Legsys.AI Technology Foundation | Adalat AI



About the Organization

Adalat AI is a non-profit justice-tech organization building an end-to-end AI platform for courts in India and the Global South. Our work focuses on strengthening judicial state capacity by modernizing core courtroom workflows—transcription, documentation, case-flow management, and evidence handling.

We work directly with High Courts and District Courts to make justice timely, accessible, and efficient, especially for the millions of litigants from low-income and marginalized communities who are disproportionately harmed by delays.

Problem Statement (use case specific)

India has 50 million pending cases and it takes an average of 13 years for a case to conclude. Despite judges and court staff working relentlessly, they are trapped in a system where manual documentation bottlenecks, especially stenography shortages, cause extreme delays.

Courts spend a lot of their time on routine tasks like writing orders, evidence summaries, and dictation—leaving little time for adjudication. Live transcription and workflow automation are essential to unblocking this capacity.

Al is a relevant solution because it is the only scalable, low-cost way to eliminate stenography shortages, digitize evidence in real time, and automate documentation at massive scale across thousands of courtrooms.

Al Solution Description

Adalat AI provides an AI-powered courtroom OS anchored around live speech-to-text transcription for Indian legal language, multilingual translation, case-flow management, document generation, and evidence organization. It serves:

- Judges (real-time transcription, order/judgment drafting, automated templates)
- Court staff & stenographers (note-taking, docket creation, exhibit management)
- Lawyers (hearing transcripts, case-file navigation)
- Litigants (transparent and timely processing of their cases)

Our system is deployed directly inside courtrooms through a secure web platform running on judicial networks.

Tools and Techniques Used

- Automatic Speech Recognition (ASR) optimized for Indian court speech (legal vocabulary, accents, dialects)
- Natural Language Processing (NLP) for summarization, entity tagging, exhibit mapping, and judgment drafting
- Machine translation across major Indian languages
- Custom LLMs fine-tuned on legal data (privacy-preserving, India-hosted)
- Automated document pipeline (orders, warrants, deposition summaries)
- Secure cloud/on-prem deployment on Azure with role-based access controls

Key Features of the Tech Solution

- Live courtroom transcription with high accuracy in noisy, multi-speaker
- Multilingual capabilities (English ↔ Indian languages)
- Al-generated orders, evidence summaries & case notes
- Case-flow management dashboard for judges and staff
- Searchable transcript repository with speaker attribution and timestamps
- On-prem / sovereign cloud deployment meeting judicial data-security standards
- Low-resource optimization for courts with minimal hardware

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Impact (Qualitative and Quantitative)

Current user base:

- 4,000+ courtrooms across 9 states using or piloting Adalat AI
- Mandate in Kerala requiring all courts to use Adalat AI for evidence recording (first statewide AI mandate globally)
- Deployments and pilots across Karnataka, Andhra Pradesh, Delhi, Odisha, Bihar, Madhya Pradesh, and others

Outcomes:

- Reduction of order-writing time from 45–60 minutes → under 10 minutes
- Ability to finish 2–3x more witnesses per day, reducing hearing timelines
- Judges report 30–50% faster disposal in matters using Al-generated documentation
- Significant reduction in the dependency on stenographers, eliminating a major historical bottleneck

Plan for roll-out and sustainability

- Scale to all districts of Kerala (with mandate) and full state of Andhra Pradesh.
- Extend deployments in Karnataka, Odisha, and Bihar through training academies and judicial administrative orders.
- Build a long-term National Judicial Tech Stack in partnership with High Courts and state governments.

Sustainability through:

- State judicial budgets
- Government innovation funds
- Low-cost hosting models and on-prem deployments
- Capacity-building at judicial academies for long-term independent use

Additional documents

- Presentation provided earlier (available <u>here</u>)
- Solution Demo Videos (available here)
- User Testimonials (available <u>here</u> and <u>here</u>)