

# Session-3-Integrating Artificial Intelligence in Court Processes: Challenges and Issues

- Concept of AI and Its Functionalities
- Use of AI in AI in Knowledge Management, Process Management and in Advisory Services
- Designing, Development and Control over the AI Processes
- Role of AI in Summary Offences, MACT Cases and Traffic Offences
- Use of AI to Streamline the Process of Listing of Cases for Hearing

Justice A. Muhamed Mustaque

# Why AI in Judiciary

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- Choice of institutional norms in preference to individual
- Functional Credibility
- Certainty
- Expediency



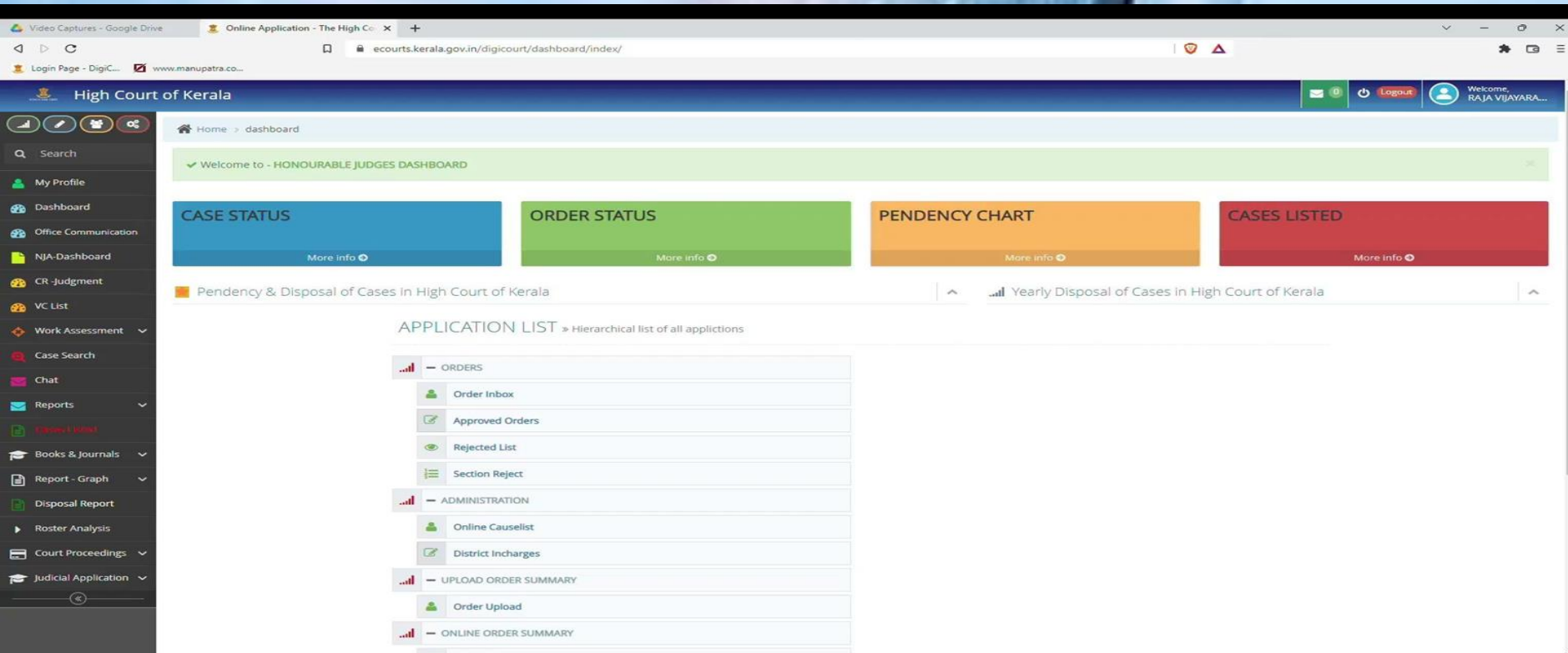
# Concept of AI and Its Functionalities

- Artificial intelligence is a set of algorithms and intelligence to try to substitute human intelligence
- Automation of court process( Filing, Scrutiny,Listing,etc)
- Machine learning
- Natural language processing (NLP)
- Robotics

# Stages of Technology

- Supportive
- Replacement
- Disruption

# High Court of Kerala Applications - Features



The screenshot displays the 'High Court of Kerala' online application dashboard. The interface includes a top navigation bar with the court's name and a user profile section. A left sidebar contains a menu with various application and administrative options. The main content area features a welcome message, four status and chart widgets, and a detailed application list.

**High Court of Kerala**

Home > dashboard

✓ Welcome to - HONOURABLE JUDGES DASHBOARD

**CASE STATUS** [More info](#)

**ORDER STATUS** [More info](#)

**PENDENCY CHART** [More info](#)

**CASES LISTED** [More info](#)

Pendency & Disposal of Cases in High Court of Kerala

Yearly Disposal of Cases in High Court of Kerala

**APPLICATION LIST** » Hierarchical list of all applications

- ORDERS
  - Order Inbox
  - Approved Orders
  - Rejected List
  - Section Reject
- ADMINISTRATION
  - Online Causelist
  - District Incharges
- UPLOAD ORDER SUMMARY
  - Order Upload
- ONLINE ORDER SUMMARY

# High Court of Kerala Applications - Judges Dashboard Features

- Digitally signed Interim order real time delivery during court proceedings time
- Annotation
- Judge Note
- Integrated Voice to text feature
- Work from Home option
- Office Communication
- NJA Program Management
- Work Assessment of all High Court employees
- Case file view (Main Case,IA,Documents etc)
- Judgement workflow and digital sign
- Chat Facility

# High Court of Kerala Applications - Judges Dashboard Features

- Case file view as per cause list order
- Filip view of case files
- Law Journal access
- Pendency -Judge wise and disposal time calculation using ML
- Daily Reports
- Roster Analysis
- Judgewise Disposal Graph
- All in one case display system for Judges and Advocates
- Delivery of Digitally signed order to stakeholders

# High Court of Kerala Applications - Features

- Digital delivery of case files for AG office,DSG office,Standing Counsel etc
- Auto generated cause list module for paperless courts
- VC Opt with Hybrid feature
- System Generated Bookmarking and doctype printing on case files
- Server Side Signer Gateway tool & Organizational Digital Signature Implementation for paperless courts
- Neutral Citation Number
- Auto-tagging of caveat during case registration and cause list publish

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# Artificial Intelligence


- Allowing a machine to behave in such a way that it would be called intelligent if a human being behaved in such a way: John McCarthy-1956
- Machine learning tools assist in intelligent scheduling of cases and creating cause lists
- AI-enabled programs can extract the accurate position of law from a mass of precedents
- Smart e-filing, intelligent filtering/prioritization, tracking of cases
- Use speech recognition techniques
- Translation
- Intelligent algorithms can be used for furnishing basic legal information to potential litigants in a conversational format

# What can AI do for Courts?

- Be of immense help in organising information
- Improve procedural efficiency
- Can be used to advise potential litigants and arrive at a predictable solution
- Aid decision making process
- Reduce arbitrariness in human decision making.
- Predictive justice by analysis of large amount of data by the means of AI enabled technologies for predicting outcomes of legal disputes.
- Has the potential to transform justice systems worldwide

# Potential use cases of AI

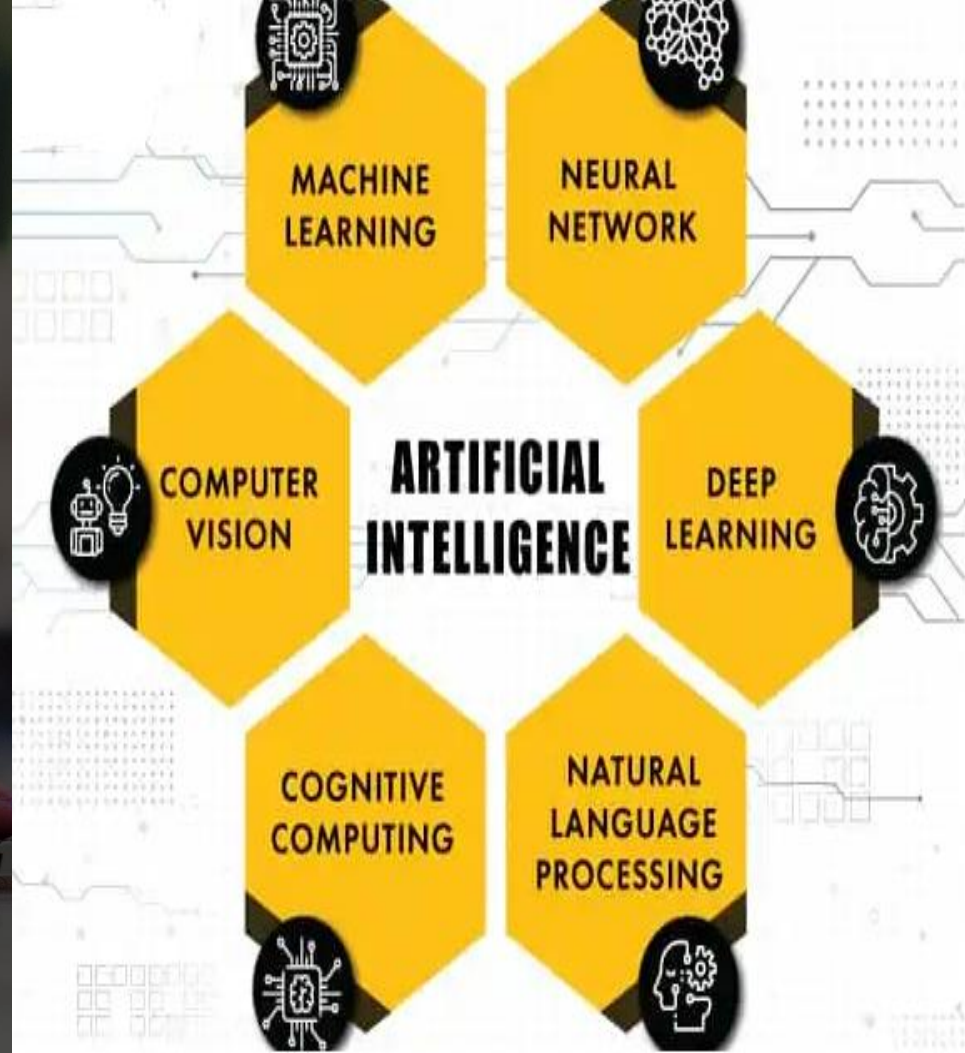
- Tools to ease the rigour of the registry – Streamline administration
- Automation, transparency and openness
- Tools for Intelligent analytics and research
- Predictive justice
- Tools to spread awareness, assist litigants and also decide time consuming prospects
- AI can be used as support systems and augmentation tools.




## Use of AI in AI in Knowledge Management, Process Management and in Advisory Services

- AI and KM(Knowledge Management) are two sides of the same coin
- Artificial Intelligence (AI) through machine learning allows machines to acquire, process and use knowledge to perform tasks and to unlock knowledge that can be delivered to people to improve the decision-making process

Designing, Development and  
Control over the AI Processes

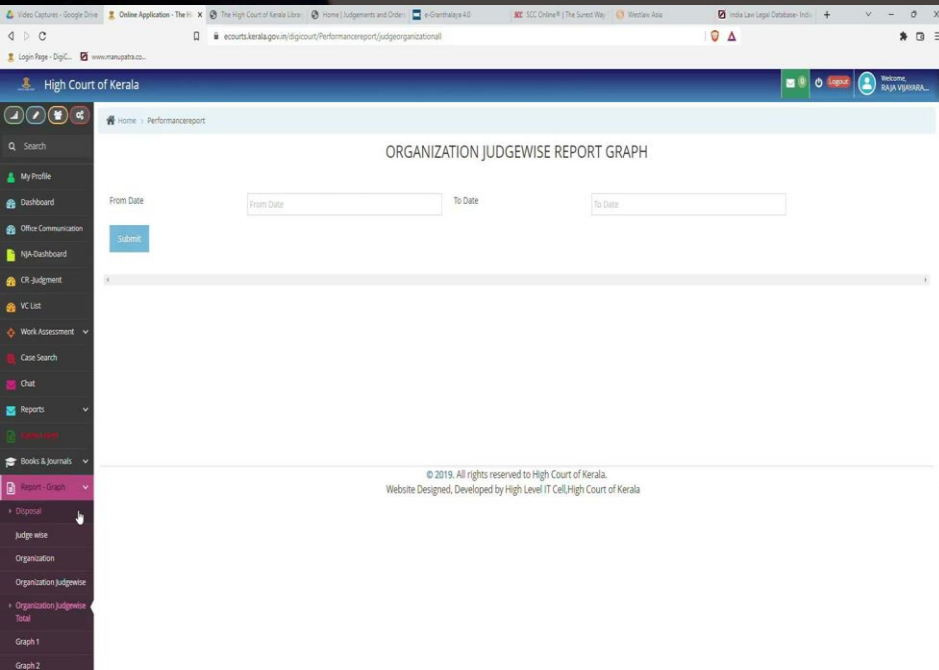




## Role of AI in Summary Offences, MACT Cases and Traffic Offences

- Traffic Challans-eChallan software-Virtual Court-No footfalls in courts
- Mapping of Incidents of motor accidents to MACTs, ADR mechanism, predictive tool for compensation, automated payments
- Other traffic violations integrated with AI cameras, Vahan, Sarathi and Virtual Court
- All courts to transform to partly virtual by identifying suitable case types.

# Use of AI to Streamline the Process of Listing of Cases for Hearing



- Roster Management
- Estimate time required for disposal
- Auto listing as per roster (Machine Learning)
- Ready for Hearing cases tracking using AI

# JUSTIS APP for HC Judges- Use of AI

- Analyse the performance of the Judicial Officer from the date of entry in service.
- By data interlink with post-litigation ADR mechanisms with the help of M/L to assess the involvement of the Judicial Officer in the ADR processes.
- Analyse various data and predict the output with a predictive mechanism for better work management
- AI tools to understand and signify the statistics of confirmation/reversal of judgements.

# Motor Accident Claims, Land Acquisition Cases & Compensation Claims

- Where mere arithmetical calculations based on different sets of criteria are only required for the decision making AI can be introduced.
- Use predictive output regarding the quantum of compensation that may be awarded as per existing norms
- This would give a clear indication to the parties as to whether to settle the claims in pre-litigation or to contest the claims
- Based on pendency, to predict the minimum life cycle of a litigation to give clear input regarding time required for litigation

# Natural Language Processing (NLP) in Legal Aid Mechanism

- Natural language processing strives to build machines that understand and respond to text or voice data—and respond with text or speech of their own—in the same way, humans do.
- This would help the remote villages get free and faster legal aid without personal assistance.
- They may be able to speak to the tool in their own way, and the tool understands the same, offers solutions and tracks the redressal mechanism.
- Access to justice is ensured.





THANK  
YOU