

Access to justice  
ICT and Courts

Justice A.Muhamed Mustaque  
Judge  
High Court of Kerala

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- Technology and impact
  - Scientific and technological revolution between 1940- 70
  - ICT revolution late 1975
  - Computer
  - mathematical formula
  - Cognitive computing and AI
  - Binary choice between Accept and live with it or reject
  - Indispensable choice
  - Harness System with technological revolution
  - Shape the revolution in a manner that improves the state of affairs

# Disruptive technology

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- Disruptive innovation
- Technology creating new platform and value
- Personal computer displaced typewriter
- Email transformed communication
- Social networking replaced traditional social relations
- Tipping points expected in future
- Hyper loop
- Li fi

# Applications

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- Replaced tax consultants , filing tax returns through online
- Uber , Airbnb
- Health related apps
- ODR
- ebay dispute resolution centre
- Sqaure trade

# Applications

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- Confession app
- Flipboard for news and personalized magazine pulling news and content from different sources
- Ushahidi crowd sourcing and social response app collecting data to get real time response  
can be used for eliciting response in times of election ,disaster etc

# Applications

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- Legal Analytics for District Court Bankruptcy Appeals is Now Available
- Product by Lexmachina ,lexisnexis product analysing judges and courts

# Applications

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- Meet **'Ross' legal Robot**
- Ross has joined the ranks of Law firm Baker Hostetler which employs 900 lawyer
- Ross is among 50 human lawyers in its bankruptcy practice.
- The legal robot is accessed via computer and billed as a subscription service

# Fourth Revolution

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- Book by Klaus Schwab  
founder of World Economic Forum  
Out lines key technologies driving this revolution  
Discusses major impacts on governments ,business , civil society etc  
Offers idea that can shape future of this world



**Table:** Tipping Points Expected to Occur by 2025

	%
10% of people wearing clothes connected to the internet	91.2
90% of people having unlimited and free (advertising-supported) storage	91.0
1 trillion sensors connected to the internet	89.2
The first robotic pharmacist in the US	86.5
10% of reading glasses connected to the internet	85.5
80% of people with a digital presence on the internet	84.4
The first 3D-printed car in production	84.1
The first government to replace its census with big-data sources	82.9
The first implantable mobile phone available commercially	81.7
5% of consumer products printed in 3D	81.1
90% of the population using smartphones	80.7
90% of the population with regular access to the internet	78.8
Driverless cars equalling 10% of all cars on US roads	78.2
The first transplant of a 3D-printed liver	76.4
30% of corporate audits performed by AI	75.4
Tax collected for the first time by a government via a blockchain	73.1
Over 50% of internet traffic to homes for appliances and devices	69.9
Globally more trips/journeys via car sharing than in private cars	67.2
The first city with more than 50,000 people and no traffic lights	63.7
10% of global gross domestic product stored on blockchain technology	57.9
The first AI machine on a corporate board of directors	45.2

Source: Survey

# Preparing for future in the legal practice

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- Use of technology in existing system
- Electronic case management to track and search procedure
- Court room technology E- filing , web based- data base
- Service of summons

# Preparing for future in Legal practice 2

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- Artificial intelligence -substituting human intelligence-machine expertise
- Cognitive computing, can complete task like human
- Potential impact on the legal profession
- Conducting legal research
- Capable to predict outcome of litigation
- Clients/lawyers would be in a position to assess possible outcome of litigation

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- In 2014 Chicago Kent Law College professor Daniel and his colleague created an algorithm to predict 7700 rulings from 1953 to 2013
  - Result 70% accuracy
  - Promoting compliance by identifying internal matters of company
  - Performing due diligence
  - Legal document , AI can suggest falls back or alternative contract provision

[https://youtu.be/ZF0J\\_Q0AK0E](https://youtu.be/ZF0J_Q0AK0E) Artificially intelligent Lawyer ROSSt

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<https://youtu.be/AtdJ1DGJjXA> How It Works: IBM Watson

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# Expectations of the people in the era of ICT

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- ICT backed with globalisation transformed people
- From end to means to end
- Eg; telecommunication
- Automotive
- Values : efficiency , effectiveness and utility
- Looking up on institutions/industries / organizations as service provider

# Access to justice

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- Defining Access to justice for a framework with ICT
- Creating legal framework
- Keeping in mind obstacles like Institutional structure , poverty etc
- Relationship between Law and Technology
- Law`s objective and technology` objective
- Necessary to legitimise technology

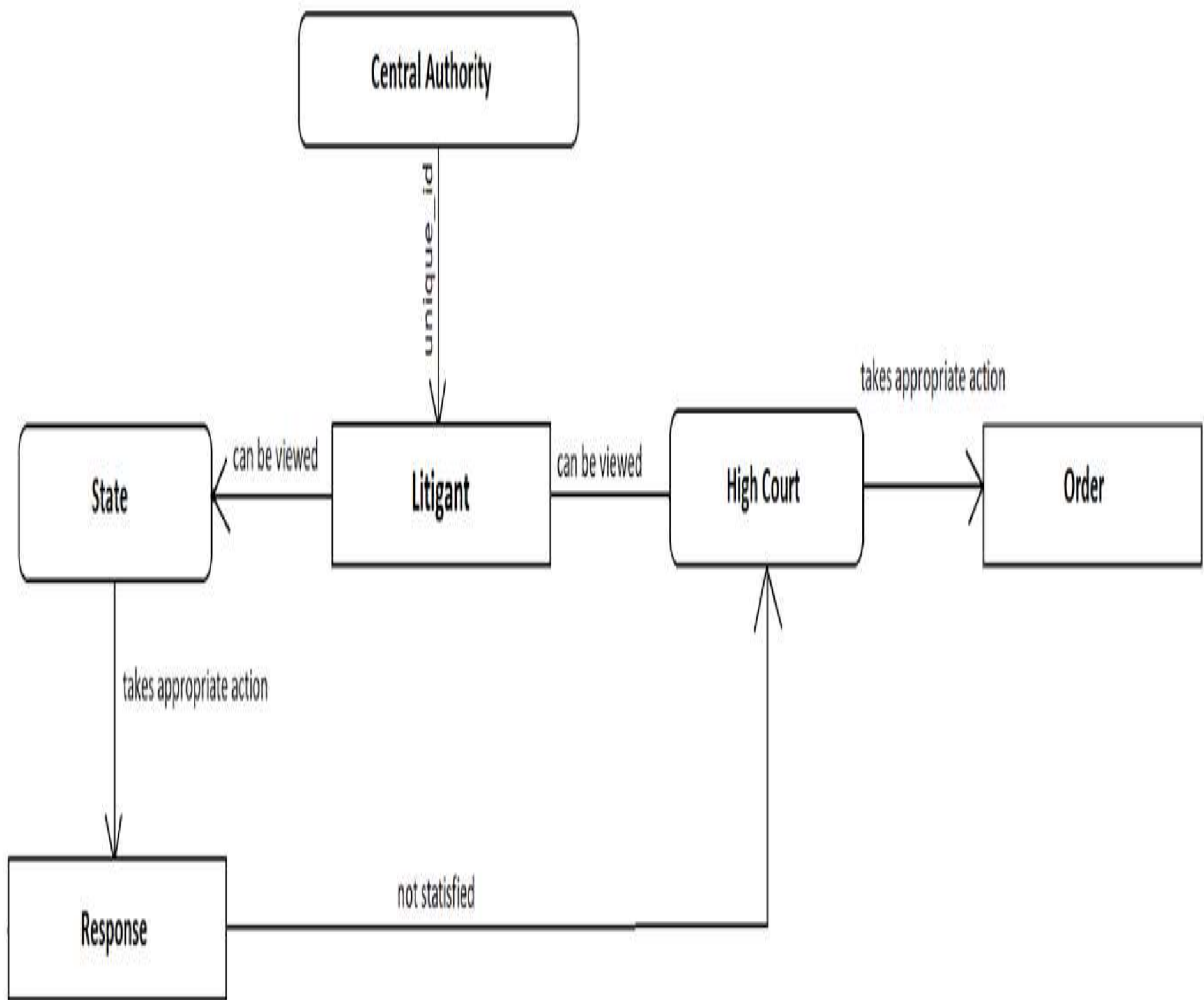


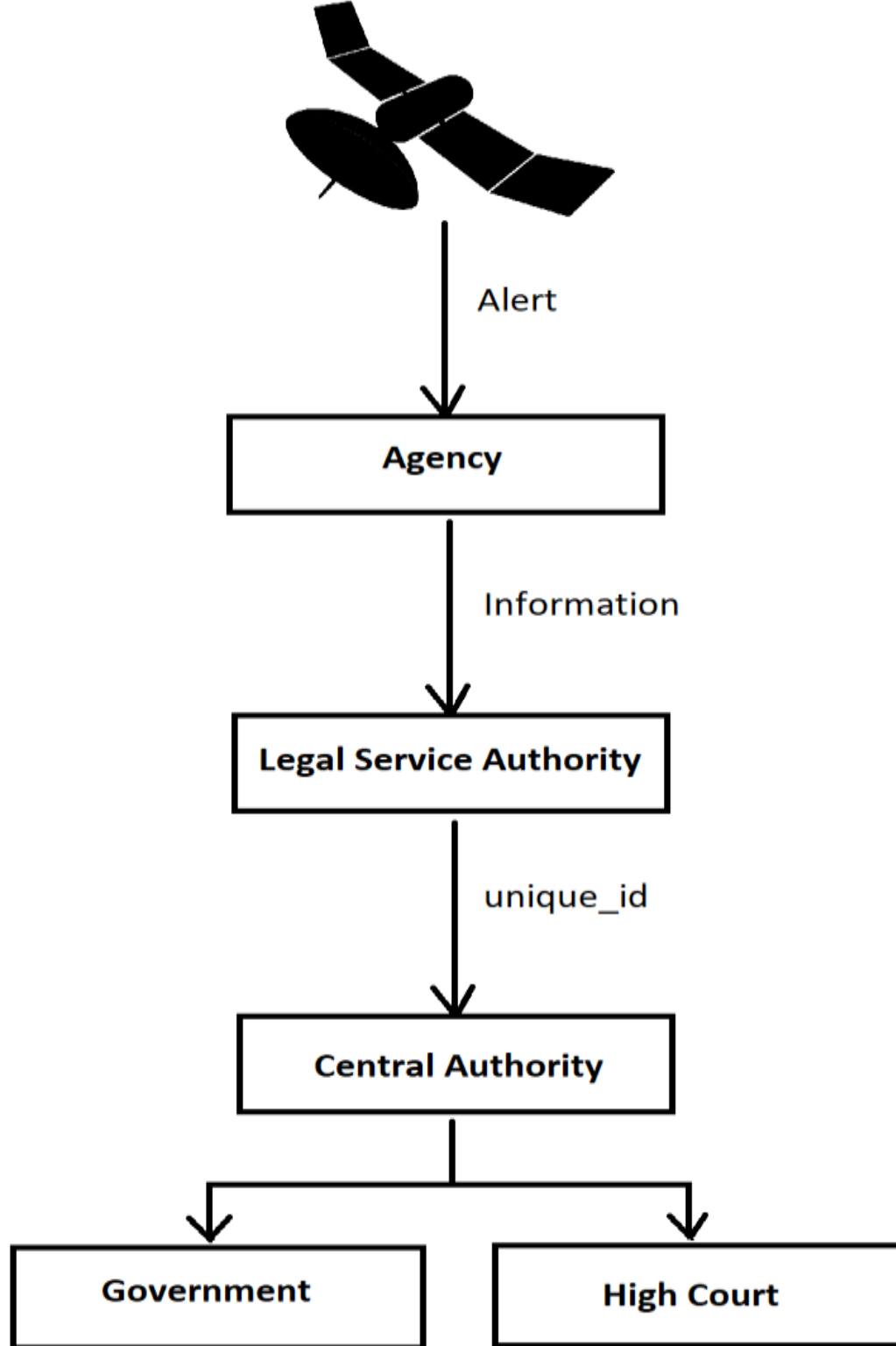
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- The administration of electronic justice must be accessible.
  - It must be easy to litigants to take matters to court
  - ICT structure capable to reduce legal costs
  - Architecture must be simple so as to make parties to understand the procedure
  - Quality of justice should not suffer
  - Fair trial must be ensured
  - Legal aid

# System design for Public Law remedy

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- Rule of law
- Desirable relationship People- Law- Government
- Legal redressal through public authority
- Judicial redressal





# The way forward

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- Suggestions in fourth revolution p106
- Contextual {mind} how we understand and apply our knowledge
- Emotional {heart} how we process and integrate our thoughts and feelings and relate to ourselves and one to another
- Inspired { the soul} how we use a sense of individual and shared purpose, trust , and other virtues to effect change and act towards the common good
- Physical { the body} how we cultivate our health to apply energy required for transformation.

# How does Technology enable the court to modernise

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- Text creations
- Storage
- Retrieval
- Improved access to courts
- Recording court proceedings
- Case management

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- E filing and digital management of files
  - Networked with hierarchy of courts
  - E court fee
  - Digital signature
  - Docket management

movement of the file can be easily tracked

theft of file can be prevented – RFID TAGS , Radio frequency identification

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- Video conferencing

For criminal courts

dispensing presence of under trial prisoners

- For evidence in criminal and civil cases
- For mediation and conciliation



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- Annotation and witness monitor

annotation monitors allow a witness to explain where crucial event occurred on a particular piece of evidence, witness can view exhibits in the monitor

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- Recoding evidence
  - Voice dictation like dragon, Voice writings, Dictaphones etc
  - Management of Roll call – developing software
  - Management of Diary postings – linking with lawyers

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- Bio metric identification
  - Linking Aadhar with case files
  - Identity of accused can be verified
  - For use in Bail matters
  - For imposing conditions in bail
  - For verifying in number of cases in which a person is involved

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- Use of bio metric contd..
  - For awarding compensation under section 350 Of Criminal procedure code
  - For insolvency cases
  - Plea of no means
  - For address verification

<https://youtu.be/FX98I2rAy3o> Chinese courtroom uses virtual reality to recreate crime scene

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<https://youtu.be/4QTJqaq32O4>

Virtual Reality Coming to the Courtroom – High Impact

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<https://youtu.be/nB-yIshPMaI>

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The McGlothlin Courtroom: Court Reporter Station (HD  
1080p)

<https://youtu.be/ZAKkTtsPKOA>

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How to Write on the Steno Machine  
Court Reporting and Captioning at Home



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**Thank you**