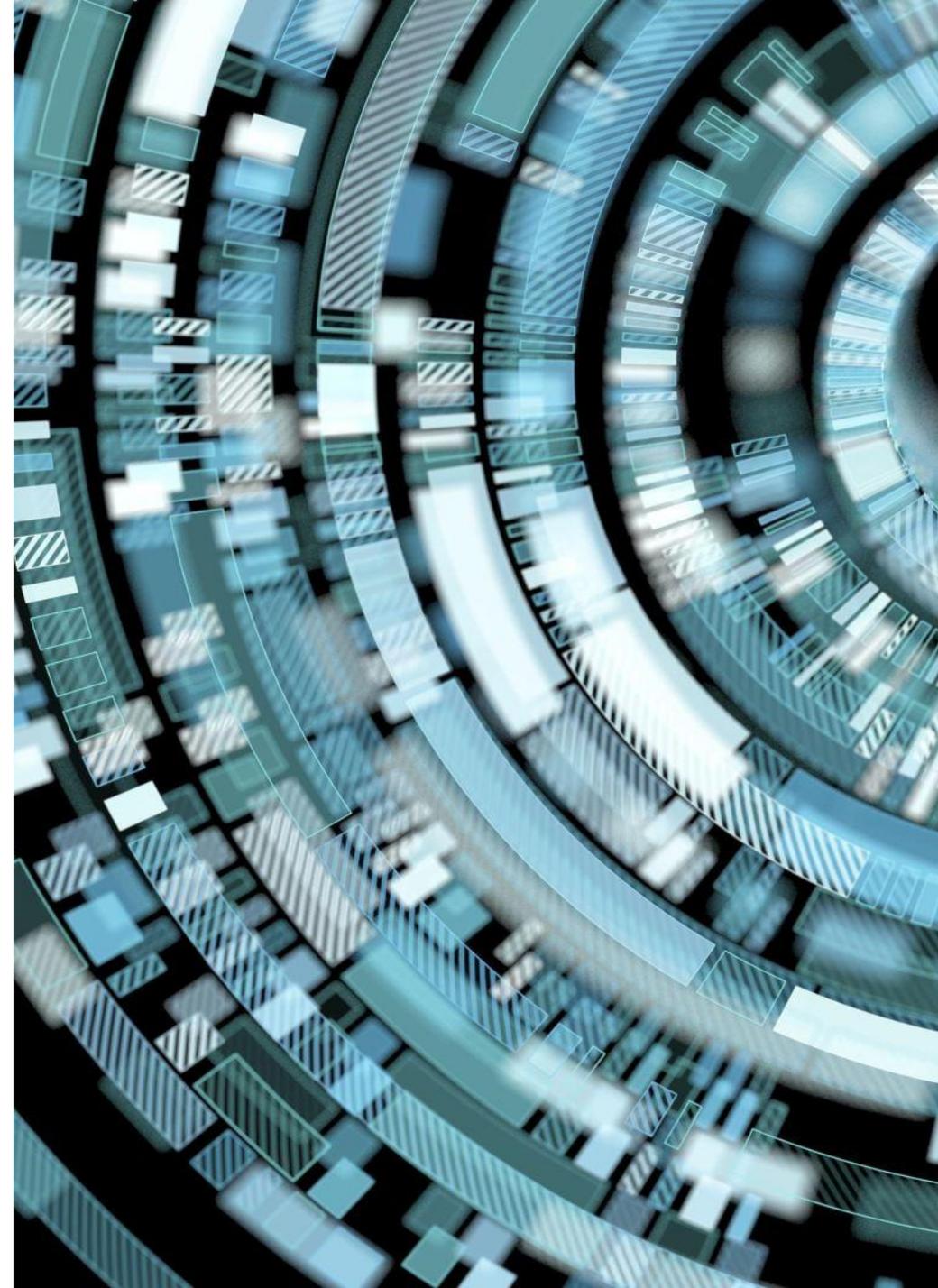
Justice, Access and Lowering Delays Initiative(JALDI)

Aspires to develop an intelligent scheduling system for Indian Courts that addresses the challenges in case listing and improving efficiency



Just AI from Mosu

Just AI, an upcoming online tool, compares time, cost and success probabilities across litigation, arbitration and mediation. Users can input preferences and access legal service providers meeting their criteria. Plans include integrating Bhashini for wider language accessibility.





Thank You!

