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Transforming Justice: The Role and Regulation of Artificial Intelligence in Indian Judiciary

KUNDENA PRASHANTH KUMAR*  AND GANDU NARESH** 

ABSTRACT

Artificial Intelligence ("AI") is increasingly recognised as an important instrument of judicial modernisation and institutional reform. In India, persistent case pendency, procedural delays, linguistic diversity, voluminous judicial records, and limitations in judicial and administrative resources create significant demands upon the justice-delivery system. AI offers potential to enhance judicial efficiency, accessibility, and administrative functioning. The Indian judiciary has initiated several AI-enabled mechanisms, including the Supreme Court Vidhik Anuvaad Software ("SUVAS"), Supreme Court Portal for Assistance in Court Efficiency ("SUPACE"), AI-assisted transcription, National Judicial Data Grid ("NJDG"), e-Filing systems, and other digital judicial platforms. The Supreme Court's White Paper on Artificial Intelligence and Judiciary further identifies applications in case management, legal research, translation, transcription, document analysis, scheduling, and administrative automation. This research examines the transformative potential of AI within the Indian judicial process and the legal, constitutional, ethical, and institutional safeguards necessary for its responsible implementation. It analyses machine learning, natural language processing, optical character recognition, computer vision, predictive analytics, and generative AI in relation to judicial and administrative functions. The study further explores their potential application in case triage, scheduling, legal research, document management, routine drafting, multilingual services, alternative dispute resolution, and procedural-delay detection. Concurrently, it examines risks concerning algorithmic bias, opacity, AI hallucinations, fabricated legal authorities, privacy, confidentiality, cybersecurity, deepfakes, and excessive technological reliance. The paper argues that AI should function as an assistive and augmentative mechanism rather than an autonomous adjudicatory authority. A rights-based, human-supervised, and institutionally governed framework incorporating secure datasets, verification, auditability, transparency, accountability, and professional training is essential to ensure that

* Author is a Student at Aurora Deemed to be University, Bhongir, Telangana, India. ORCID: <https://orcid.org/0009-0000-4024-3435>

** Author is a Student at Aurora Deemed to be University, Bhongir, Telangana, India. ORCID: <https://orcid.org/0009-0001-3135-6021>

technological advancement strengthens the rule of law, judicial independence, procedural fairness, and the integrity of adjudication.

Keywords: Artificial Intelligence, Indian Judiciary, e-Courts, SUPACE, SUVAS, NJDG, Machine Learning, Natural Language Processing, Generative AI, Judicial Administration, Case Backlog, Algorithmic Bias, Access to Justice

I. INTRODUCTION

The administration of justice is presently undergoing a profound technological transformation. Artificial intelligence (AI) has evolved from a predominantly experimental field of computer science into a significant technological instrument capable of facilitating information retrieval, natural-language processing, documentary analysis, predictive assessment, process automation, and decision support. Within the legal and judicial sphere these capabilities assume particular significance, as courts are required to examine and adjudicate upon substantial volumes of structured and unstructured legal information, including pleadings, judicial precedents, statutory provisions, evidentiary materials, judicial orders, and administrative records.¹ AI can accordingly assist judicial institutions in undertaking repetitive, information-intensive, and computationally complex functions, particularly in legal research, document review, case management, translation, and administrative automation, thereby enhancing the efficiency and expedition of the judicial process.²

The imperative for technological transformation is particularly acute in India, where judicial institutions continue to grapple with substantial caseloads and persistent pendency. Replying to a Lok Sabha question on 16 December 2022, the Ministry of Law and Justice, drawing on National Judicial Data Grid (NJDG) data, reported more than 4.86 crore cases pending before the High Courts and District Courts.³ A Reuters report of April 2022, citing the then Chief Justice of India, N.V. Ramana, recorded over 40 million pending cases in the subordinate courts and underscored the inadequacy of judicial capacity relative to population and litigation.⁴ Although these figures date from 2022, they demonstrate the structural scale of the pendency that technological reform seeks to alleviate.

¹ ANURAG BHASKAR ET AL., WHITE PAPER ON ARTIFICIAL INTELLIGENCE AND JUDICIARY 8–12, 46–54 (Ctr. for Rsch. & Plan., Sup. Ct. of India 2025), <https://cdnbbsr.s3waas.gov.in/s3ec0490f1f4972d133619a60c30f3559e/uploads/2025/11/2025112244.pdf>.

² Khushbu Choudhary & Chandan Bala, *Impact of Artificial Intelligence on Judicial System*, 10 INT'L J. ADVANCED RSCH. & DEV. 1, 1–5 (2024), <https://www.multireviewjournal.com/assets/archives/2025/vol10issue1/10001.pdf>.

³ DEP'T OF JUST., MINISTRY OF LAW & JUST., GOV'T OF INDIA, *Use of Artificial Intelligence Tools in Judicial System*, Lok Sabha Starred Question No. 147 (answered Dec. 16, 2022), <https://sansad.in/getFile/lsapps/loksabhaquestions/annex/1710/AS147.pdf?source=lsapps>.

⁴ *India Has Court Backlog of 40 Million Cases, Chief Justice Says*, REUTERS (Apr. 30, 2022), <https://www.reuters.com/world/india/india-has-court-backlog-40-million-cases-chief-justice-says-2022-04-30/>.

India has established a substantial institutional framework for digital justice through the e-Courts Mission Mode Project. The Supreme Court's e-Committee, in coordination with the Department of Justice, has progressively advanced from basic digitisation towards an integrated digital judicial infrastructure. Phase I (2007–2015) focused on establishing core technological infrastructure, while Phase II (2015–2023) strengthened digital case management, e-filing, and the National Judicial Data Grid. Phase III, under way since 2023, envisages further integration through comprehensive digitisation, virtual courts, intelligent scheduling, and advanced technologies, including AI, machine learning (ML), optical character recognition (OCR), and natural language processing (NLP).⁵ The integration of AI into the judiciary is not merely a technological endeavour, since adjudication entails constitutional interpretation, evidentiary assessment, procedural fairness, institutional legitimacy, and individualised justice. Because AI systems rely on data-driven and computational processes, they may perpetuate embedded biases and, particularly in generative applications, produce fabricated authorities or erroneous legal analysis.^{6,7} The fundamental concern, therefore, is to ensure that technological assistance neither displaces human judicial responsibility nor undermines the transparency and legitimacy of adjudication.

II. RESEARCH METHODOLOGY

This study adopts a doctrinal, qualitative, analytical, and comparative methodology, supplemented by a systematic review of legal, academic, policy, and institutional materials concerning artificial intelligence and the judiciary. It examines the Supreme Court of India's *White Paper on Artificial Intelligence and Judiciary* (2025), governmental and parliamentary materials, judicial initiatives, academic scholarship, and comparative developments across jurisdictions. The research identifies AI applications relevant to judicial administration, evaluates existing initiatives such as SUPACE, SUVAS, AI-based transcription, the NJDG, and e-Courts Phase III, and assesses their potential to reduce case pendency and administrative delay. It further analyses the constitutional, legal, ethical, and institutional risks associated with AI deployment, including bias, opacity, and erroneous outputs. The study distinguishes between AI-assisted decision-making, which supports human adjudicators, and autonomous or AI-generated decision-making, which substantially determines outcomes. The analysis ultimately evaluates the safeguards necessary to ensure that AI enhances judicial efficiency without displacing human judicial responsibility, procedural fairness, or institutional legitimacy.

⁵ BHASKAR ET AL., *supra* note 1, at 46–48.

⁶ Rowena Rodrigues, *Legal and Human Rights Issues of AI: Gaps, Challenges and Vulnerabilities*, 4 J. RESPONSIBLE TECH. 100005 (2020), <https://doi.org/10.1016/j.jrt.2020.100005>.

⁷ See also BHASKAR ET AL., *supra* note 1, at 55–58.

III. LITERATURE REVIEW

The existing literature reflects a substantial consensus that artificial intelligence has considerable potential to enhance legal and judicial administration, while recognising that technological efficiency cannot supplant human legal reasoning and adjudicatory judgment. Trivedi and Nilakshi⁸ identify case management, judicial productivity, legal research, document review, and decision support as key domains for AI application, while highlighting data quality, algorithmic bias, privacy concerns, and the preservation of human judicial judgment as significant challenges. Their analysis is particularly significant because it directly associates the deployment of AI with the persistent problem of judicial pendency in India. Sharma⁹ and Kaur and Kaur¹⁰ similarly recognise that AI should augment rather than supplant human adjudication, given that judicial decision-making encompasses legal and constitutional considerations beyond computational processing. They further acknowledge AI's potential to automate repetitive judicial functions and alleviate judicial workload, while identifying algorithmic bias, privacy, and transparency as significant concerns.

The broader legal scholarship provides a substantial theoretical foundation for AI governance. Olubiyi, Oyediji-Oduyale and Adeniyi¹¹ explain that AI technologies, including machine learning and deep learning, raise significant concerns relating to human rights, privacy, intellectual property, accountability, and regulation. Chakrabarti and Ray¹² similarly emphasise automated decision-making, data privacy and protection, and the ethical and regulatory framework governing AI as central legal concerns. Rodrigues further identifies algorithmic transparency, cybersecurity, discrimination, lack of contestability, privacy, data protection, liability, and accountability as principal vulnerabilities, demonstrating that effective AI governance must extend beyond technical accuracy to address the potentially disproportionate consequences of erroneous or biased outcomes.¹³

Indian scholars increasingly examine the practical application and governance of AI in judicial administration. Khanna and Dubey analyse India's e-Courts infrastructure, AI-assisted

⁸ Vivek Trivedi & Nilakshi Nilakshi, *Artificial Intelligence in the Indian Judiciary: A Systematic Analysis of Potential Applications and Challenges in Addressing Case Backlogs*, 1 J. TRENDS & CHALLENGES ARTIFICIAL INTELLIGENCE 91, 91 (2024), <https://doi.org/10.61552/JAI.2024.03.003>.

⁹ Mohit Sharma, *India's Courts and Artificial Intelligence: A Future Outlook*, 15 LEXONOMICA 99, 101, 112 (2023), <https://doi.org/10.18690/lexonomica.15.1.99-120.2023>.

¹⁰ Navneet Kaur & Manpreet Kaur, *Role of Artificial Intelligence in the Indian Courts*, 6 INT'L J.L., POL'Y & SOC. REV. 17, 17–19 (2024), <https://www.lawjournals.net/assets/archives/2024/vol6issue1/5124.pdf>.

¹¹ Ifeoluwa A. Olubiyi, Rahamat Oyediji-Oduyale & Damilola M. Adeniyi, *Artificial Intelligence and the Law: An Overview*, 12 ABUAD L.J. 1 (2024), <https://doi.org/10.53982/alj.2024.1201.01-j>.

¹² Soumyadeep Chakrabarti & Ranjan Kumar Ray, *Artificial Intelligence and the Law*, 14 J. PHARM. NEG. RESULTS (Special Issue 2) 87 (2023), <https://www.pnrjournal.com/index.php/home/article/view/6563>.

¹³ Rodrigues, *supra* note 6.

transcription, and the Supreme Court's Artificial Intelligence Committee, emphasising that AI should operate as an assistive mechanism rather than a substitute for human judicial judgment.¹⁴ Choudhary and Bala similarly identify e-Courts, legal research tools, predictive analytics, and virtual hearings as means of enhancing judicial efficiency and access, subject to responsible governance.¹⁵ The Supreme Court of India's 2025 *White Paper on Artificial Intelligence and Judiciary* provides a more comprehensive institutional framework, addressing AI technologies, judicial applications, ethical principles, and governance safeguards, while identifying hallucinations, deepfakes, algorithmic bias, intellectual-property concerns, confidentiality, and privacy as significant risks requiring appropriate institutional oversight.¹⁶ Collectively, the literature demonstrates a shift in the Indian discourse from the feasibility of AI adoption in courts towards determining which judicial functions are suitable for automation, the safeguards governing such deployment, and the allocation of ultimate institutional responsibility. The present study builds on that emerging framework.

IV. AI TECHNOLOGIES APPLICABLE TO JUDICIAL ADMINISTRATION

Artificial intelligence is not a single technological instrument but a broad spectrum of computational methods and applications. Its utility within the judicial sphere depends upon the appropriate alignment of specific AI capabilities with defined judicial and administrative functions. Such deployment may facilitate legal research, document analysis, case management, translation, and process automation, subject to applicable legal and institutional safeguards. Accordingly, AI should be integrated as a task-specific assistive mechanism consistent with judicial independence, procedural fairness, and human accountability.

A. Machine learning

Machine learning enables computational systems to identify patterns within datasets and progressively improve task performance through data-driven learning. In judicial administration, supervised learning may facilitate case classification, the identification of procedural defects, and document categorisation, while unsupervised learning can reveal patterns within extensive judicial datasets that may not be readily discernible through conventional analysis; reinforcement-learning techniques may further assist, in principle, with scheduling and resource allocation.¹⁷ The efficacy and fairness of such applications, however, depend substantially upon the quality, accuracy, and representativeness of the underlying

¹⁴ Vani Khanna & Aviansh Dubey, *AI and Evolving Indian Legal System*, 10 INT'L J. RSCH. TRENDS & INNOVATION a750, a750, a753–54, a757 (2025), <https://ijrti.org/papers/IJRTI2503092.pdf>.

¹⁵ Choudhary & Bala, *supra* note 2, at 1–3.

¹⁶ BHASKAR ET AL., *supra* note 1, at 54–64.

¹⁷ Trivedi & Nilakshi, *supra* note 8, at 92.

training data. Historical judicial records may embody existing institutional patterns or inequalities, creating a risk that algorithmic systems reproduce rather than rectify them. The White Paper accordingly emphasises that AI systems may inherit biases from training data and that fairness requires continuous monitoring and appropriate institutional safeguards.¹⁸

B. Natural language processing

Natural language processing assumes particular significance in the judicial domain because a substantial part of judicial activity involves the processing, interpretation, and analysis of legal language. It can facilitate case-law retrieval, judgment summarisation, the identification of legal issues, the extraction of relevant information from pleadings, and the translation of legal documents.¹⁹ SUPACE exemplifies the application of AI-assisted legal information processing within the Indian judiciary, while SUVAS demonstrates the use of AI and ML for the translation of judicial and legal documents.²⁰

C. AI-enabled document and evidence analysis

Optical character recognition facilitates the conversion of scanned or image-based judicial records into machine-readable text, thereby enabling the digitisation, searchability, classification, and subsequent AI-assisted analysis of extensive judicial archives. Its integration with natural language processing may further enhance the systematic use of historical and legacy court records. Computer vision can support the computational examination and organisation of visual evidence, including documents, photographs, and audiovisual materials, although its deployment raises significant concerns of evidentiary authentication, particularly in the context of deepfakes and AI-manipulated images, videos, and audio.²¹ Generative AI and large language models (LLMs) may assist with routine drafting, summarisation, document classification, legal research support, and the extraction of relevant information; the Supreme Court's White Paper, however, cautions against treating LLM-generated outputs as substitutes for authoritative legal research and emphasises the necessity of independent verification.²² These technologies are therefore appropriately regarded as task-specific assistive instruments rather than autonomous judicial actors, and their lawful and legitimate deployment depends upon the nature of the function, the reliability of the data, the degree of human oversight, and the potential consequences of technological error.

¹⁸ BHASKAR ET AL., *supra* note 1, at 60–61, 68.

¹⁹ Trivedi & Nilakshi, *supra* note 8, at 92, 94.

²⁰ DEP'T OF JUST., *supra* note 3.

²¹ BHASKAR ET AL., *supra* note 1, at 59–60, 76–78.

²² *Id.* at 77.

V. CURRENT APPLICATIONS OF ARTIFICIAL INTELLIGENCE IN THE INDIAN JUDICIARY

India has progressively undertaken AI-enabled judicial initiatives within the broader framework of the e-Courts Mission Mode Project. The Supreme Court's Artificial Intelligence Committee has identified judicial translation, legal research assistance, and process automation as significant domains for AI deployment. Parliamentary materials further document the development of SUPACE and SUVAS and indicate that Phase III of the e-Courts Project incorporates components relating to artificial intelligence and blockchain technology.²³ On 3 June 2026 the Supreme Court published, for public comment, draft Regulations for Use of Artificial Intelligence in Courts, 2026, prepared under the aegis of its Artificial Intelligence Committee; the draft would confine AI systems to an assistive role, subject their use to prior approval and human supervision, and prohibit both the determination of judicial outcomes by algorithmic decision-making alone and the use of AI for risk scoring.²⁴

A. SUPACE and AI-assisted legal research

The Supreme Court Portal for Assistance in Court Efficiency (SUPACE) is an AI-enabled mechanism intended to assist judicial officers in processing extensive case materials, identifying relevant facts and authorities, and facilitating preliminary legal research. Its principal function is the augmentation of judicial capacity rather than the substitution of judicial reasoning, reducing the time involved in information retrieval and preliminary analysis. The White Paper describes SUPACE as capable of analysing large volumes of case records, identifying legally relevant material and key precedents, and supporting functions such as issue identification, summarisation, and the organisation of case documents.²⁵

B. SUVAS and AI-enabled legal translation

The Supreme Court Vidhik Anuvaad Software (SUVAS) addresses the linguistic dimension of access to justice by employing AI and machine-learning technologies for the translation of judicial materials. Initially launched with capability in nine Indian languages, SUVAS facilitated the translation of approximately 36,000 Supreme Court judgments into 19 Indian languages during 2023. Its significance extends beyond administrative convenience, as

²³ DEP'T OF JUST., *supra* note 3.

²⁴ ARTIFICIAL INTELLIGENCE COMM., SUP. CT. OF INDIA, *Draft Regulations for Use of Artificial Intelligence in Courts, 2026*, regs. 4, 19(1), 20(1)(b), 20(1)(d), at 7, 10–12 (June 3, 2026), <https://cdnbbsr.s3waas.gov.in/s3ec0490f1f4972d133619a60c30f3559e/uploads/2026/06/2026060342.pdf>.

²⁵ BHASKAR ET AL., *supra* note 1, at 14, 49.

multilingual access to judicial decisions broadens access to legal information within India's linguistically diverse legal system.²⁶

C. AI-assisted transcription and court proceedings

AI-based transcription has been deployed to convert oral submissions and proceedings into real-time text, particularly before Constitution Benches of the Supreme Court. Such transcripts may be made accessible to lawyers, litigants, researchers, and the wider public, thereby providing a contemporaneous and accessible record of proceedings. Similar speech-to-text applications have also been explored at the district-court level for recording witness depositions and evidentiary statements.²⁷

D. LegRAA and generative AI-assisted legal analysis

The Legal Research Analysis Assistant (LegRAA) is a generative-AI-based system designed to process substantial volumes of pleadings, judgments, and statutory materials and to produce structured outputs, including case briefs, issue-based summaries, and precedent lists. By facilitating the rapid identification of relevant facts, legal questions, doctrinal developments, and authorities, LegRAA has the potential to reduce the time devoted to preliminary legal research. Its outputs, however, require appropriate human scrutiny and independent verification before reliance in judicial work.²⁸

E. AI-enabled e-filing and defect detection

The Supreme Court has initiated a pilot programme, in collaboration with the Indian Institute of Technology Madras, to employ AI and ML for the automated detection of defects in electronic filings. The system is intended to identify recurring deficiencies, including missing annexures, incorrect formatting, incomplete affidavits, and procedural non-compliance, while extracting relevant metadata. Such deployment may reduce registry-level scrutiny time, minimise clerical errors, and address procedural bottlenecks that arise before substantive adjudication.²⁹

F. AI applications across other judicial institutions

AI adoption is also extending beyond the Supreme Court. The White Paper records the Kerala High Court's policy on the responsible and restricted use of AI tools in the District Judiciary, which emphasises transparency, accountability, confidentiality, and human supervision. Adalat AI has been deployed for the real-time transcription of witness depositions, while AI Saransh,

²⁶ *Id.* at 50.

²⁷ *Id.* at 50–51.

²⁸ *Id.* at 51.

²⁹ *Id.* at 51–52.

developed by the National Informatics Centre, generates concise précis of pleadings. TERES provides multilingual transcription and translation of courtroom proceedings; NyayKaushal incorporates AI-enabled features within virtual hearings and digital case-management processes; and the National Legal Services Authority's LESA chatbot provides litigant-oriented assistance, including application-tracking facilities. These developments indicate an increasingly distributed institutional adoption of AI across different stages of the judicial workflow.³⁰

G. AI, ML, NLP and OCR in judicial administration

Governmental materials further recognise machine learning, natural language processing, optical character recognition, and predictive analytics as relevant technologies for strengthening case tracking, information processing, and administrative automation. Their deployment within the e-Courts framework may facilitate more efficient management of judicial information and administrative processes, subject to appropriate safeguards concerning accuracy, confidentiality, transparency, and human oversight.³¹

VI. POTENTIAL APPLICATIONS OF ARTIFICIAL INTELLIGENCE FOR REDUCING CASE BACKLOGS IN INDIA

A. Intelligent case management and procedural optimisation

The most immediate application of AI in reducing judicial pendency lies in administrative and procedural optimisation rather than automated adjudication. AI-enabled case-triage and queue-management systems can classify matters according to urgency, subject matter, procedural stage, complexity, and age, while assisting registries in identifying stagnant cases and optimising listing sequences.³² Similarly, AI-based analysis of NJDG information can identify recurring procedural bottlenecks, including delays in the service of notices, pleadings, evidence, translation, and record preparation, as well as repeated adjournments.³³ Such systems can therefore assist courts in addressing the underlying causes of delay rather than merely measuring the numerical volume of pending cases.

³⁰ *Id.* at 52–53.

³¹ Santosh Kumar, Sheetal Angral & Vatsla Srivastava, *Digital Transformation of Justice: Integrating AI in India's Judiciary and Law Enforcement*, PRESS INFO. BUREAU, MINISTRY OF LAW & JUST. (Feb. 25, 2025), <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2106239>.

³² BHASKAR ET AL., *supra* note 1, at 10, 74–75.

³³ *Id.* at 74–75.

B. AI-assisted legal, documentary and judicial services

AI can further reduce the administrative burden associated with legal research, documentary analysis, routine drafting, translation, transcription, and public legal assistance. NLP, OCR, and related technologies can process voluminous records, extract relevant facts, statutory references, dates, documents, and legal issues, and facilitate the preliminary identification of relevant precedents.³⁴ AI may also generate preliminary drafts of routine procedural orders and notices, subject to mandatory judicial supervision and verification.³⁵ Likewise, AI-enabled translation and speech-recognition systems, including SUVAS-type applications, can facilitate multilingual access to judgments and judicial proceedings. AI-powered court assistants and chatbots may provide routine procedural information and filing guidance, thereby reducing registry workload and preventing avoidable delays arising from defective or incomplete filings.

C. ODR, anomaly detection and human-centred deployment

AI may also support online dispute resolution (ODR), particularly through automated case intake, dispute classification, the identification of suitable procedural pathways, and assistance in matching parties with appropriate mediators. Pattern-recognition systems may additionally identify recurring filing defects, unusual procedural patterns, or potential documentary irregularities for subsequent human examination.³⁶ These applications should, however, operate strictly as assistive and screening mechanisms and should not autonomously determine the validity of claims, the existence of fraud, or other consequential legal issues. AI deployment should accordingly be confined initially to high-volume, repetitive, low-discretion, and objectively verifiable functions, followed by empirical evaluation of accuracy, bias, confidentiality, transparency, and institutional impact. The ultimate objective should remain the augmentation, not the replacement, of judicial capacity, with final responsibility for adjudication and consequential decisions continuing to rest with human judicial authorities.³⁷

VII. DISCUSSION

The principal proposition emerging from the literature and the Supreme Court's White Paper is that AI should transform judicial administration before it touches adjudication. Functions such as scheduling, transcription, translation, document management, and registry scrutiny are comparatively amenable to automation, whereas constitutional interpretation, credibility

³⁴ Trivedi & Nilakshi, *supra* note 8, at 94.

³⁵ BHASKAR ET AL., *supra* note 1, at 69.

³⁶ *Id.* at 74–75.

³⁷ Sharma, *supra* note 9, at 101, 112.

assessment, statutory ambiguity, and disputed factual determination require human judgment. Sharma accordingly emphasises that AI should assist rather than replace judges.³⁸

The primary value of AI lies in reducing the informational and administrative burden upon judicial officers while preserving human judicial responsibility. AI deployment nonetheless raises substantial concerns relating to algorithmic bias, opacity, hallucinations, privacy, and evidentiary integrity. Judicial datasets may reproduce historical inequalities, while opaque systems may impede explanation and contestability. Generative-AI hallucinations may further result in fabricated authorities or erroneous legal propositions, requiring the independent verification of every AI-generated legal output. Confidential judicial records must also be protected from unauthorised disclosure, while deepfakes and manipulated audiovisual material necessitate specialised forensic scrutiny and human supervision. AI cannot, by itself, resolve the structural causes of judicial pendency. Technological deployment must operate alongside adequate judicial strength, procedural reform, court infrastructure, alternative dispute resolution, and effective case-flow management.

AI should accordingly be introduced through a phased, evidence-based, and human-centred framework, initially targeting repetitive and verifiable functions before extending to more complex applications. Its legitimacy ultimately depends upon maintaining judicial independence, accountability, transparency, procedural fairness, and human control over consequential decisions.

VIII. RECOMMENDATIONS

1. **Establish a judicial AI governance framework:** Adopt a uniform, risk-based framework for AI deployment across all levels of the judiciary. Low-risk functions may be facilitated, while applications affecting liberty, rights, bail, sentencing, or adjudication should face stringent safeguards.
2. **Constitute institutional AI ethics committees:** Establish specialised committees comprising judicial, legal, technological, and ethical expertise to evaluate AI systems, prescribe standards, and monitor compliance with governance requirements.³⁹
3. **Prioritise secure in-house AI systems:** Prefer institutionally controlled AI platforms incorporating encryption, role-based access, data minimisation, and audit mechanisms to safeguard sensitive judicial information.⁴⁰

³⁸ *Id.* at 101.

³⁹ See BHASKAR ET AL., *supra* note 1, at 70–71.

⁴⁰ See *id.* at 71, 75.

4. **Preserve human-in-the-loop decision-making:** AI outputs should remain advisory and incapable of determining substantive judicial outcomes. Final authority must invariably remain with the responsible judicial officer.⁴¹
5. **Mandate verification and audit trails:** Maintain comprehensive records of AI-assisted processes, including the system used, the source materials, the outputs, and the human verification undertaken.⁴²
6. **Develop curated judicial datasets:** Create accurate, standardised, representative, and appropriately anonymised judicial datasets, with periodic review for errors, duplication, incompleteness, and embedded bias.⁴³
7. **Ensure transparency and contestability:** Where AI materially influences judicial administration, affected persons should, where appropriate, be informed of its use and provided with mechanisms for meaningful human review and challenge.
8. **Strengthen confidentiality and data protection:** Prohibit the use of unapproved AI platforms for confidential, privileged, or sensitive judicial information and maintain strict institutional controls over access and processing.⁴⁴
9. **Promote AI literacy and professional training:** Judges, lawyers, registry personnel, and court staff should receive structured training concerning AI limitations, hallucinations, bias, cybersecurity, privacy, verification, and responsible use.⁴⁵
10. **Implement controlled pilot projects:** Introduce AI incrementally through measurable, low-risk pilot programmes, assessing accuracy, processing time, procedural defects, costs, and user outcomes before institutional expansion.⁴⁶

IX. CONCLUSION

Artificial intelligence offers significant potential to modernise Indian judicial administration through improved case management, legal research, translation, document processing, and procedural efficiency. Existing initiatives, including SUPACE, SUVAS, AI-assisted transcription, LegRAA, and intelligent filing systems, demonstrate an emerging institutional transition towards AI-enabled justice. Risks concerning bias, confidentiality, hallucinations, opacity, and evidentiary integrity, however, require robust safeguards. India should therefore pursue responsible judicial augmentation rather than technological substitution, preserving

⁴¹ See *id.* at 65; ARTIFICIAL INTELLIGENCE COMM., *supra* note 24, regs. 4, 20(1)(c), at 7, 11–12.

⁴² See BHASKAR ET AL., *supra* note 1, at 72, 76.

⁴³ See *id.* at 11.

⁴⁴ See *id.* at 67, 77.

⁴⁵ See *id.* at 72, 76.

⁴⁶ See *id.* at 11.

human control over legal reasoning and adjudication. The legitimacy of AI-enabled justice must ultimately rest upon fairness, transparency, accountability, accessibility, and judicial independence.
