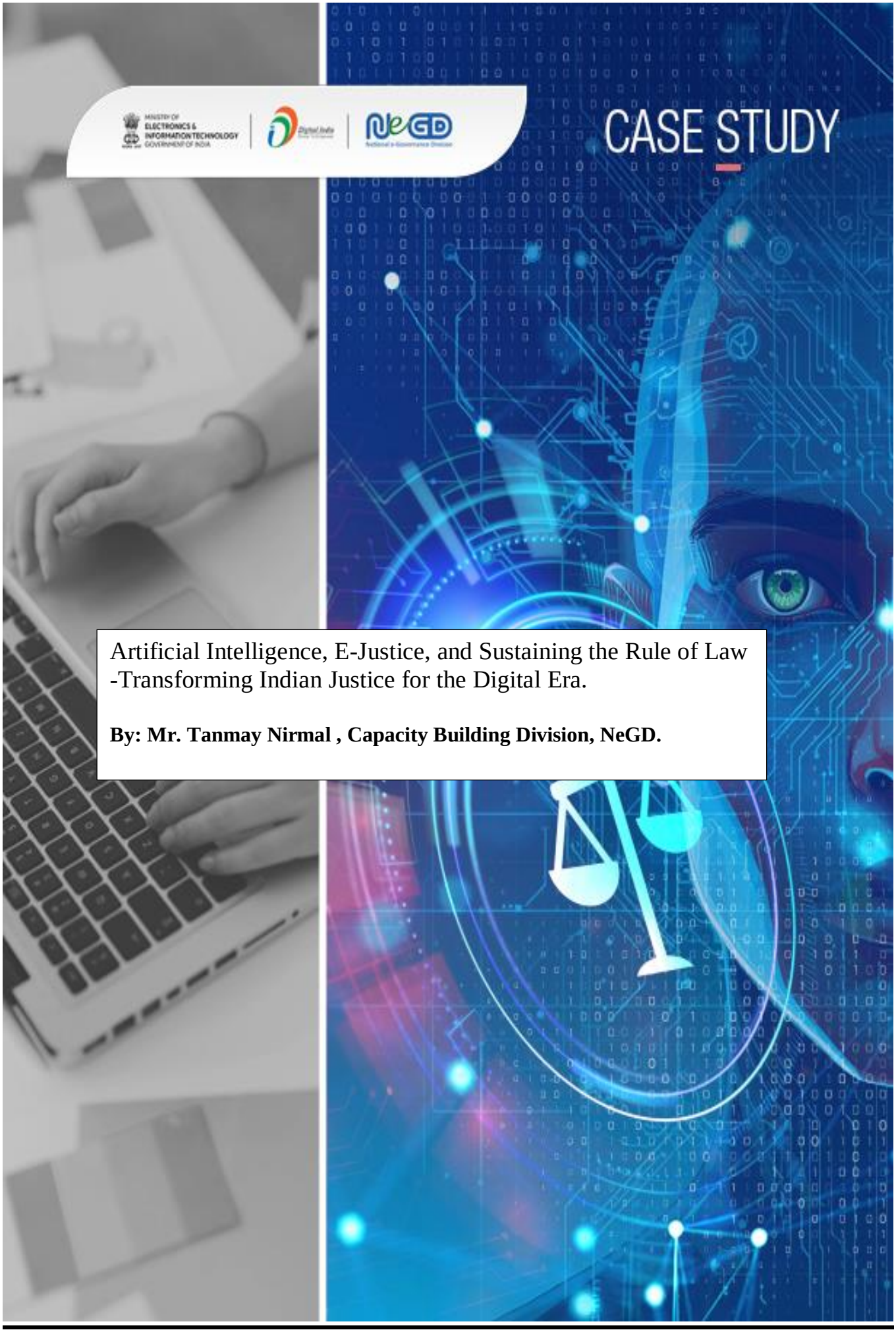

Artificial Intelligence, E-Justice, and Sustaining the Rule of Law -Transforming Indian Justice for the Digital Era.

By: Mr. Tanmay Nirmal , Capacity Building Division, NeGD.

Introduction

The National e-Governance Division (NeGD), under the Ministry of Electronics & Information Technology (MeitY), is leading the charge in realizing the Digital India vision. A cornerstone of this mission is Capacity Building (CB), which empowers government officials and stakeholders with the expertise needed to implement and sustain transformative digital initiatives.

This case study, "Artificial Intelligence, E-Justice, and Sustaining the Rule of Law — Transforming Indian Justice for the Digital Era," is part of NeGD's ongoing commitment to document, analyze, and share best practices in digital governance and innovation. Developed by internal experts at the Technical Advisory Unit (TAU), this study offers a comprehensive exploration of how AI and digital technologies are reshaping the Indian justice system, enhancing efficiency, accessibility, and the rule of law.

As AI becomes increasingly integrated into judicial processes—through smart case management, predictive analytics, legal research, and user-facing chatbots—the imperative to ensure ethical, secure, and reliable use of these technologies grows. The study examines both the opportunities and challenges of AI adoption, including issues of algorithmic bias, transparency, data privacy, and the need for robust governance frameworks.

Our methodology combines in-depth research, analysis of policy and security frameworks, and interviews with key stakeholders and domain experts who are shaping India's approach to digital justice. This ensures that the narratives are accurate and enriched with practical insights and firsthand perspectives.

The objective of this repository is to serve as a valuable knowledge asset for policymakers, program managers, technologists, and implementers at all levels of government. By facilitating learning and enabling the development of robust, responsive digital solutions, it supports the broader Digital India initiative and the evolution of a citizen-centric, transparent, and sustainable justice system

Acknowledgment

The Capacity Building Division, NeGD, extends its sincere gratitude to Shri Tanmaya Nirmal from the Technical Advisory Unit (TAU) for authoring this insightful and detailed case study on Artificial Intelligence, E-Justice, and Sustaining the Rule of Law—Transforming Indian Justice for the Digital Era. His comprehensive analysis of government strategies, local initiatives, international benchmarks, and forward-looking recommendations has enriched our understanding of technology's role in democratizing access to justice.

We also acknowledge the invaluable contributions of various Government Pleaders, Nodal Officers, and departmental users from the e-Courts ecosystem, whose on-ground feedback illuminated the practical impacts of AI-driven tools like SUVAS, the National Judicial Data Grid (NJDG), and virtual hearing platforms on efficiency, inclusivity, and litigant usability.

Furthermore, we extend our deepest thanks to the internal experts at NeGD who meticulously reviewed this document. Their rigorous scrutiny ensured alignment with our pedagogical standards, factual accuracy—drawing from sources such as the Digital India programme, E-Courts Phase III, and global frameworks like the EU AI Act—and its enduring value as a resource for capacity building among judicial stakeholders, legal professionals, and policymakers.

Disclaimer

This case study has been developed by the National e-Governance Division (NeGD) under its Capacity Building mandate for the purpose of knowledge sharing and academic reference. The information presented herein has been compiled from official government sources, project documents, and interviews with relevant stakeholders involved.

While every effort has been made to ensure the accuracy and reliability of the information, this document is intended for educational and illustrative purposes only. It should not be interpreted as an official policy statement or a guideline for implementation. The views and conclusions expressed are those of the author and contributors based on their analysis and do not necessarily reflect the official position of the Ministry of Electronics & Information Technology (MeitY) or the National e-Governance Division (NeGD).

The commercial use of this material is strictly prohibited. This case study is meant to be used as a learning tool for government officials, trainees, and individuals interested in e-Governance and public policy.

Any reproduction or use of this material must include proper attribution to 'National e-Governance Division (NeGD).' All intellectual property rights remain with NeGD unless otherwise specified.

Case Study: Artificial Intelligence, E-Justice, and Sustaining the Rule of Law —Transforming Indian Justice for the Digital Era

INTRODUCTION

India's justice system stands at a historic moment, confronted with a convergence of technological innovation, evolving public expectations, and urgent imperatives for reform. The "reset moment" is not simply about digitisation or process efficiency, but a fundamental reinvention of the law's purpose, capability, and reach in a democratic society. Artificial Intelligence (AI), cloud computing, and digital services are reshaping pathways to justice. This case study analyses these dynamics with reference to Indian government strategies, exemplary local initiatives, emerging challenges, notable international comparisons, and future-proven recommendations. In the context of India's vast population and diverse socio-economic landscape, this transformation is particularly critical. With over 1.4 billion citizens, many residing in remote or underserved areas, the integration of AI and digital tools promises to democratise access to justice, reducing the historical barriers posed by geography, language, and cost. As verified through recent governmental reports, initiatives like the Digital India programme have already laid the groundwork for this shift, emphasising inclusive growth and technological empowerment.

CORE THEMES: THE NEW LEGAL PARADIGM

The Paradigmatic Reset

The twenty-first-century legal landscape is marked not just by incremental reform but by radical transformation driven by new technologies and changing expectations.

Professional boundaries are dissolving: lawyers now collaborate with technologists, data scientists, legal engineers, and policy strategists, forging multidisciplinary ecosystems.

"E-Justice" is not merely digital convenience; it is the centrepiece for broadening access, increasing transparency, and driving fairness within legal proceedings.[i] This paradigm shift is evident in the evolving role of legal professionals, who are increasingly required to possess skills in data analytics and cybersecurity alongside traditional jurisprudence. For instance, the emergence of 'legal ops' roles within law firms illustrates how operational efficiency is being prioritised, blending legal expertise with business acumen to streamline workflows and reduce costs. Moreover, public expectations have evolved, with citizens demanding faster resolutions and greater accountability,

influenced by the ubiquity of digital services in other sectors like banking and e-commerce.[ii]

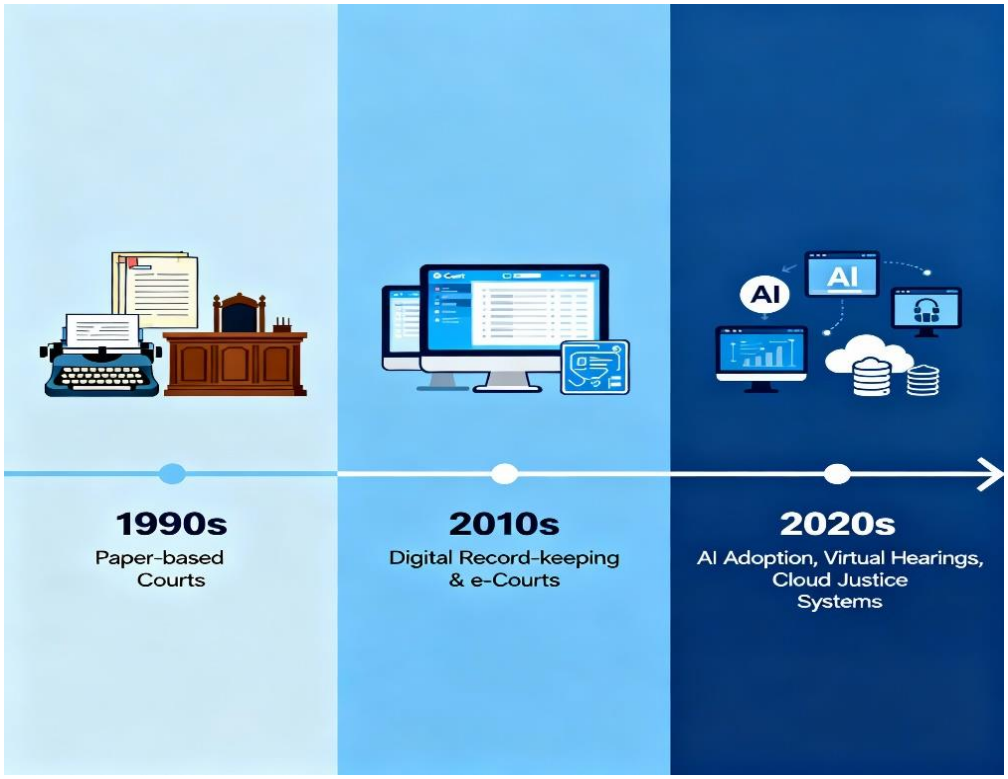

Figure 1: Legal Ecosystem Transformation Timeline

Technology, AI, and the Rule of Law

AI stands as both an enabler and disruptor. Automation streamlines routine judicial functions — research, drafting, translation—while predictive analytics support complex case management and policy formulation.

E-Justice platforms offer anytime, anywhere access to justice — bridging gaps for rural residents, people with disabilities, and financially disadvantaged litigants.[iii]

Cloud infrastructure enables interoperable, secure data sharing among courts, police, and government agencies. AI's disruptive potential lies in its ability to analyse vast datasets for patterns that human reviewers might overlook, such as predicting case outcomes based on historical precedents. However, this must be balanced with upholding the rule of law, ensuring that AI decisions align with constitutional principles like equality and non-discrimination. International benchmarks, such as those from the OECD, emphasise ethical AI deployment to prevent erosion of public trust. [iv]In India, this is particularly relevant given the cultural and linguistic diversity, where AI tools must be trained on inclusive datasets to avoid perpetuating biases.[v]

GOVERNMENT PLANS AND NATIONAL STRATEGY

Digital India and the E-Courts Mission

The Ministry of Electronics and Information Technology, alongside the Ministry of Law and Justice and NITI Aayog, spearheads transformative digital efforts centred around the flagship Digital India initiative, aiming at a faceless, paperless, and cashless government.

The e-Courts Mission Mode Project Phase III has received government approval with a ₹7,210 crore outlay (2023-2027) and an allocation of ₹53.57 crore specifically earmarked for emerging technologies like AI and blockchain deployed across High Courts.[vi]

Deliverables encompass AI-driven case management, real-time reporting and transcription, automated judicial scheduling, and predictive caseflow analytics.This substantial investment reflects the government's commitment to modernising the judiciary, with Phase III building on previous phases that computerised over 18,000 courts. Key objectives include creating a unified technology platform for seamless integration across judicial levels, incorporating features like video conferencing and electronic filing to minimise physical appearances. As confirmed by official press releases, this phase aims to achieve 'maximum ease of justice' through paperless courts, directly addressing the inefficiencies that have plagued the system for decades. Furthermore, the allocation for AI and blockchain underscores a forward-looking approach, with blockchain ensuring tamper-proof records and AI optimising resource allocation.[vii]

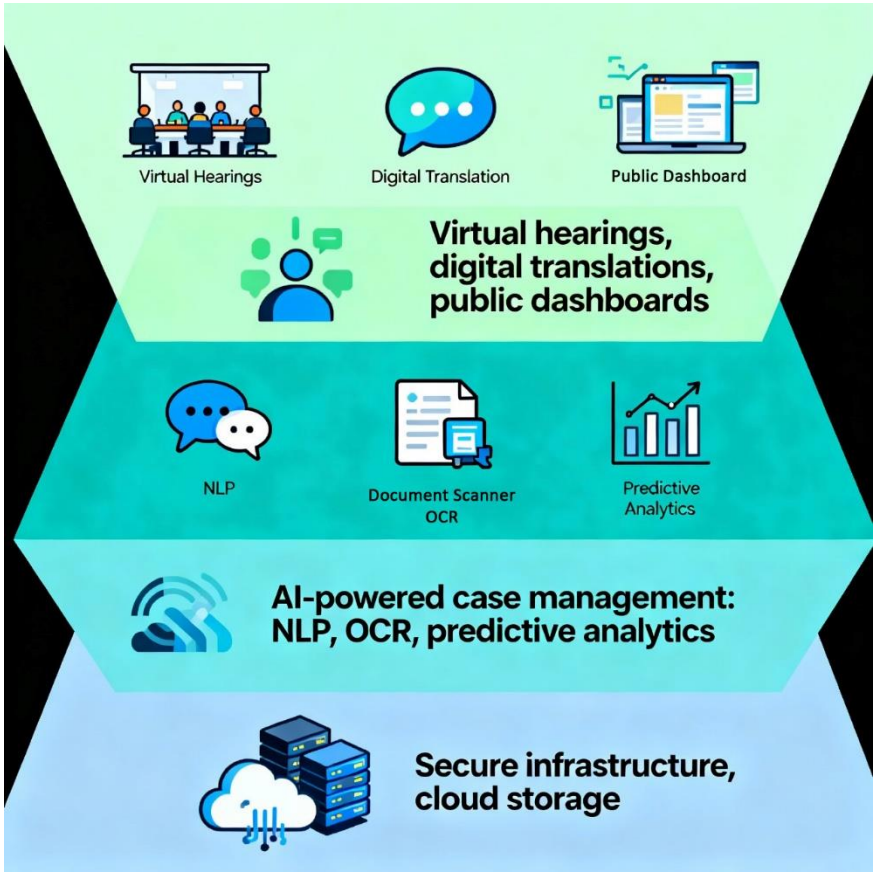

Figure 2: E-Courts Technology Stack

AI and Multilingual Justice

Noteworthy initiatives such as **SUVAS** (Supreme Court Vidhik Anuvaad Software) provide real-time AI-powered translation to overcome India's linguistic diversity spanning over two dozen major languages, advancing judicial inclusivity.

Live transcription technology is being integrated into Constitution Bench hearings, enhancing transparency and accessibility. SUVAS, developed in collaboration with tech partners, utilises machine learning to translate judgments and orders into regional languages, making legal documents accessible to non-English speakers. This tool has been pivotal in promoting judicial inclusivity, as it addresses the barrier of India's 22 official languages and numerous dialects. Recent updates indicate its expansion to cover more languages, with accuracy rates improving through continuous AI training. Live transcription, meanwhile, allows real-time access to proceedings via online portals, fostering public engagement and accountability.[viiiix]

Skill Development and Multidisciplinary Education

National Education Policy (NEP 2020) and Bar Council of India reforms incentivise the fusion of law, technology, privacy, and ethics in curricula, catalysing new professional tracks: legal engineers, data protection officers, and AI compliance specialists.[xxi]

Industry-academic collaborations (e.g., partnerships with NASSCOM, IITs, TCS) foster research into legal AI models, digital compliance, and algorithmic governance. These reforms are designed to prepare a new generation of legal professionals for a tech-driven future. For example, curricula now include modules on data privacy laws and ethical AI use, responding to the growing need for expertise in areas like cybersecurity in legal practice. Collaborations with industry leaders have led to joint research projects, such as developing AI models tailored for Indian legal contexts, ensuring that education remains relevant and practical.

INDIAN BEST PRACTICES AND NOTABLE CASE STUDIES

The e-Courts Project and National Judicial Data Grid (NJDG)

Currently, 18,735 courts are connected to the National Judicial Data Grid, a platform providing real-time updates on pendency, case statuses, and judgments.[xii]

Real-time dashboards enable policymakers to target sources of delay and judicial inefficiency, transforming accountability and public trust. The NJDG serves as a central repository, aggregating data from district, subordinate, and high courts, allowing stakeholders to monitor trends and implement targeted interventions. As of recent data, it tracks over 47 million cases, highlighting areas of high pendency for resource reallocation. This transparency has been instrumental in building public confidence, as citizens can now track their cases online without intermediary dependence. Additionally, the grid's analytics tools help identify bottlenecks, such as procedural delays in specific regions, enabling evidence-based policy-making.[xiii]

Virtual Hearings and Open Courts

COVID-19 accelerated adoption of virtual hearings, enabling courts nationwide to conduct remote proceedings, significantly improving access for all, including vulnerable groups.

Tools like **Adalat.AI** automate transcription and deposition recording, saving resources and enhancing judicial accuracy. [xiv][v]Virtual hearings have become a mainstay, reducing travel burdens and expediting processes, particularly for those in rural areas or with mobility issues. The Kerala High Court has mandated that all witness depositions starting November 1 2025, will be “primarily recorded” using the **Adalat AI**, a Voice-to-Text Transcription Tool. This makes Kerala the first Indian state to mandate AI transcription as a default across its district courts.[xv] Platforms like **Adalat.AI** leverage AI for accurate, real-time documentation, minimising errors and freeing judicial time for substantive matters. This shift has also promoted environmental sustainability by cutting paper usage and travel emissions.[xvi]

LegalTech Innovation and Startups

India hosts over 950 legal tech startups. Entrepreneurs are pioneering AI-driven platforms for legal research, contract automation, compliance dashboards, and citizen-centric legal aid.

Leading startups include **LawSeek.ai**[xvii], **Vakilsearch**[xviii], **LegitQuest**[xix], and **CaseMine**[xx]. These companies focus on integrating AI to improve rural justice access, SME legal services, judiciary research, and predictive litigation analytics. The LegalTech sector in India has grown exponentially, with startups attracting significant venture capital. Recent estimates place the number at around 960, reflecting a vibrant ecosystem driven by AI advancements. These firms offer solutions like automated contract review, which uses natural language processing to flag risks, and predictive analytics that forecast litigation success rates based on past data. For small and medium enterprises (SMEs), this means affordable compliance tools, levelling the playing field against larger corporations.[xxi]

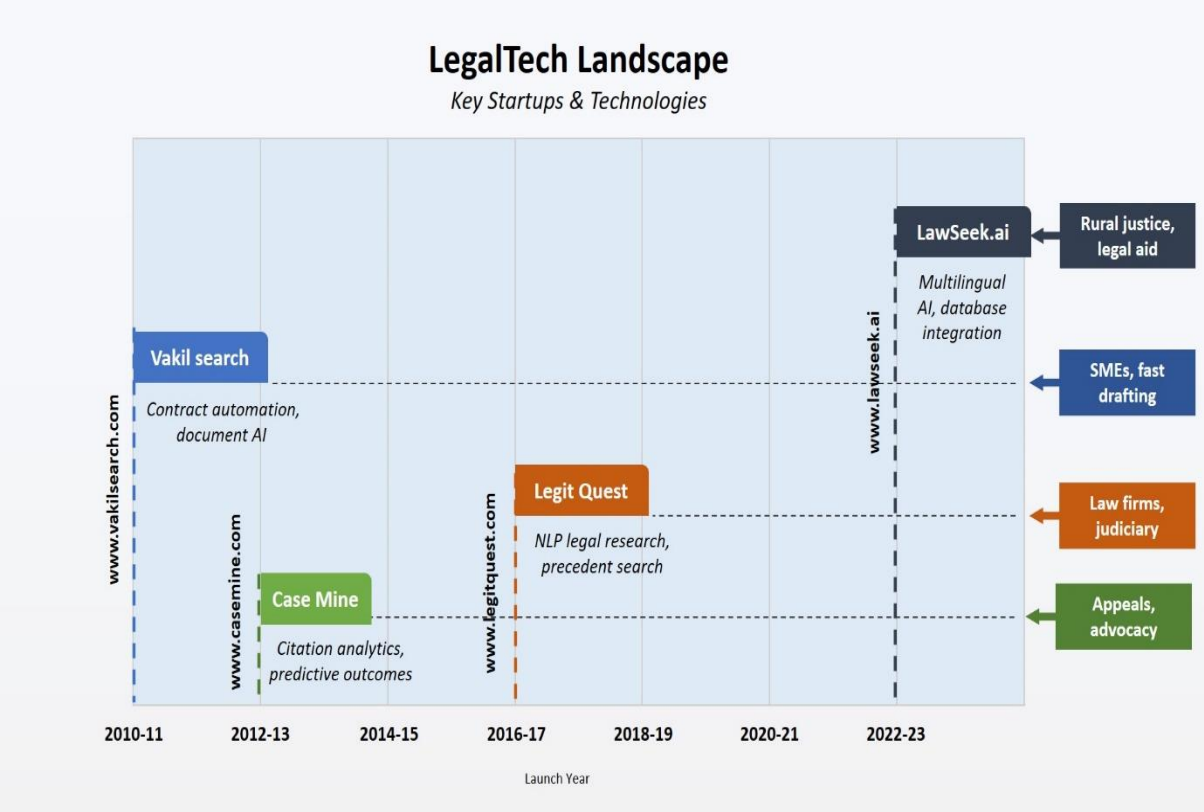

Figure 4: LegalTech Landscape Table

Legal Literacy and Digital Access

Government initiatives and NGOs deploy multilingual apps and AI chatbots to promote legal literacy, demystifying the law for ordinary citizens and supporting equitable justice. These tools, such as AI-powered chatbots on government portals, provide instant answers to common legal queries in multiple languages, empowering users to understand their rights without consulting lawyers initially. NGOs like iProbono have developed apps that connect users with pro bono services, further enhancing accessibility.[xxii]

Public-Private Partnerships

Collaborations like Digital Infrastructure for Knowledge Sharing (DIKSHA) may unite judicial chambers, academia, and industry to scale privacy-respecting AI solutions promoting judicial fairness and efficiency. DIKSHA facilitates resource sharing, including training modules on AI ethics, ensuring that partnerships yield scalable, ethical innovations. Such collaborations have led to pilot projects testing AI in case triage, demonstrating efficiency gains.

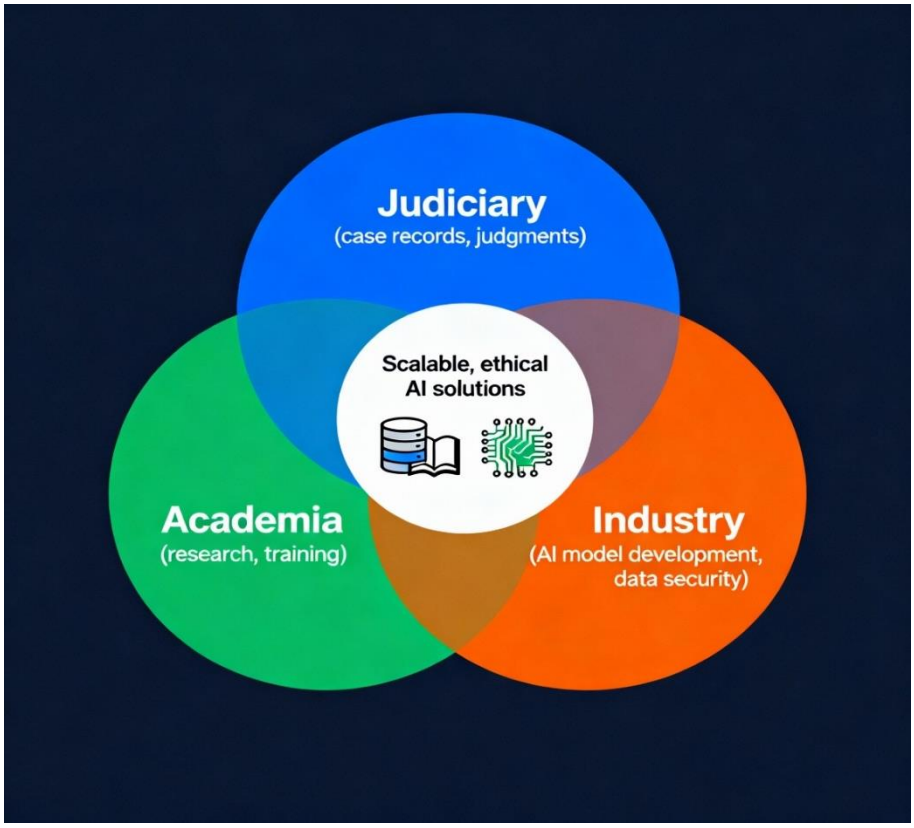

Figure 5: Public-private partnership diagram

CHALLENGES AND EMERGING ISSUES

Data Privacy and Security

The massive digitisation of court records elevates risks concerning data privacy and security. The Digital Personal Data Protection Act, 2023, provides a legislative framework for safeguarding litigant information. However, continuous oversight is crucial given dependency on cloud-based platforms and potential cross-border data flows. Enacted in August 2023, the DPDP Act mandates consent-based data processing and imposes penalties for breaches, aligning India with global standards like the GDPR. Challenges include enforcing compliance in a federated system and addressing vulnerabilities in cloud storage, where cyberattacks could compromise sensitive information. Ongoing

audits and international data flow regulations are essential to mitigate these risks.[xxiii]

Algorithmic Bias and Transparency

Bias mitigation, algorithmic explainability, and human oversight remain fundamental to ensure fairness in AI-aided judicial systems. Judicial authorities mandate regular audits of AI tools to prevent “black box” decisions. Algorithmic bias can arise from skewed training data, potentially disadvantaging marginalised groups. Transparency requires 'explainable AI' models that allow judges to understand decision rationales, with audits conducted by independent bodies to ensure impartiality.

Reliability and Human Oversight

AI-powered transcription and adjudication tools require verification by human judges to maintain legal standards and due process, especially to manage regional language nuances and technical accuracy. While AI enhances speed, human oversight is indispensable for contextual interpretation, particularly in nuanced cases involving cultural sensitivities. Training programmes for judges on AI limitations are vital to uphold due process.

INTERNATIONAL CASE STUDIES AND BENCHMARKS

European Union: AI Act and Judicial Digitalisation

The EU’s AI Act sets pioneering standards enforcing transparency, human review, and risk-based regulation of AI. The EU's “E-Justice Scoreboard” projects a model of cross-border judicial data cooperation informed by advanced digitalisation strategies.[xxiv]

Cross-border digital case management and open judicial data now underpin the EU’s “E-Justice Scoreboard”; these lessons guide India’s NJDG and e-Courts strategy. The AI Act, effective from 2024, categorises AI systems by risk levels, prohibiting high-risk applications without safeguards. It promotes judicial digitalisation through interoperable platforms, offering India insights into harmonised data sharing and ethical AI governance.[xxv]

Jurisdiction	AI Regulation Principle	Judicial Digitalisation Level	Key Risks Addressed
EU	Risk-based, explainability	European Commission	Bias, Privacy
USA	Innovation-first, market-led	FTC, State Courts	Access Oversight Gaps
India	Balanced, inclusion-centred	MEITY, NITI Aayog	Non-Inclusivity, Language Social Equity
Singapore	Proactive, education-led	MinLaw, SG Courts	High Talent, Pipeline, local nuance

Figure 6: Comparative Benchmark Table

United States: LegalTech Adoption and Access Gaps

Despite widespread adoption of LegalTech in the US, an access-to-justice gap persists: *92% of low-income litigants did not receive any or enough legal help for their civil legal problems*[xxvi], underscoring the need for policy interventions alongside technological innovation. The US experience highlights that technology alone cannot bridge gaps without supportive policies, such as funding for legal aid. India's initiatives must incorporate similar measures to avoid exacerbating inequalities.[xxvii]

Singapore and Australia: Technology Courts and Legal Education

Singapore's court system integrates digital dispute resolution, AI legal research, and digital training for judges and advocates. Singapore's Community Justice and Tribunals System enables online dispute resolution, reducing court burdens. [xxviii]

Australia's hubs foster AI research, providing models for India's multidisciplinary education reforms.[xxix]

IMPACT ASSESSMENT: OUTCOMES AND OPPORTUNITIES

Reducing Delays and Increasing Inclusivity

India's judicial backlog reached over 50 million pending cases.[xxx] AI tools for case prioritisation, virtual hearings, and automated paperwork substantially reduce delays and enhance litigant access.

AI-powered translation and chatbots break down language and procedural barriers, especially benefiting rural and non-English-speaking populations. With pendency exceeding 53 million cases as of September 2025, [xxxi]AI-driven prioritisation algorithms can categorise cases by urgency, accelerating resolutions. This has led to measurable reductions in backlog in pilot courts, promoting inclusivity for underserved demographics.[xxxii]

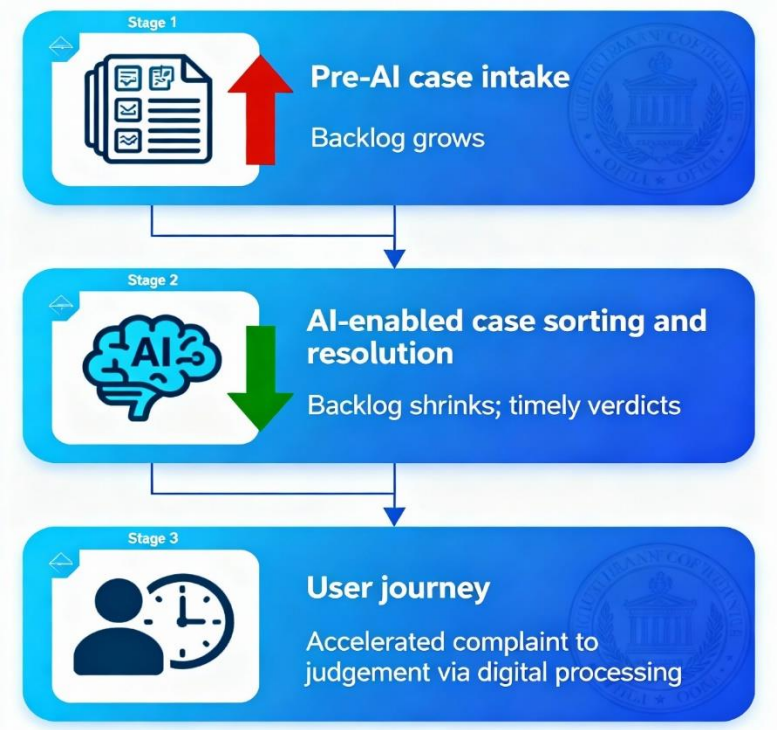

Figure 7: Case Pendency Reduction Flowchart

Citizens' Rights and Public Trust

NJDG's transparency tools, live-streaming of constitutional hearings, and digital literacy campaigns increase public trust and engagement with the judicial system. These measures empower citizens, fostering a sense of ownership and reducing perceptions of opacity in judicial processes.[xxxiii]

Legal Industry Evolution

Interdisciplinary legal training has cultivated new professionals blending AI expertise with legal practice, accelerating reform and innovation within courts and law firms. This evolution is creating a more agile legal workforce capable of navigating digital challenges.

STRATEGIC RECOMMENDATIONS AND FUTURE ROADMAP

Human-machine Collaboration

AI must amplify, not replace, human judgement. Frameworks ensuring explainability, accountability, and cultural adaptability are vital.

Regulatory frameworks must enshrine “explainability” and local adaptability as principles, reflecting India’s linguistic and social complexity. Establishing 'human-in-the-loop' systems ensures AI supports rather than supplants judicial discretion, with regular ethical reviews.

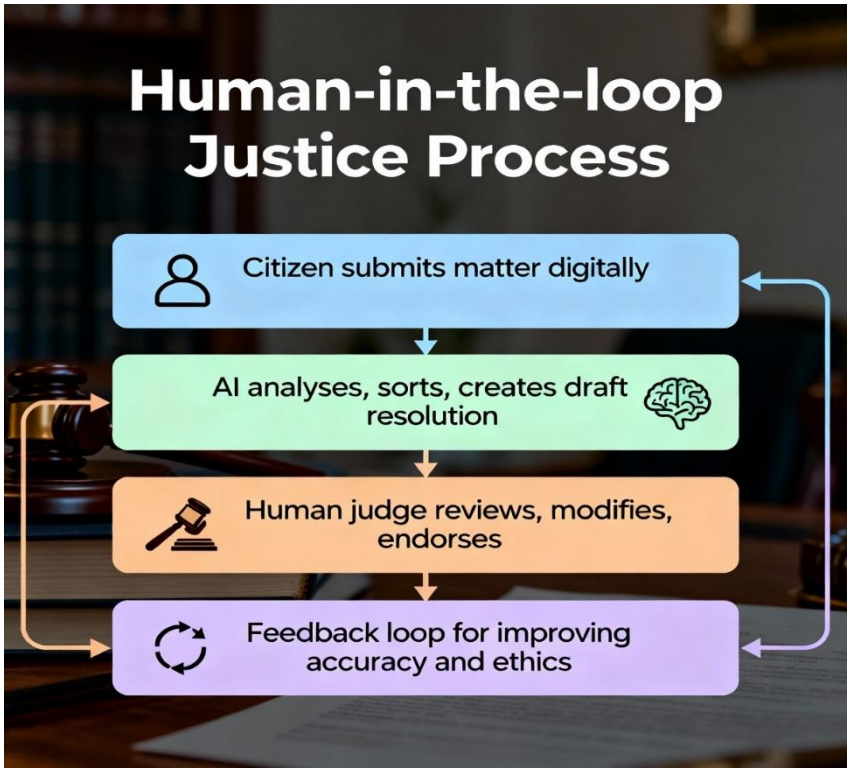

Figure 8: Human-in-the-loop Justice Flow

Multidisciplinary Training and Research

Law schools, bar councils, and academic institutions should institutionalise AI, ethics, data protection, and social justice modules in their curricula.

Judicial officers need ongoing professional development in digital tools and best practice governance.

Regulatory Foresight and AI Sandboxes

Judicial and government “sandboxes” for legal technology allow pilots under close ethical and technical scrutiny, modelled on EU “compliance labs.”

Stakeholder representation should include civil society, not just lawyers and technologists. Sandboxes enable safe testing of innovations, accelerating adoption while managing risks.

Democratise Legal Data and Support

Expand NJDG and open-access data, ensuring privacy and oversight. Use AI tools for real-time translation, digital legal literacy, and plain language explainers.

Target outreach in local languages and dialects for true justice accessibility. Open data initiatives, balanced with privacy protections, can spur further innovation.

International Engagement and Harmonisation

India must remain active in global law and AI standards bodies (OECD, Hague Conference, G20) to ensure harmonised, cross-border digital justice.

Bilateral exchanges and sharing with leading jurisdictions will strengthen India's talent pool, technology base, and regulatory agility. Active participation in forums like the G20 will position India as a leader in ethical AI for the pursuit of justice.

CONCLUSION

The transformation of India's justice system is neither theoretical nor tentative; it is happening today. AI and e-justice platforms are resolving longstanding delays, broadening inclusivity, and building public trust. Yet, as the book emphasises, the real "reset" lies in the legal sector's ability to uphold the rule of law, safeguard rights, and serve society's evolving needs, not just deliver technological efficiency.

Technology, when carefully governed and inclusively deployed, can make India a global benchmark for just, transparent, and effective justice. A new generation of professionals and public servants, empowered by ethical AI, multidisciplinary collaboration, and supportive regulation, will deliver on the promise of fairness and accessibility for all.

With sustained investment, ongoing oversight, and ambitious leadership, India can shape the frontier of global legal innovation, providing not just "law as service", but true justice, in the digital era. This vision requires collective effort from all stakeholders to realise a judiciary that is not only efficient but equitable, setting a precedent for developing nations worldwide.

---

[i] https://www.sciencedirect.com/science/article/pii/S0740624X23000643
[ii] https://op.europa.eu/webpub/com/eu-what-it-is/en/
[iii] https://documents1.worldbank.org/curated/en/570521469672196913/pdf/multi0page.pdf
[iv] https://www.oecd.org/en/topics/sub-issues/ai-principles.html
[v] https://eucrim.eu/articles/artificial-intelligence-and-digitalisation-of-judicial-cooperation/
[vi] https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2085127
[vii] https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2085127
[viii] https://www.drishtijudiciary.com/current-affairs/supreme-court-vidhik-anuvaad-software-suvas
[ix] https://www.pib.gov.in/PressReleasePage.aspx?PRID=1947490
[x] https://www.researchgate.net/publication/366223555_National_Education_Policy_2020_and_Challenges_to_the_Bar_Council_of_India
[xi] https://www.barcouncilofindia.org/info/clarificat-vfrru1

[xii] https://doj.gov.in/the-national-judicial-data-grid-njdg/
[xiii] https://doj.gov.in/the-national-judicial-data-grid-njdg/
[xiv] https://www.adalat.ai/
[xv] https://www.medianama.com/2025/10/223-kerala-hc-adalat-ai-witness-deposition-transcription/
[xvi] https://legalmaestros.com/current-legal-update/how-adalat-ais-tech-innovations-are-bridging-legal-gaps-for-millions/
[xvii] https://www.lawseek.ai/
[xviii] https://vakilsearch.com/
[xix] https://www.legitquest.com/
[xx] https://www.casemine.com/
[xxi] https://tracxn.com/d/explore/legal-tech-startups-in-india/__E1QQRMw4NEjHwC6iLnpj5s5God9ZktQAeqwocPbdMfk/companies
[xxii] https://i-probono.com/wp-content/uploads/2025/04/Strength-in-Solidarity.pdf
[xxiii] https://www.meity.gov.in/static/uploads/2024/06/2bf1f0e9f04e6fb4f8fef35e82c42aa5.pdf
[xxiv] https://www.cnj.jus.br/wp-content/uploads/2022/11/report-e-justice-v6-compressed.pdf
[xxv] https://eucrim.eu/articles/artificial-intelligence-and-digitalisation-of-judicial-cooperation/
[xxvi] https://justicegap.lsc.gov/
[xxvii] https://justicegap.lsc.gov/
[xxviii] https://www.judiciary.gov.sg/alternatives-to-trial/enegotiation-emediation
[xxix] https://aii.unimelb.edu.au/wp-content/uploads/2024/10/InnovEd-Report_Digital_Final.pdf
[xxx] https://www.nytimes.com/2024/01/13/world/asia/india-judicial-backlog.html
[xxxi] https://hiteshcsoni.in/blogs-1/f/indias-judicial-pendency-judges-tireless-efforts-and-solution?blogcategory=Supreme+Court
[xxxii] https://en.wikipedia.org/wiki/Pendency_of_court_cases_in_India

End of the Document