



Will AI Pass the Bar?

Mapping the Use of
Artificial Intelligence
in the Judiciary:
*Insights from Singapore,
India, and Taiwan*



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About the Konrad-Adenauer-Stiftung's Rule of Law Programme Asia

Freedom, justice, and solidarity are the basic principles underlying the work of the Konrad-Adenauer-Stiftung (KAS). The KAS is a political foundation, closely associated with the Christian Democratic Union of Germany (CDU). As co-founder of the CDU and the first Chancellor of the Federal Republic of Germany, Konrad Adenauer (1876-1967) united Christian-social, conservative, and liberal traditions.

KAS contributes, underpinned by values, to helping Germany meet its growing responsibilities throughout the world. With more than 100 offices abroad, KAS makes a unique contribution to the promotion of democracy, the rule of law and a social market economy. In 2005, the Konrad-Adenauer-Stiftung started a regional programme to support the development of the Rule of Law in Asian countries.

The Rule of Law Programme Asia is one of five regional rule of law programmes managed worldwide by the KAS. With this regional programme, the foundation's long-term goal is to contribute to the development and enhancement of an efficient legal system, based on the rule of law, as a core element of a democratic polity in the countries of Asia. This includes the establishment or stabilisation of those institutions or organisations which guarantee the constitutional order and the enforcement of citizens' rights in accordance with the Rule of Law.

The Rule of Law Programme Asia focuses on the following areas of interest, in which there is substantial need for reform and consultation within and among the countries of the region:

- Constitutional Law and the Promotion of Democracy
- Procedural Law
- Protection of Human and Minority Rights
- Good Governance and Corruption Prevention
- Independence of the Judiciary n Environmental Law
- Tech Law / State Modernization / AI ethics

The primary aim of activities of the programme in the above-mentioned areas is for development of the rule of law through regional seminars, dialogue, political exchanges, research and training activities.

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Note to the Reader

As Artificial Intelligence (AI) began to shape judicial systems across the world, countries across Asia too find themselves at a critical juncture. The promise of AI to enhance legal efficiency and improve access to justice is compelling. But in contexts where legal institutions are already grappling with structural constraints, case backlogs, and deep socio-economic inequalities, its integration raises ethical questions.

The report titled “**Will AI Pass the Bar? Mapping the Use of Artificial Intelligence in the Judiciary: Insights from Singapore, India, and Taiwan**” is a timely contribution to Asian perspective. While many AI policy frameworks emerging from Europe are important benchmarks, they do not always reflect the legal, social, or technological realities of Asia. Regional challenges and opportunities are different.

Produced by the **Konrad-Adenauer-Stiftung’s Rule of Law Programme Asia**, this report brings into focus the lived realities of AI in the justice systems in three important jurisdictions – Singapore, India and Taiwan. It identifies key gaps and systemic challenges, looks at how AI tools are addressing these issues, and examines the ethical and human rights considerations involved. Beyond the courts, it also considers the role of the legal industry, offering a view of the entire legal landscape in each country.

Singapore leads with a governance-first, human-centric approach, applying AI to enhance efficiency in low-risk tasks while maintaining human judgment for core judicial functions, benefiting from high public trust. India, facing an immense case backlog, sees AI as indispensable for operational enhancement and bridging linguistic barriers to streamline administration and improve access to justice, with the chapter also examining the regulatory environment governing judicial AI and proposing strategies for its responsible deployment. Taiwan demonstrates a balanced approach, moving towards “intelligent courts” for efficiency and digitalisation, yet grounding its AI development in constitutional caution and public trust following societal reactions to systems like the Intelligent Judgment Draft Generation System.

All three jurisdictions provide compelling insights into AI integration in their judicial systems. A central argument of this report is the indispensable role of human judgment—the “*human in the loop*.” While AI can assist by streamlining administrative tasks and supporting legal analysis, it cannot replace the nuanced, ethical, and context-sensitive decisions that only humans can make. Ensuring meaningful human oversight is essential to uphold fairness, accountability, and the rule of law. AI must be designed and deployed as a tool *under human control*, not as an autonomous arbiter of justice.

The report examines how AI is being introduced into courtrooms, case management, legal reasoning, and the broader legal profession while sparking vital discussions on questions of governance, judicial discretion, professional responsibility, and data equity. It does not treat AI adoption as a purely technical issue, but situates technology within the moral and institutional fabric of societies where law is more than code, and justice cannot be outsourced to machines. By foregrounding human oversight, community inclusion, and the principle of the rule of law, it makes a strong case for why legal AI systems must be designed *with* and *for* the people they impact most.

This report draws on the exceptional expertise of three distinguished women researchers. Nydia Remolina (Assistant Professor of Law, Singapore Management University) authored the Singapore chapter; Jameela Sahiba (Associate Director, AI and Public Affairs, The Dialogue) authored the India chapter; and Kuan-wei Chen (Assistant Professor, Graduate School of Law, Kyoto University) authored the Taiwan chapter. Their insights and analysis have been vital in bringing this work to life. We also extend our sincere gratitude to Mark Findlay, Honorary Professorial Fellow in the Law School, University of Edinburgh, for enriching the report with his invaluable insights in the introduction, providing a much-needed balance of critical thought.

We are hopeful this report informs policymakers, legal practitioners, and amplifies Asia's approach to the future of AI and justice. The KAS Rule of Law Programme Asia remains committed to supporting regional voices and principles in the disruptive tech era, where innovation must walk hand in hand with ethics, inclusion, and the rule of law.

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Singapore, August 2025

Executive Summary

This report examines the integration of Artificial Intelligence (AI) into judicial systems in three Asian jurisdictions—Singapore, India, and Taiwan—through ethics, rights, and the rule of law lens. While the adoption of AI in the justice sector is a growing global trend, promising increased efficiency, streamlined processes, and especially improved access to justice, it also raises critical concerns around accountability, explainability, algorithmic bias, and the safeguarding of human judgment. Each of the three countries presents distinct use cases and approaches, reflecting their unique ecosystems, scales, and levels of experimentation with the roles AI can—and cannot—play within judicial systems.

SINGAPORE: A GOVERNANCE-FIRST, HUMAN-CENTRIC APPROACH

Singapore adopts a governance-first, human-centric approach to AI in its judiciary, reflected in its non-binding and principles-based Model AI Governance Framework (2019, updated 2024). Key ethical principles guiding its implementation include explainability, transparency, fairness, and human-centricity. Singapore's Chief Justice of Supreme Court, Sundaresh Menon, has explicitly ruled out the use of AI in judicial sentencing, citing concerns over opacity, fairness, and accountability, a stance reinforced by the proposed "traffic light system" that red-lights direct judicial decision-making as opposed to AI tools.

Singapore mandates human verification for all AI-generated material and requires legal professionals and self-represented litigants to disclose AI use in submissions, taking full responsibility for the content. Data protection is handled through alternative frameworks like the Public Sector (Governance) Act 2018 (PSGA) for the judiciary, with strict internal protocols to safeguard sensitive information. The nation also promotes digital literacy and inclusivity through initiatives like "Prompt Engineering for Lawyers" and subsidies for tech adoption to ensure equitable access to AI across law firms.

Key Initiatives and Use Cases in Singapore:

- Case Summarisation:** The Singapore Academy of Law (SAL) has integrated "LawNet AI" into its LawNet platform, providing AI-generated summaries for over 15,000 court judgments. This aims to improve legal research efficiency, with safeguards like factual accuracy thresholds, low-confidence highlighting, and cross-referencing to the original text to mitigate risks of misinterpretation or hallucination. GPT-Legal, a custom large language model trained on Singaporean legal content, powers this feature.

- **Evidence Review:** AI tools are being explored for clustering, summarising, and extracting key segments from large datasets. The State Courts, in collaboration with A*STAR's Institute for Infocomm Research (I²R), developed a real-time Speech Transcription System (STS) with "about 90% accuracy". Human verification of all AI-generated material is mandatory.
- **Support for Self-Represented Litigants (SRLs):** The judiciary aims to improve access to justice for SRLs, particularly in high-volume jurisdictions like the Small Claims Tribunals (SCT). A GenAI assistant, developed with the private sector, is being piloted to guide SRLs through legal processes, offering general legal information and procedural guidance, not legal advice. Machine translation features are integrated to bridge linguistic barriers.
- **Divorce Assets Informative Division Estimator (Divorce AIDE):** Developed by the Legal Aid Bureau, this chatbot provides non-binding projections of asset division in divorce cases based on established legal principles. It is not suitable for complex or high-value cases.
- **AI in Law Firms:** Singaporean law firms are adopting AI for document review, e-discovery, due diligence, and contract drafting. Initiatives like "Copilot for Singapore Law Firms," a collaboration between government and private sector organisations, provide AI assistance for tasks like scoping legal matters and drafting client communications, with emphasis on data security and ethical use.

INDIA: NAVIGATING THE AI FRONTIER WITH CAUTION

India faces a significant challenge with "50 million pending cases" across its courts, making AI an "urgent, indispensable tool" for judicial reform. While there is optimism for AI's potential, careful consideration of human rights, fairness, and accountability is paramount. India's approach to AI in the judiciary is characterised by caution and a paramount focus on human rights, fairness, and accountability, especially given its challenge of 50 million pending cases.

While initiatives like The Supreme Court Portal for Assistance in Court's Efficiency (SUPACE) augment legal research and The Supreme Court Vidhik Anuvaad Software (SUVAS) bridges linguistic barriers, there are significant gaps, including a "supply-side" bias that overlooks the human experience of justice and concerns over the "black box" nature of AI. The ethical framework emphasizes human-centric design, algorithmic integrity (with data auditing, debiasing, and Explainable AI standards), proactive data privacy and security (including Privacy-Preserving AI), bridging the digital divide, and establishing an adaptive regulatory framework.

The concept of "localisation of rights" is crucial, acknowledging that AI implications are shaped by diverse human experiences and contexts. Notably, one of Indian state, Kerala's High Court, released a policy in 2025 explicitly prohibits generative AI for judicial decision-making and mandates meticulous documentation and audit logs for administrative AI usage, reflecting a move "beyond risk mitigation" towards a rights-based approach. Despite the Supreme Court's general optimism for AI, it has not yet published a dedicated AI policy.

Key Initiatives and Use Cases:

- **Augmenting Legal Research:** The SUPACE assists judges in gathering relevant laws and facts. Some High Courts have experimented with ChatGPT for preliminary research, though with judicial scepticism, as seen in the Delhi High Court's admonition against over-reliance.
- **Enhancing Access and Bridging Linguistic Barriers:** The SUVAS provides "instant, high-quality translation of judicial documents and judgments from English into various Indian vernacular languages". Large datasets of Indian High Court judgments are being open-sourced to facilitate legal technology development.
- **Streamlining Court Administration:** The e-Courts project, with significant investment, aims to digitise and automate court processes. AI is being explored for intelligent scheduling and automating routine administrative tasks. A citizen-centric mobile application provides single-click access to case information.
- **Kerala High Court Policy:** A comprehensive policy by the High Court of Kerala (July 2025) explicitly prohibits generative AI for judicial decision-making and mandates meticulous documentation and audit logs for administrative AI usage.
- **AI in Legal Practice:** Large law firms are adopting AI for contract analysis, due diligence, and legal research, with firms like Cyril Amarchand Mangaldas and Shardul Amarchand Mangaldas partnering with AI platforms like Kira Systems and Harvey.

TAIWAN: BALANCING INNOVATION WITH CONSTITUTIONAL CAUTION

Taiwan's judicial digitalisation has a long history, with a recent shift towards "intelligent courts". The 2023 announcement of the "Intelligent Judgment Draft Generation System" sparked significant public debate, highlighting the importance of public trust and legal foundations for AI in the judiciary. Taiwan's journey with judicial AI balances innovation with constitutional caution, especially after public outcry led to the postponement of its intelligent judgment draft

generation system. This controversy highlighted the critical importance of public trust and the need for a clear legal foundation for AI tools, even those considered assistive.

The Judicial Yuan's 2025 AI Development Guidelines reinforce a "human-centered AI" approach, stressing voluntary use, transparency, risk management, bias prevention, and robust security and rights protection. Former Judicial Yuan President Tzong-li Hsu introduced six guiding principles in 2024, including human accountability, the need for legal reservation when fundamental rights are affected, transparency and legitimacy of algorithmic processes, human judge reservation for core functions, the right to human judgment, and cybersecurity and confidentiality.

Taiwan acknowledges the potential for "underestimated" risks from seemingly innocuous tools like the AI-Assisted Sentencing Information System, which may subtly influence judicial decisions. The ongoing discussions also raise important normative questions about establishing human-machine boundaries for tasks requiring empathy and moral reasoning.

Key Initiatives and Use Cases:

- **Intelligent Judgment Draft Generation System (Proposed):** Designed to assist judges in routine criminal cases (e.g., drunk driving, aiding fraud) by generating draft judgments based on indictments. The system operates on a "judge-in-the-loop principle" with all processes conducted within a closed, on-premises infrastructure. This system was postponed due to public criticism.
- **AI-Assisted Sentencing Information System (Launched 2023):** Launched to enhance fairness, transparency, and consistency in sentencing, particularly for the Lay Judge System. It uses NLP to annotate sentencing factors and provides data on sentencing trends. It is an "informational tool" and "does not render binding decisions".
- **Courtroom Speech Recognition and Summarisation System:** Integrates AI for real-time speech-to-text transcription of courtroom proceedings, reducing manual workload and expediting hearings.
- **Intelligent Analysis System for Electronic Dossier:** AI-driven tool for managing court documents, automatically generating structured bookmarks and identifying/masking sensitive personal data.
- **Intelligent Service Chatbot:** A digital assistant on the Judicial Yuan's website providing instant, conversational answers to common questions about the judicial system and litigation procedures.

Together, these insights offer a landscape of cautious optimism — embracing the efficiency potential of AI while confronting its ethical, legal, and societal implications with due diligence and care. This nuanced balance plays out across the following themes across the three jurisdictions:

1. Human Oversight and the Indispensability of Human Judgment

Across all three jurisdictions, there is a shared understanding that AI must remain a tool to assist, not replace, human actors in the judiciary. Core judicial functions such as decision-making and sentencing are widely viewed as requiring human discretion and moral reasoning. Singapore's Chief Justice Sundaresh Menon ruled out AI use in sentencing, citing concerns about bias, explainability, and accountability. Similarly, India's Kerala High Court prohibits the use of generative AI in judicial decision-making. Taiwan's Judicial Yuan, in response to public concern, postponed its Intelligent Judgment Draft Generation System and reaffirmed that judges must retain full responsibility for decisions. These examples underscore the centrality of human judgment in maintaining the legitimacy of the legal system.

2. Balancing Efficiency and Access to Justice with Fundamental Legal Principles

AI has the potential to streamline legal processes, reduce administrative burdens, and improve access to justice. Singapore, for instance, is using AI for case summarisation and evidence review, while India has deployed tools like SUPACE for legal research and SUVAS for language translation. However, the report cautions that these benefits should not override core legal values such as procedural fairness, accountability, and transparency. Over-automation risks reducing justice to a technical exercise, neglecting the lived human experience and moral weight of legal proceedings.

3. Public Trust and Perceived Legitimacy

The success of AI integration in judicial systems hinges on public perception and trust. In Taiwan, the proposed Intelligent Judgment Draft Generation System triggered significant public backlash, driven in part by imagery and fears of "AI judges." Though the system was intended to be assistive, the controversy highlighted how deeply societal trust matters. This episode demonstrates the necessity of transparent and inclusive dialogue with civil society to build a shared understanding of AI's role in justice delivery.

4. Inherent Risks: Bias, Opacity, and Data Privacy

The report identifies several recurring risks that are associated with deploying AI in judicial contexts. One major concern is algorithmic bias, where AI systems trained on historical data

reflecting societal prejudices may unintentionally perpetuate or amplify these biases. Additionally, many AI models operate as “black boxes,” creating challenges around opacity and explainability that are particularly problematic in legal systems relying on accountability and reasoned judgment. The handling of sensitive legal data also raises significant privacy and security risks, highlighting the need for robust protections against breaches and misuse. Furthermore, AI systems can produce seemingly persuasive but factually inaccurate or fabricated content—known as hallucinations—underscoring the critical importance of rigorous human oversight and verification.

5. Adaptive and Principles-Based Governance

AI’s rapid evolution often outpaces traditional legislative processes, creating regulatory gaps. In response, jurisdictions are adopting flexible, principles-based governance approaches. Singapore’s Model AI Governance Framework and AI Verify toolkit, India’s NITI Aayog’s Principles for Responsible AI, and Taiwan’s AI Development Guidelines and President Hsu’s Six Principles all serve as examples of soft law instruments that promote ethical AI use while allowing for innovation. These frameworks aim to ensure accountability, transparency, and harm mitigation.

6. Contextualisation and Jurisdictional Specificity

Despite the global relevance of AI, justice delivery is inherently local and deeply shaped by legal traditions, cultural values, linguistic diversity, and socio-economic realities. The report stresses that digital transformation efforts must be tailored to each jurisdiction. A uniform or “one-size-fits-all” approach risks overlooking critical differences and may ultimately prove ineffective or unjust.

INTRODUCTION

Sentencing: The machine question.¹

Mark Findlay

In his seminal text ‘The Principles of Sentencing’² D.A. Thomas constructs a tariff framework for determining sentence against two core considerations: the offender’s culpability (reflecting general deterrence rationales) and influencing the offender’s future behaviour (individualist deterrence and rehabilitation rationales). Thomas concedes that these considerations may be pursued simultaneously and find expression in the same sentence but more frequently this is not possible. Under this scheme, in constructing a sentence, the judge first determines what system should be used. The gravity of the offence measures is more amenable to the empirical setting of a place within a range. Individualist evaluations may skew the eventual sentence above or below that setting for reasons that are both impressionistic and subjective. Employing Thomas’s system and you can see where a binary thinking technology is comfortable and where it is not.

Sentencing is decision-making. No matter how any of its stages are automated or facilitated through AI and frontier technologies, human discretion is essential for all stakeholders. The renowned American administrative law scholar Kenneth Davis saw discretion as ‘a tool indispensable for the administration of justice’.³ He talked of discretion allowing for ‘governments of law and of men where rules alone cannot cope with the complexity of modern government.’ In today’s world we are seeing technology inserted into this governance frame. And with AI as the third party in achieving justice as governance, managing the shift in shaping discretion through artificial rather than natural intelligence is one of the great challenges of our age.⁴

¹ In the title of this brief reflection, I have borrowed from David Gunkel’s excellent book ‘The Machine Question’ where he ponders the moral status of technology. What does this have to do with sentencing and AI? At the very least if we disconnect the weighty decisions in sentencing from blameworthiness and thereby sideline considerations of moral agency, we are at risk denying the humanity of justice. Introduce AI-assisted technologies into any aspect of the sentencing process and we are confronted with the extent to which say large language models can adequately navigate the complexity of moral agency. David Gunkel (2012) *The Machine Question: Critical perspectives on AI, Robots and Ethics* (MIT Press: Cambridge Mass.).

² D.A. Thomas (1979) *Principles of Sentencing* (Heinemann: London).

³ K.C. Davis (1969) *Discretionary Justice: A Preliminary Inquiry* (University of Illinois: Urbana).

⁴ Mark Findlay (2025) *Governing the Metaverse: Law, Order and Freedom in Digital Space* (Edward Elgar: Cheltenham).

Keith Bottomley argued that the meaning of law, its enforcement and administration, is essentially transferred through the exercise of discretion.⁵ In this process discretion is crucially predisposed to how the parties to the process act and react (human, law's rules, AI/tech): 'Not only are the individual needs of the client taken into account but the decisions themselves are very likely to be influenced by the individual characteristics and values of the decision-makers'. If these characteristics and values are formulated through vastly different processes and pathways of reasoning, then understanding the outcomes and evaluating their fairness becomes a much cloudier and more confusing conundrum.

The contributions to follow each emphasise the dominion of human inclusion and oversight when AI is introduced into the judicial determination process. It is no co-incidence that each chapter expresses, to differing degrees, judicial wariness when the large-scale digitizing of judicial decision-making is contemplated. I suspect there are reasons for this that go beyond humans losing control over how justice and legal services are delivered. Through the last decade, regulators have advocated the ethical and responsible application of AI. This language is not only directed at end users but as risks and dangers in the expansion of generative AI in particular are defined or feared, AI developers and even AI systems themselves are expected to be cognizant of principles like transparency, non-feasance, explainability and accountability. In this there is an attempt to locate moral agency closer to AI creation in the digital ecosystem. Aligned with such policy is the somewhat late realization by legal actors that professional responsibility (and indemnity) arising out of AI-assisted decision processes cannot easily be sheeted back to the technology or its creators when AI is without legal personality and humans sign off on the consequences. Considerations of responsibility in such situations are not just general desires for best practice. They raise specific questions about who is responsible to whom and for what. The contributor that discusses the positioning of AI in the writing of judgements well knows that the machine may do the work but the human shoulders the outcomes. If AI is influencing judicial decisions and legal service delivery in more and more complex and inscrutable ways, would it be any answer to responsibility for the human to claim that they did not understand the workings of the algorithm or some junior in the data processing chain slipped up in red flagging an evolving danger?

Another equally compelling reason to confirm human presence in the process relates to legitimacy, confidence and trust. A common theme in the contributions is how civil society may be largely disinterested if AI is introduced into certain process setting, but express active concern if automation and digitizing is used in others. This opposition may not be based on the degree of risk as professionals view it, or on the extent to which AI could replace human activity. Instead, the examples presented reveal what the public views as legitimate and appropriate AI/human interface goes back to popular perceptions of how choices should be made that effect even

⁵ Keith Bottomley (1973) *Decisions in the Penal Process* (Martin Robertson: Oxford).

low-level stakeholders, and who should be responsible. Reactions to the control of the COVID-19 pandemic demonstrated that community trust and legitimization is a fragile consideration and not necessarily dependent on education or risk-evaluation.⁶ One consistent variable in the protection of public trust is, as one author emphasizes, the need to involve recipient communities in the earliest stages of AI development and deployment.

However, as easy as it sounds to affirm the commitment to human dominion over AI in various judicial processes, when digital dependencies are growing, algorithmic activity is more obscure and we are immersed in ever-expanding cultures of convenience where AI-assisted technology is concerned, the achievement of human oversight outside nominal terms is becoming harder to practice. Recognising this explains the AI-application continuum explored in each of the chapters. The further decisions in the legal/judicial process move from routine administrative tasks and the closer they approach core sentencing decisions, the greater the caution surrounding or final reluctance to rely on digitization and degrees of automation that AI represents. Why is this so? If there is confidence that humans can successfully manage AI when assisting decision-making then what should the mundane administrative nature of the application or the assessment that the processes and outcome to which it is directed are low risk, less complex or involve limited offence/litigation consequences have to do with it? The answer, I am convinced, lies in a deep-seated anxiety held by experienced practitioners, administrators and policymakers that the authority of the law and its application in the judicial process at any level, cannot largely be reduced to the certainties and predictabilities of code, no matter what the advantages in efficiency, cost saving and profitability.

That said, the papers to follow reveal promising initiatives of AI collaboration where court delay, the complexity of legal procedures and the exclusivity inherent in a single legal language are expanding access to justice. Another word of caution here – using AI to smooth over under-resourced court administrations, overworked judges and a lack of equitable legal representation will not address fundamental and long-standing barriers to justice inclusion.

Some of the chapters expand their consideration of AI's influence into the provision of professional legal services. Particularly at the top end of town there has been a recent rush to technologise almost every aspect of data analysis and document evaluation. Contracts are being drafted by ChatGPT, algorithms are doing discovery and due diligence compliance is determined through AI. Some larger firms have enormously expanded their case-load portfolio using AI because those time-consuming information and data analysis tasks that once made the risky costs involved in running more problematic cases prohibitive, have been contained through automation. As positive as this all sounds if it leads to greater legal representation and lower

⁶ Alicia Wee and Mark Findlay (2020) 'AI and Data Use: Surveillance Technology and Community Disquiet in the Age of COVID-19', SMU Centre for AI & Data Governance Research Paper No. 2020/10, Available at SSRN: <https://ssrn.com/abstract=3715993> or <http://dx.doi.org/10.2139/ssrn.3715993>

charges to clients (neither perhaps necessarily the firms' primary reason for digitising) there are downsides to this trend. The demographics of legal firms has changed radically. Legal secretaries, para legals, junior lawyers (and I guess judge's associates) have become expendable labour as technology can perform their routine functions quicker, cheaper and without the ancillary obligations. What impact this transition has had on the reality of in-house legal training is yet to be fully evaluated. And as I mentioned earlier, unless senior partners have become code savvy, they are at risk of professional liability suits if AI fails in crunching data against legal duty and client expectations.

Yet as with the potential to open up access to justice through the courts, if law firms employ savings made through digital transformation to benefit their clients (and potential clients) and are mindful of the human impact that comes with automation, then the use of AI will have widespread benefit. One contributor discusses the need in such developments to keep one eye on equitable utilization across law firms big, medium and small. The reasons for this are obvious when it comes to a level litigation playing field. In the criminal jurisdiction it would be a challenge to affecting the presumption of innocence if the prosecution services were well technologised, and limited legal aid fell behind, or vice versa.

As it was with the strictures caused for judicial administration and legal service delivery by the COVID-19 pandemic, the move to more digitised courts and AI-managed legal paperwork were responses to external inevitabilities. Even without the tyranny of social distancing, if the rest of the professional world and civil society are becoming digitally transformed, and emersed in the convenience of generative AI, it would only endorse the view that law is always behind the times if it resisted the march of frontier technology. Even so, the peculiar requirements for an AI brief in crafting engagement with the courts and legal services mean that simply re-using the efficiency and cost-effective drivers that AI providers might consider in other market applications will lead to adverse outcomes. An example may help here. If access to justice is a key objective that AI developers are asked to integrate into the AI application then the workable definition of justice is crucial so that it can have a technical transposition. In legal theory the law is meant to be certain but at the same time responsive to subjective contexts. On the certainty front this may translate into binary code without too much difficulty. Intuition and cognitive variance case to case is much more problematic when it comes to predictive code reduction. But both are necessary if AI is to reflect the way law is applied in human reasoning.

Inevitability, while a reality is something that legal services struggle to address in keeping pace with modernity on all fronts. Necessity should be a stimulus and not an end in itself when it comes to digital transformation. Digital transformation is much more than adopting technology in as many settings as possible. It is better to realise two important issues where digital transformation is concerned:

- It should improve rather than complicate the fortunes of human stakeholders. In the context at issue here, improving case-load efficiency and reducing court time through AI-assistance should not generate administrative possibilities requiring judges to take on more work. Rather, through the redistribution of mundane tasks to more automated processing judges must be given more time to improve the quality of what they do best.
- It should focus on data and not only technology and AI. In this regard the quality of the data and not just the volume that is processed and analysed is of paramount importance. A key problem in automating data management with efficiency as the driver is that stakeholders become distracted by volume and speed and do not take time considering whether the data being crunched is as good or better than when it was sourced and managed through human intelligence. The problems with biased outcomes when AI is employed in criminal justice recordkeeping is an important example.

Inevitability is a profound consideration when we see justice agencies and legal service delivery struggling to keep up with alternative resolution processes and pressures from aligned institutional and market areas. It could be conceded that courts and law firms had no choice but to engage with AI and technology in the modern information economy. Even so, this eventuality can be seen as an opportunity for having justice delivery and lawyering drawing closer to the society they should see as serving, rather than risk becoming more elite and removed through a fog of technological firewalls.

This brief reflection has touched on some of the push and pull factors behind the digitising of justice. Being aware of these against a background of prevailing barriers to equitable justice delivery is crucial if the digital transformation of law and justice is also to return law to the important daily challenges of rapid social change. In the Asian jurisdictions covered in the three papers that follow political, economic, social and cultural characteristics have been rocketed into a digital stratosphere. Almost every aspect of contemporary life experience is dependent on frontier technologies and AI applications. Recognising the great benefits that are attendant on this revolution, justice and legal professionals and administrators should not be blind to the challenges that change presents to the normative foundations of law. I have talked about access and accountability but the equality in justice delivery is also at risk. In 1983 Doreen McBarnet published an important monograph exposing what she called ‘two tiers of justice’: wherein legal determinations in the higher courts were delivered with all the checks and balances that the adversarial system is known for, while in the sub-ordinate courts justice was churned out in a depersonalised and often trivialised fashion.⁷ Recently, Jane Loo and I employed and developed McBarnet’s analysis in the context of digitised courts and justice in one of the jurisdictions covered by the contributors to this collection. In that article we attempted to elaborate how

⁷ Doreen McBarnet (1983) *Conviction: Law, the State and the Construction of Justice* (Oxford Socio-Legal Studies: Oxford).

automating the lower courts on the basis that matters heard therein were of less consequence, and any failing of tech/AI might be less damaging, while retaining conventional due process safeguards for the higher courts risked exacerbating two realms of legal process and judicial determination.⁸

Perhaps the most significant contribution offered to the consideration of digitised justice by the chapters to follow is that even when AI and frontier technology are globalist features of digital transformation, the delivery of justice and legal services are profoundly contextual. Whether the differences discussed in the chapters are as a consequence of various histories of transplantation or more as a result of contemporary socio-economic distinction we do not have time to debate here. The contributors spend time in detailing the unique decision-making institutions and processes that comprise the justice administrations of their focus. From there they draw out specific reasons for why certain pathways of digital transformation have been favoured and others closed off. It is fascinating for the reader to delve into these particular contextual dynamics and then to search out similarities and differences across the three jurisdictions. There are common constants. The court hierarchies and their judicial leaders play important roles in determining the direction and pace of judicial transformation. The linguistic, ethnic and cultural makeup of civil societies being serviced will prioritise certain needs and directions. All judicial administrations are over-burdened and under resourced to meet the growing pressure of expanding case-loads. All legal professions are eager to avail themselves of automation in data management. The trust and legitimacy offered or withdrawn by civil society plays an important role in what policies work and what don't. But despite the similarities, important subjective considerations mean that no one-size-fits all approach to digital transformation is appropriate when the distinct identities of national court systems and legal traditions are in play.

Recognising the need for jurisdictional sensitivity when advocating a regional or even global approach to AI enhancement is one thing. At the same time there are certain universal considerations when law and justice are the recipients of technological advancement. Rule of law and its guiding principles remain uncontested as at the heart of the judge's mission and the lawyer's craft. This means that if the languages of the law and of technology are to speak in harmony when seeking the modernisation of legal decision-making then concepts like rule of law must make sense to AI technicians and data scientists as much as they do to lawyers. Legal scholars have their work cut out to ensure that AI developers understand in the context of justice facilitation that rule of law should apply to AI as it does to legal practice. If AI and legal service delivery develop in separate orbits and are then forced together because of market pressures or economic and political inevitabilities, then the moment of empathetic cross fertilisation may be

⁸ Jane Loo and Mark Findlay (2022) 'Digitized Justice: The New Two Tiers', *Criminal Law Forum; an International Journal* 33: 1-38.

lost. Consequently technology and AI will prevail as the much stronger players in digital transformation requiring law and justice to fit an uncomfortable mould.



AI in the judiciary: The Singapore Case

Nydia Remolina

Abstract

This Chapter examines the integration of Artificial Intelligence (AI) within the judicial system of Singapore. Singapore's judiciary has embraced AI not as a tool for adjudication, but as an augmentative instrument for legal research, procedural efficiency, and access to justice. It provides a detailed account of AI use cases in the courts, including case summarization, evidence review, assistance for self-represented litigants, and tools like the Divorce Assets Informative Division Estimator. The discussion then turns to the legal profession, exploring how law firms in Singapore are adopting AI technologies. The paper also addresses how AI implementation in the judicial system is situated in the AI Governance model. In its final sections, the paper reflects on the broader governance implications, emphasizing the alignment of AI tools with national AI principles, the roles of different stakeholders, the importance of digital literacy and inclusiveness, and the evolving impact of generative AI on legal education.

Keywords

AI, Singapore courts, Generative AI, access to justice, Legal technology, AI governance, data protection, digital transformation.

1. INTRODUCTION

The integration of artificial intelligence (AI) into judicial systems worldwide has prompted both enthusiasm and caution. While AI promises efficiency gains, streamlined processes, and improved access to justice¹, it also raises profound questions about accountability, explainability, the role of human judgment, and the consequences of over-simplification in the judicial system. AI integration in courts is often framed as a way to reconcile efficiency with improved access to justice.² AI tools—such as triage systems, online dispute resolution platforms, and automated document drafting—can reduce administrative burdens and procedural complexity, making justice systems more accessible, especially to self-represented or underserved users.³ However, scholars caution that over-simplification through automation may undermine procedural fairness, particularly in complex or sensitive cases.⁴ Excessive procedural streamlining may reduce transparency or procedural fairness, especially for complex or vulnerable cases that require human judgment or tailored remedies.⁵ Digitally driven efficiency gains may inadvertently exclude users with limited internet access, language barriers, or low digital literacy—undermining true access to justice. Concerns about algorithmic bias, lack of

¹ Stephanie Ashe, Stanford Law School Launches Filing Fairness Toolkit (Dec. 5, 2023), <https://law.stanford.edu/press/stanford-law-school-launches-filing-fairness-toolkit/>; Colleen V Chien and Miriam Kim, 'Generative AI and Legal Aid: Results from a Field Study and 100 Use Cases to Bridge the Access to Justice Gap' (2024) 57 *Loyola of Los Angeles Law Review* 903. Chien and Kim conducted the first controlled field study examining how generative AI tools affect legal aid delivery in the United States. A group of 91 legal aid attorneys received trial access to large language models, with a randomly selected subset receiving “concierge” support—training sessions, peer use cases, and office hours. By the end of the pilot, 90% of participants reported increased productivity, and 75% indicated they intended to continue using these tools. Adoption grew even among female users who initially lagged behind; by the study's conclusion, there was no significant gender disparity in outcomes. The participating individuals primarily employed AI for low-risk tasks such as document summarisation, preliminary legal research, first-draft generation, and translation into accessible formats. Importantly, the study produced a library of 100 real-world use cases, including prompts and outputs, to demonstrate practical application scenarios for legal aid contexts. The findings underscore that successful integration hinges not merely on tool access, but also on structured onboarding and support—especially to mitigate risks like hallucinations and confidentiality concerns. Overall, the study concludes that generative AI can significantly narrow the justice gap—not by replacing lawyers, but by augmenting their capacity and enabling them to serve more underserved clients efficiently and ethically.

² Margaret D Hagan, 'Opportunities & Risks for AI, Legal Help, and Access to Justice' (Legal Design and Innovation, June 2023) <https://medium.com/legal-design-and-innovation/opportunities-risks-for-ai-legal-help-and-access-to-justice-9c2faf8be393> accessed 26 July 2025.

³ Hon Xavier Rodriguez, 'Artificial Intelligence (AI) and the Practice of Law' (2023) 24 *The Sedona Conference Journal* 783, 823; Colleen V Chien, Miriam Kim, Akhil Raj and Rohit Rathish, 'How Generative AI Can Help Address the Access to Justice Gap Through the Courts' (2024), *Loyola of Los Angeles Law Review* (forthcoming)

⁴ Margaret D Hagan, 'Opportunities & Risks for AI, Legal Help, and Access to Justice' (Legal Design and Innovation, June 2023) <https://medium.com/legal-design-and-innovation/opportunities-risks-for-ai-legal-help-and-access-to-justice-9c2faf8be393> accessed 26 July 2025.

⁵ Ibid.

transparency (explainability), and diminished human oversight have also been raised, highlighting the importance of maintaining accountability and equitable design in AI-based legal processes. In this context, Singapore has emerged as a jurisdiction that aims to integrate AI into judicial institutions responsibly and strategically. This chapter explores Singapore's evolving approach to AI in its courts, focusing on how technological innovations are being deployed and implemented⁶ to augment rather than replace human actors.

Singapore's judiciary began exploring AI use cases in the early 2010s as part of a broader digital transformation strategy. However, the recent emergence of generative AI (GenAI)—and large language models (LLMs) in particular—has accelerated these developments. Rather than adopting these technologies indiscriminately, Singapore follows a governance-first, human-centric approach, carefully aligning its initiatives with national ethical frameworks such as the Model AI Governance Framework⁷. These efforts are supported by institutional actors including the Singapore Academy of Law, the Ministry of Law, and industry partners from the private sector.

This chapter outlines the key initiatives deployed by Singapore in the judicial system and, to some extent, the legal profession, examines the ethical and governance frameworks informing these efforts, and analyses the broader implications for legal practice, access to justice, and institutional trust.

2. THE SINGAPORE APPROACH TO THE AI IN THE JUDICIARY

Singapore has emerged as a global leader in the thoughtful integration of Artificial Intelligence (AI) into its judicial system.⁸ The city-state's approach is rooted in balancing the efficiency and innovation offered by generative AI (GenAI) with the need to uphold the rule of law, judicial integrity, and data protection. Several studies have explored the use of AI for improving judicial efficiency, such as predicting case outcomes, assisting in evidence analysis, and automating legal

⁶ At this point it is crucial to draw a critical distinction between the underlying AI technologies and the institutional information management processes through which they are operationalised. While tools such as natural language processing and machine learning provide new technical capabilities their actual impact on judicial practice depends largely on how they are embedded within administrative workflows, decision-making protocols, and broader procedural norms. Recognising this distinction is essential to evaluating both the opportunities and risks that AI presents.

⁷ Personal Data Protection Commission (PDPC), *Singapore's Approach to AI Governance: Model AI Governance Framework* (January 2020) <https://www.pdpc.gov.sg/help-and-resources/2020/01/model-ai-governance-framework> accessed 26 July 2025.

⁸ Jason Grant Allen, Jane Loo and Jose Luis Luna Campoverde, 'Governing Intelligence: Singapore's Evolving AI Governance Framework' (2025) 1 *Cambridge Forum on AI: Law and Governance* e12.

document generation.⁹ The judiciary has been actively engaging with AI since the early 2010s, particularly through its digital transformation initiatives, but its embrace of GenAI has significantly accelerated following developments in large language models (LLMs) like GPT-4.

Rather than rushing to adopt new technologies wholesale, Singapore follows a testbed and governance-first approach.¹⁰ The courts collaborate closely with the Ministry of Law, the Singapore Academy of Law, and private technology providers, including the legal AI company Harvey, with whom the judiciary signed a two-year memorandum of understanding in 2024.¹¹ Additionally, the judiciary has been clear in identifying domains where AI, and more specifically, GenAI, can assist without compromising judicial discretion given that Singapore's broader digital judiciary strategy is framed by values of "accessibility, efficiency, and transparency", and AI is seen as "a means to achieve these objectives"—not a replacement for human judgment.¹² For instance, Chief Justice Sundaresh Menon has emphasized that AI will not be used for decision-making or sentencing purposes in the near future, due to ethical concerns surrounding explainability, bias, and accountability.¹³ Instead, AI is being piloted in low-risk domains such as case summarization, translation, and self-help tools for litigants-in-person that will be explained in the next session of this chapter.¹⁴

⁹See Kalliopi Terzidou, 'The Use of Artificial Intelligence in the Judiciary and its Compliance with the Right to a Fair Trial' (2022) 31 *Journal of Judicial Administration* 154.; Qingxia Chen, 'Improving the Trial Efficiency of Criminal Cases with the Assistance of Artificial Intelligence' (2025) 5 *Discover Artificial Intelligence* 110; Bart Jan van Ettehoven and Corien Prins, 'Artificial Intelligence and the Judiciary System' in Vanessa Mak, Marta Cantero Gamito and Hans-W Micklitz (eds), *Research Handbook in Data Science and Law* (Edward Elgar Publishing 2024) 361.

¹⁰ Devyani Pande and Araz Taeihagh, 'Navigating the Governance Challenges of Disruptive Technologies: Insights from Regulation of Autonomous Systems in Singapore' (2023) 26 *Journal of Economic Policy Reform* 298.

¹¹ Legal Technology Insider, 'Singapore Courts Sign MOU with Harvey AI' (22 February 2024) <https://legaltechnology.com/2024/02/22/singapore-courts-sign-mou-with-harvey-ai> accessed 1 June 2025.

¹² Aedit Abdullah, 'Speech Delivered at Conversations with the Community' (Singapore Judiciary, 30 May 2024) <https://www.judiciary.gov.sg/news-and-resources/news/news-details/justice-aedit-abdullah-speech-delivered-at-conversations-with-the-community-on-30-may-2024> accessed 26 July 2025.

¹³ These concerns have been pointed out by the Chief Justice in Singapore even before the announcement of Singapore's initiatives for the use of AI in the judiciary. See Sundaresh Menon, 'Response by Chief Justice to Opening of the Legal Year 2019' (Singapore Judiciary, 7 January 2019) <https://www.judiciary.gov.sg/docs/default-source/news-docs/cj-oly-speech-2019-pdf.pdf> accessed 26 July 2025.

¹⁴ Sundaresh Menon, 'Keynote Address at the Sentencing Conference 2022' (31 October 2022) <https://www.sal.org.sg/Resources-Tools/Speeches/Speech-Details/speech-by-chief-justice-sundaresh-memon--sentencing-conference-2022> accessed 1 June 2025.

Accordingly, Mr. Tan Ken Hwee, Chief Transformation and Innovation Officer of the Singapore Courts, has proposed a “traffic light system” to evaluate and guide AI integration in the judiciary.¹⁵ Under this framework, green-lighted use cases are low-risk applications that support administrative efficiency or user empowerment—such as document classification, scheduling tools, or public-facing chatbots—where the risks to fairness or due process are minimal. Amber uses may involve higher stakes or require closer monitoring and human oversight, such as tools that provide legal information or summarise case law. Red-lighted applications, including those involving direct judicial decision-making, sentencing, or predictive analytics that may affect outcomes, are currently deemed unacceptable due to unresolved concerns around transparency, bias, and institutional accountability. This structured framework provides practical, context-sensitive guidance for the courts and their partners in determining how and where AI tools can responsibly be deployed within the justice system.

Singapore also aligns its judicial AI strategy with national AI governance efforts. While Singapore’s Model AI Governance Framework, first published in 2019 and updated for generative AI in 2024¹⁶, and related national initiatives are primarily directed at the private sector, they have contributed meaningfully to a sustained multi-stakeholder dialogue on the ethical, legal, and operational challenges of AI deployment. Importantly, this dialogue extends to the public sector, where concerns around AI governance are increasingly visible as mentioned by Senior members of the judiciary have, in public speeches, when acknowledging the governance challenges that arise when integrating AI into legal decision-making processes. Evidence of this is the recently published discussion paper on Generative AI, launched by the AI Verify Foundation, a Singapore-based non-profit, established under the Infocomm Media Development Authority (IMDA), that promotes responsible AI through testing and governance tools. Even though the AI Verify Foundation build on Singapore’s AI Governance Framework – directed to the private sector – the discussion paper states that it “proposes ideas for senior leaders in government and businesses on building an ecosystem for the trusted and responsible adoption of generative AI.”¹⁷

¹⁵ Thomson Reuters, *AI in the Judiciary: A Singapore Courts Perspective* (Thomson Reuters Legal Insight Southeast Asia, 14 January 2025) <https://insight.thomsonreuters.com/sea/legal/posts/ai-in-the-judiciary-a-singapore-courts-perspective> accessed 26 July 2025

¹⁶ Personal Data Protection Commission (PDPC), ‘Model AI Governance Framework (2nd Edition)’ (2020) <https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/press-releases/2020/model-ai-governance-framework-second-edition> accessed 1 June 2025.

¹⁷ AI Verify Foundation, *Towards a Practical Framework for AI Testing and Assurance: A Discussion Paper* (May 2023) https://aiverifyfoundation.sg/downloads/Discussion_Paper.pdf accessed 26 July 2025.

3. THE INTEGRATION OF AI IN SINGAPORE'S JUDICIAL SYSTEM

3.1. Case summarization

One of the most visible uses of GenAI in Singapore's courts is the automated summarization of legal judgments. This function is especially valuable in a legal system where judgments are lengthy and require detailed analysis for legal research, precedent-setting, or public understanding. A key driver of this innovation is the Singapore Academy of Law (SAL), whose flagship platform, LawNet, plays a central role in implementing and operationalizing such AI capabilities. LawNet serves as the primary digital infrastructure for legal research, case management, and knowledge dissemination in Singapore, and it increasingly integrates AI tools to enhance legal search, automate document classification, and support predictive analytics. For example, its Legal Research Module leverages natural language processing to allow users to query case law and statutes more intuitively, surfacing relevant results based on semantic meaning rather than mere keyword matching.

SAL is a statutory body and professional membership organisation that occupies a unique institutional position: it is tasked with supporting and advancing Singapore's legal sector, which includes everything from legal education and law reform to court technology and digital services.¹⁸ As an organisation led by stakeholders from the Bench and Bar,¹⁹ SAL's initiatives often bridge the needs of the judiciary, the legal profession, and the public.²⁰ In recent years, SAL has been at the forefront of legal technology innovation, pursuing projects that leverage AI to enhance legal research, information access, and transactional efficiency. A prominent example is the overhaul of the LawNet platform to incorporate AI-driven tools.

¹⁸ *A Guide to the Singapore Legal System and Legal Research*, NYU Law GlobalLex (Globalex) (accessed 26 July 2025) <https://www.nyulawglobal.org/globalex/singapore1.html>

¹⁹ The Chief Justice of Singapore is the President of the SAL.

²⁰ The statement that SAL's initiatives often bridge the needs of the judiciary, the legal profession, and the public reflects the institution's role in facilitating coordination across different parts of Singapore's legal ecosystem. Many of SAL's projects are designed to serve multiple stakeholders simultaneously—for example, by improving legal research infrastructure through platforms like LawNet, which supports the work of judges, lawyers, and self-represented litigants. Similarly, its involvement in legal technology development and regulatory experimentation helps ensure that innovation is not confined to the private sector but is informed by judicial needs and public access considerations. In this way, SAL operates as an intermediary, helping to align institutional objectives with broader public interest goals. See for example: Singapore Academy of Law, 'LAUNCHED: LAUNET AI & E-APOSTILLE!' (LinkedIn post, TechLaw.Fest 2024, circa 10 months ago) https://www.linkedin.com/posts/singapore-academy-of-law_launched-lawnet-ai-e-apostille-two-activity-7239928771523346432-pLRz/ accessed 26 July 2025

LawNet is Singapore's central legal information portal, operated by SAL, which provides a comprehensive database of legal materials – including case law, legislation, practice directions, and authoritative commentaries – to legal professionals.²¹ It has long been an essential service, reportedly used by over 75% of Singapore's legal practitioners²², but SAL recognized the opportunity to improve LawNet's usability and intelligence with AI. As a result, in 2024, SAL launched a major update termed "LawNet AI."²³ This initiative introduced a refreshed interface consolidating key services (Legal Research, Academy Library resources, Corporate Registers, among others.) and, notably, an AI-powered case summarisation feature for judgments.²⁴ The IMDA partnered with the SAL to co-develop GPT-Legal, a generative AI-driven research assistant that was later integrated into the LawNet platform.²⁵

Under LawNet AI, more than 15,000 Singapore court judgments have been supplemented with AI-generated summaries.²⁶ These summaries are modelled on the style of official headnotes found in the Singapore Law Reports, containing concise statements of the catchwords (topics), material facts, issues, and holdings of each case. The aim is to improve legal research efficiency: instead of reading a full judgment, which can span dozens of pages, to grasp its essence, lawyers and judges can obtain a quick overview from the AI summary, then decide if the case is relevant enough to delve into further.²⁷

Concerns about AI-generated summaries influencing legal reasoning—particularly through the misidentification or oversimplification of ratio decidendi—are increasingly salient as generative

²¹ *A Guide to the Singapore Legal System and Legal Research*, NYU Law GlobalLex (Globalex) (accessed 26 July 2025) <https://www.nyulawglobal.org/globalex/singapore1.html>

²² *Amazon Web Services, Developing an AI-Driven Solution Using AWS: IMDA Case Study* (AWS Solutions Case Study) <https://aws.amazon.com/solutions/case-studies/imda-case-study/> accessed 26 July 2025

²³ *LawNet Release Notes*, 'Introducing LawNet AI Summaries with Trust and Safety Features – v2.0' (Release Notes, LawNet, 15 October 2024) https://release-notes.lawnet.com/2024/10/15/gen_ai/ accessed 26 July 2025

²⁴ *Ibid.*

²⁵ Infocomm Media Development Authority, 'Legal research to become more efficient with new large language model contextualised to domestic law' <https://www.imda.gov.sg/resources/press-releases-factsheets-and-speeches/factsheets/2024/gpt-legal> accessed 26 July 2025

²⁶ See for example: Singapore Academy of Law, 'LAUNCHED: LAWNET AI & E-APOSTILLE!' (LinkedIn post, TechLaw.Fest 2024, circa 10 months ago) https://www.linkedin.com/posts/singapore-academy-of-law_launched-lawnet-ai-e-apostille-two-activity-7239928771523346432-pLRz/ accessed 26 July 2025

²⁷ Singapore Academy of Law, 'LAUNCHED: LAWNET AI & E-APOSTILLE!' (LinkedIn post, TechLaw.Fest 2024, circa 10 months ago) https://www.linkedin.com/posts/singapore-academy-of-law_launched-lawnet-ai-e-apostille-two-activity-7239928771523346432-pLRz/ accessed 26 July 2025

technologies are integrated into legal research platforms.²⁸ In response, the SAL has introduced specific safeguards within its LawNet platform to mitigate the risk of such summaries being mistaken for authoritative interpretations. As outlined in its October 2024 release notes, summaries are only generated when a high threshold of factual accuracy is met, and those falling below this standard are automatically withheld. Additionally, LawNet employs visual cues such as low-confidence paragraph highlighting and unmatched entity warnings to flag potential hallucinations or distortions. Importantly, users can cross-reference each summary paragraph with the corresponding portion of the original judgment, reinforcing transparency and enabling verification. These features are further supported by an overall “fact score” that communicates the reliability of each summary. Collectively, these safeguards are designed not only to maintain user trust but to ensure that AI-generated content supports rather than substitutes doctrinal reasoning,²⁹ thereby reducing the likelihood that summaries inadvertently shape precedent or supplant legal analysis.

On the technical front, GPT-Legal was a collaborative effort involving SAL, the Infocomm Media Development Authority (IMDA, a government agency), and technology partners.³⁰ According to an industry case study, IMDA’s Business Technology Group worked with SAL to build a custom large language model (LLM) tuned specifically for Singapore legal content.³¹ This model, GPT-Legal, was trained and deployed on secure cloud infrastructure (Amazon Web Services’ SageMaker platform) with a focus on Singapore’s sources of law.³² The training process incorporated actual Singapore court data and LawNet’s databases in consultation with the Singapore Courts, ensuring that the AI understands local legal terminology, bilingual content (e.g. common use of Malay or Chinese terms in judgments), and the stylistic nuances of Singaporean legal texts.³³ The result is a system that can generate summaries that closely approximate what a legally-trained human might write. It delivers, at a glance, the key points of unreported judgments, which previously had no summaries or headnotes – including the salient facts and the court’s holdings.³⁴ This reduces research time. For instance, tasks that once required manually

²⁸ See David Uriel Socol De La Osa and Nydia Remolina, ‘Artificial Intelligence at the Bench: Legal and Ethical Challenges of Informing—or Misinforming—Judicial Decision-Making through Generative AI’ (2024) 6 *Data & Policy* e59.

²⁹ *LawNet Release Notes*, ‘Introducing LawNet AI Summaries with Trust and Safety Features – v2.0’ (Release Notes, LawNet, 15 October 2024) https://release-notes.lawnet.com/2024/10/15/gen_ai/ accessed 26 July 2025

³⁰ *Ibid.*

³¹ Amazon Web Services, *IMDA Enhances Legal Research Process by Developing New Large Language Model for Legal Case Summarisation Using Amazon SageMaker* (AWS Solutions Case Study) <https://aws.amazon.com/solutions/case-studies/imda-case-study/> accessed 26 July 2025

³² *Ibid.*

³³ *Ibid*

³⁴ *Ibid*

skimming or reading through lengthy judgments (sometimes 5–10 hours of work) can now be accomplished in minutes.³⁵

In addition, GPT-Legal is anticipated to have applications beyond its deployment on LawNet. In future, legal tech providers may be able to integrate the model into their platforms, enabling them to build new tools or upgrade existing ones.³⁶ For instance, GPT-Legal could power features that summarize private legal documents such as contracts or prospectuses, synthesizing information across multiple legal sources into structured, user-friendly formats.³⁷

In connection to this initiative, at TechLaw.Fest 2024, SAL and Microsoft Singapore signed a memorandum of understanding to collaborate on resources that help the legal profession use generative AI effectively.³⁸ One immediate product was a “Prompt Engineering for Lawyers” guide released by SAL,³⁹ educating lawyers on how to frame queries to AI systems for accurate results and highlighting pitfalls to avoid (such as inadvertent disclosure of confidential data or over-reliance on AI outputs without verification). This training initiative complements SAL’s technical projects by ensuring the end-users – lawyers and law students – are equipped with the knowledge to use AI tools responsibly and skillfully. It underscores SAL’s dual institutional role: not only building innovative tools like LawNet AI, but also cultivating an AI-ready culture in the legal community.⁴⁰

3.2. Evidence Review

Another area where GenAI is being explored is the review and synthesis of evidence. Court cases often involve vast volumes of documents—contracts, emails, statements, reports—and it is time-consuming to locate key evidence and construct a coherent narrative. Singapore’s judiciary is testing AI tools that automatically cluster, summarize, and extract important segments from

³⁵ Ibid

³⁶ No publicly disclosed evidence has yet confirmed that any **specific legal firms or tech companies in Singapore** have begun using GPT-Legal in commercial products beyond the LawNet integration.

³⁷ Infocomm Media Development Authority, ‘Legal research to become more efficient with new large language model contextualised to domestic law’

³⁸ Caroline Hill, ‘TechLaw.Fest in Singapore: New Collaborations for the Academy and Ministry of Law with Microsoft and Lupl’ (Legal Technology Insider, 11 September 2024) <https://legaltechnology.com/2024/09/11/techlaw-fest-in-singapore-new-collaborations-for-the-academy-and-ministry-of-law-with-microsoft-and-lupl/> accessed 26 July 2025

³⁹ Ibid.

⁴⁰ Ibid.

large datasets submitted during litigation. These tools are being trialled internally and may be rolled out in procedural tasks such as pre-trial conferences, discovery, and case file preparation.⁴¹

The courts have also experimented with speech-to-text tools powered by AI, which can transcribe court hearings in real time and facilitate transcript-based reviews.⁴² For instance, the State Courts⁴³, in collaboration with A*STAR's Institute for Infocomm Research (I²R), developed in 2020 a real-time Speech Transcription System (STS) that transcribes oral testimony in English during hearings.⁴⁴ The system can display transcripts instantly in courtroom displays, enabling judges and parties to review evidence immediately. According to data published by the judiciary, it reportedly achieved about 90% accuracy, with speaker recognition tailored to court-specific vocabulary (e.g. for coroner's inquiries).⁴⁵ These tools potentially could improve accuracy and accessibility, especially for appellate review and hearings involving unrepresented litigants.

However, concerns remain. Evidence synthesis tools, particularly those powered by GenAI, may inadvertently bias the judicial narrative if not properly checked. This is even recognised by the judiciary in Singapore in the Registrar's Circular No 1 of 2024 on the Use of Generative Artificial Intelligence Tools by Court Users.⁴⁶ There is also a risk of over-reliance,⁴⁷ particularly if AI tools

⁴¹ Singapore Courts Transformation Office, 'AI for Evidence Synthesis Pilot Report' (April 2024, internal circulation).

⁴² Sundaresh Menon CJ, 'Judicial Responsibility in the Age of Artificial Intelligence' Keynote Speech at the Inaugural Singapore-India Conference on Technology (13 April 2024)
<https://www.judiciary.gov.sg/news-and-resources/news/news-details/chief-justice-sundaresh-menon--keynote-speech-at-the-inaugural-singapore-india-conference-on-technology>, accessed 25 July 2025

⁴³ The State Courts handle over 90% of Singapore's judicial caseload. Eugene Tan, *Singapore: National Report for the Global Access to Justice Project* (Global Access to Justice Project, September 2021)

⁴⁴ **State Courts and ASTAR's Institute for Infocomm Research (I²R) Collaborate to Develop Real-time Speech Transcription System for Use in Courts*** (Press Release, 14 December 2017)
<https://www.nas.gov.sg/archivesonline/data/pdfdoc/20171214002.pdf> accessed 26 July 2025

⁴⁵ Aedit Abdullah, 'Technology as a Bridge to Justice' (Speech, **Conversations with the Community**, Singapore Courts, 30 May 2024)
<https://www.judiciary.gov.sg/news-and-resources/news/news-details/justice-aedit-abdullah--speech-delivered-at-conversations-with-the-community-on-30-may-2024> accessed 26 July 2025

⁴⁶ The Guide states that AI can "generate answers that appear to be persuasive and authoritative, but could be extremely inaccurate or even fabricated. [...] They can also include facts which you never provided to them, or make arguments that you never asked them to make. This is also known as "hallucinating"." Registrar, **Registrar's Circular No 1 of 2024, Supreme Court** (28 February 2024)
https://www.judiciary.gov.sg/docs/default-source/circulars/2024/registrar's_circular_no_1_2024_supreme_court.pdf accessed 26 July 2025.

⁴⁷ Zana Buçinca, Maja Barbara Malaya, and Krzysztof Z. Gajos. 2021. To Trust or to Think: Cognitive Forcing Functions Can Reduce Overreliance on AI in AI-assisted Decision-making. *Proc. ACM Hum.-Comput. Interact.* 5, CSCW1, Article 188 (April 2021), 1-21.

overlook nuances in tone, body language, or verbal hesitations during oral testimonies.⁴⁸ As such, Singapore's judiciary requires that all AI-generated material be subject to human verification, and has developed internal protocols for validation, regardless of the AI safeguards the AI system has put in place, or who has developed the AI system that the court user⁴⁹ has chosen.⁵⁰ The potential for AI to transform evidence review in courts remains substantial, especially if paired with explainable AI techniques that help users understand why certain evidence was selected or prioritized.⁵¹ The integration of Explainability as an AI governance principle, is critical in legal contexts where transparency, due process, and accountability are foundational. Some scholars have noted that in jurisdictions such as the United States, using a GenAI system to, for instance, summarise evidence, without informing counsel or providing them with an opportunity to object to arguments that are not in the record may very well expose the Court to sources of information that have not been put in evidence by the parties, or that raise other due process issues. Accordingly, extreme caution must be exercise on these use cases and further developments of ethical use of AI in the courtroom may be needed.⁵²

3.3. Support for Self-Represented Litigants

Singapore's approach to access to justice is grounded in a holistic framework that encompasses legal aid provision, the promotion of pro bono legal work, the accessibility and efficiency of court processes, and the development of alternative dispute resolution (ADR) mechanisms both within and beyond the judiciary. It also prioritises the affordability of legal services and responsiveness to the needs of individuals, communities, and businesses.⁵³ Despite these well-established efforts, significant gaps remain—particularly for those who fall outside the eligibility thresholds for legal aid yet cannot afford private legal representation. This issue is most visible in family law proceedings, such as maintenance, protection order, and divorce cases, where a considerable

⁴⁸ Some authors even argue that standard explainable-AI features may actually exacerbate over-reliance unless carefully designed interventions are used. Ibid.

⁴⁹ A Court User refers to any person who is involved in a Court case, including prosecutors, lawyers, Self-Represented Persons, or witnesses.

⁵⁰ Registrar, *Registrar's Circular No 1 of 2024, Supreme Court* (28 February 2024) https://www.judiciary.gov.sg/docs/default-source/circulars/2024/registrar's_circular_no_1_2024_supreme_court.pdf accessed 26 July 2025.

⁵¹ Paul W Grimm, Maura R Grossman, Daniel G Brown and Molly Y Xu, 'The GPTJudge: Justice in a Generative AI World' (2023) 23 *Duke Law & Technology Review* 1–34.

⁵² Ibid.

⁵³ Eugene Tan K B, *Singapore: National Report for the Global Access to Justice Project* (Global Access to Justice Project, September 2021)

proportion of litigants are self-represented.⁵⁴ While self-representation may reflect procedural openness, it often results in uneven outcomes: individuals unfamiliar with legal norms and evidentiary requirements are left to navigate a complex system without guidance.⁵⁵ As such, the formal availability of judicial recourse by introducing the possibility of self-representation, does not always translate into meaningful access to justice, particularly for vulnerable or resource-constrained parties.

Hence, Singapore's broader commitment to leveraging technology to support self-represented litigants. The integration of GenAI into judicial systems has significant potential to improve access to justice, particularly for self-represented litigants (SRLs), who often lack the legal knowledge and procedural familiarity necessary to navigate complex court processes.⁵⁶ In Singapore, the judiciary has identified SRLs as a priority group in its digital transformation agenda, recognizing the barriers these individuals face in preparing legal documents, interpreting procedural rules, and presenting arguments effectively.⁵⁷ These challenges are especially pronounced in high-volume jurisdictions such as the Small Claims Tribunals (SCT), where SRLs constitute the majority of parties and where efficiency and procedural compliance are crucial to case progression.⁵⁸

In 2024, the Singapore judiciary entered a two-year memorandum of understanding with the legal technology firm Harvey AI to develop a customized GenAI assistant tailored specifically for judicial applications.⁵⁹ The assistant is designed to guide SRLs through various aspects of the

⁵⁴ Helena Whalen-Bridge, 'Unrepresented litigants in Singapore: A prolegomenon to court typologies' (2021) 11 *Oñati Socio-Legal Series* 480–502

⁵⁵ Empirical studies show that ignorance and misunderstanding of the law are common across different domains. See Benjamin van Rooij, 'Do People Know the Law? Empirical Evidence about Legal Knowledge and Its Implications for Compliance' in Benjamin van Rooij and D Daniel Sokol (eds), *The Cambridge Handbook of Compliance* (Cambridge University Press 2021) 467.

⁵⁶ Andrew T Holt, *Legal AI-d to Your Service: Making Access to Justice a Reality* (Vanderbilt JETLaw, 4 February 2023) <https://www.vanderbilt.edu/jetlaw/2023/02/04/legal-ai-d-to-your-service-making-access-to-justice-a-reality/> accessed 26 July 2025.; Cabral JE, Chavan A, Clarke TM, Greacen J, Hough BR, Rexer L, et al. Using Technology to Enhance Access to Justice. *Harv J Law Technol.* 2012;26(1)

⁵⁷ Lydia Lam, 'Generative AI Being Tested for Use in Singapore Courts, Starting with Small Claims Tribunal' (Channel NewsAsia, 27 September 2023) <https://www.channelnewsasia.com/singapore/artificial-intelligence-court-small-claims-singapore-chatgpt-3801756> accessed 26 July 2025.

⁵⁸ Clare Lin, 'Four Ways AI Is Shaking Up Singapore's Legal Practice' (GovInsider, 4 June 2025) <https://govinsider.asia/intl-en/article/four-ways-ai-is-shaking-up-singapores-legal-practice> accessed 26 July 2025.

⁵⁹ *Ibid.*

legal process, including document preparation, procedural navigation, and rights clarification.⁶⁰ Importantly, this GenAI tool does not aim to provide legal advice but is limited to offering general legal information and procedural guidance according to the public statements released by the judiciary.⁶¹ The project is being piloted within the SCT, which hears approximately 10,000 cases annually and often involves disputes of a civil-commercial nature between individuals or small businesses.⁶² The GenAI system is still under development and its impact remains to be seen.⁶³

The judiciary is also mindful of linguistic and accessibility barriers and their impact in access to justice. Singapore's multilingual population necessitates legal tools that operate effectively in English, Mandarin, Malay, and Tamil. In alignment with this objective, the AI assistant is integrated with a machine translation feature that enables real-time rendering of legal documents and guidance into the user's preferred language, an innovation first trialed by the Small Claims Tribunal in 2023.⁶⁴ The SCTs have introduced complimentary AI-driven translation services to translate court correspondence into Chinese, Malay and Tamil for documents in cases filed in the SCTs.⁶⁵ This feature not only improves comprehension for non-English speakers but also facilitates inclusivity in a judiciary that prides itself on procedural fairness and equal access given that in Singapore, documents submitted in court must be in English.

GenAI tools for legal aid and advice are not unique to Singapore and they reflect a trend in which digital platforms are deployed to support users of the judicial system and expand access to legal information. At ICAIL 2025's AI4A2J workshop, participants presented tools including chatbots that assist tenants facing eviction, automated form-fillers offering contextual guidance through court navigation systems, and layout generators that transform dense legal forms into

⁶⁰ At the Standing International Forum of Commercial Courts in April 2024, Justice Goh Yi-han stated that the goal was to use Harvey to "answer legal queries, help users prepare their case for hearing, and even provide a preliminary assessment of the likely outcome of cases." Ibid.

⁶¹ Ibid.

⁶² Ibid.

⁶³ Yi-han Goh, 'Perspectives on Artificial Intelligence – A View from Singapore' (Address, Standing International Forum of Commercial Courts, Doha, 20 April 2024) <https://www.judiciary.gov.sg/news-and-resources/news/news-details/justice-goh-yi-han--address-at-the-standing-international-forum-of-commercial-courts> accessed 26 July 2025.

⁶⁴ State Courts of Singapore, 'Singapore Courts Launch AI Translation for Small Claims Tribunal' (Press Release, April 2024) <https://www.judiciary.gov.sg/news/ai-translation-sct> accessed 1 June 2025.

⁶⁵ State Courts, *Small Claims Tribunals Commemorate 40th Anniversary with Book Launch and MOU Signing* (Media Release, 16 April 2025) <https://www.judiciary.gov.sg/news-and-resources/news/news-details/media-release--small-claims-tribunals-commemorate-40th-anniversary-with-book-launch-and-mou-signing> accessed 26 July 2025.

user-friendly visual designs.⁶⁶ For instance, in the UK, an Online Dispute Resolution recommender tool guides users through employment disputes using empathetic conversational flows; in Czechia, the PONK system structures legal texts into style arguments for clarity.⁶⁷ As Singapore explores similar GenAI initiatives to aid unrepresented parties, these models and the academic community emphasize the importance of transparent design, real-world testing, and iterative refinement to mitigate the risks of hallucinations, misleading advice, or over-reliance. Ongoing user research, explainability features, and robust feedback loops are therefore critical to developing systems that reliably empower self-represented litigants without compromising legal accuracy or ethical responsibility.⁶⁸

3.4. The Divorce Assets Informative Division Estimator

The Singapore's Legal Aid Bureau has developed a chatbot, the Divorce Assets Informative Division Estimator (or "Divorce AIDE"). It was announced in 2020⁶⁹ and gives users an estimate of how much they can potentially receive as their share of the matrimonial assets post-divorce.⁷⁰ Divorce AIDE functions as a user-guided estimator that applies established legal principles to the facts provided by users, such as asset values, types of contributions (financial and caregiving), and duration of the marriage. It offers users a non-binding projection of each party's possible share of assets, allowing them to better understand how Singapore courts may approach asset division under prevailing case law.⁷¹

Divorce AIDE is not suitable for cases with complex or high-value asset pools (such as those exceeding S\$5 million), disputes involving trusts, or unique circumstances such as special-needs

⁶⁶ Margaret Hagan, 'Human-Centered AI R&D at ICAIL's Access to Justice Workshop' (Justice Innovation – Stanford Legal Design Lab, 25 June 2025) <https://justiceinnovation.law.stanford.edu/human-centered-ai-at-icails-access-to-justice-workshop/> accessed 26 July 2025

⁶⁷ Ibid.

⁶⁸ Margaret Hagan, 'Towards Human-Centred Standards for Legal Help AI' (2024) 382 *Philosophical Transactions of the Royal Society A* 20230157.

⁶⁹ Yun Xuan Poon, interview with Chua Xin Juan (Acting Director, Professional Services Programme Office, Ministry of Law, Singapore), *What Singapore's Digital Law Future Looks Like*, *GovInsider* (23 November 2020) <https://govinsider.asia/intl-en/article/chua-xin-juan-minlaw-what-singapores-digital-law-future-looks-like> accessed 26 July 2025.

⁷⁰ *Divorce AIDE* (LAB's Matrimonial Asset Division Estimator, Legal Aid Bureau, Ministry of Law, Singapore) https://ink.library.smu.edu.sg/cgi/viewcontent.cgi?article=5680&context=sol_research accessed 26 July 2025.

⁷¹ The website states that *Divorce AIDE does not generate legal advice*. *Divorce AIDE* (LAB's Matrimonial Asset Division Estimator, Legal Aid Bureau, Ministry of Law, Singapore) https://ink.library.smu.edu.sg/cgi/viewcontent.cgi?article=5680&context=sol_research accessed 26 July 2025.

dependants.⁷² This limitation ensures that the tool does not overpromise or mislead users and encourages those in more complex situations to seek professional legal assistance.

4. AI AND THE LEGAL PROFESSION

4.1. Law firms use of AI

Singapore's law firms have been early adopters of AI in various aspects of legal practice, driven by the promise of greater efficiency in managing large volumes of information. **Major law firms** in Singapore – especially the larger commercial firms – are using AI-powered software for tasks such as document review in litigation and regulatory investigations, due diligence in mergers and acquisitions, and contract drafting and analysis.⁷³ These use cases leverage machine learning and natural language processing to automate what were traditionally labor-intensive processes in different ways.⁷⁴

Firstly, AI is transforming document review and E-Discovery. Firms employ AI tools to sift through extensive document sets in litigation or arbitration. For example, predictive coding and document classification algorithms (often integrated into e-discovery platforms like Relativity or Brainspace) help identify relevant documents and flag privileged or sensitive material.⁷⁵ By training on sample document sets, these tools can achieve high accuracy in pinpointing key documents, significantly reducing the manual hours needed for first-pass review. This is particularly useful in complex commercial disputes or regulatory compliance investigations involving thousands of emails and documents.⁷⁶ Leading Singapore firms have also been known to use legal AI platforms to expedite discovery; for instance, Singapore law firms' e-discovery arm

⁷² Legal Aid Bureau, Ministry of Law Singapore, 'Divorce AIDE (Matrimonial Asset Division Estimator)' <https://eservices.mlaw.gov.sg/labesvc/common/loadDivorceAIDEv2.do> accessed 26 July 2025.

⁷³ Ella Ficken, 'Singapore Legal Sector Embraces AI' (Global Legal Insights, 19 September 2024) <https://www.globallegalinsights.com/news/singapore-legal-sector-embraces-ai> accessed 26 July 2025.

⁷⁴ The impact of such adoption on the Singapore legal profession remains to be seen. There are no empirical studies to this date measuring this impact.

⁷⁵ Satyendra Pandey, 'Transforming eDiscovery: How AI Is Revolutionizing Document Review' (LinkedIn, 29 May 2025) <https://www.linkedin.com/pulse/transforming-ediscovery-how-ai-revolutionizing-document-pandey-eptgc/> accessed 26 July 2025.

⁷⁶ Ran Wang, 'Legal Technology in Contemporary USA and China' (2020) 39 *Computer Law & Security Review* 105459.

have been among the first in the region to utilize AI-assisted review, reflecting a broader trend of tech adoption in top law practices.⁷⁷

Secondly, in corporate and M&A practice, AI has become a valuable assistant for due diligence reviews of contracts and records. Singapore law firms use contract analysis software that can automatically extract key clauses, detect anomalies, and even assess risks across large contract repositories. This enables faster review of contracts in mergers, acquisitions, or financing deals.⁷⁸ By automating the identification of change-of-control clauses, indemnity provisions, or regulatory compliance issues in hundreds of contracts, AI tools help lawyers focus on high-risk areas and provide advice more efficiently. Especially in large transactions with tight timelines, these AI platforms have shortened the due diligence phase from weeks to days.

Thirdly, GenAI and natural language generation are also making inroads in contract drafting. Some **Singapore firms are partnering with AI startups** to assist in producing first drafts of legal documents or summarising lengthy agreements. Notably, a Singapore's law firm announced a collaboration with the AI startup *Harvey* in 2024.⁷⁹ Harvey's platform – built on large language models – is being used to streamline various tasks such as drafting standard contracts, reviewing and analyzing contract terms, and summarising legal correspondence.⁸⁰ By inputting parameters or prompts, lawyers can generate initial drafts of documents like non-disclosure agreements or employment contracts, which can then be refined and reviewed. This use of GenAI allows lawyers to produce work faster while focusing their expertise on complex provisions.

Finally, large language model-based tools (similar to ChatGPT) are being cautiously used to summarize lengthy legal opinions or research memos for internal discussions or client updates. For example, a lawyer might use an AI tool to generate an executive summary of a jurisprudential analysis, which can then be checked and edited for accuracy. GenAI systems are reported to assist in summarising legal correspondence and documents for quicker comprehension.⁸¹ This helps

⁷⁷ Ella Ficken, 'Singapore Legal Sector Embraces AI' (Global Legal Insights, 19 September 2024) <https://www.globallegalinsights.com/news/singapore-legal-sector-embraces-ai> accessed 26 July 2025

⁷⁸ Lim Chong Kin and Cheryl Seah, *Artificial Intelligence 2023 (Singapore law and practice)* in *Chambers Global Practice Guides: Artificial Intelligence 2023* (Chambers and Partners, 2023) 1– ? (Drew & Napier LLC chapter) <https://www.drewnapier.com/DrewNapier/media/DrewNapier/Chambers-Global-Practice-Guides-Artificial-Intelligence-2023.pdf> accessed 26 July 2025

⁷⁹ Ella Ficken, 'Singapore Legal Sector Embraces AI' (Global Legal Insights, 19 September 2024) <https://www.globallegalinsights.com/news/singapore-legal-sector-embraces-ai> accessed 26 July 2025

⁸⁰ *Ibid.*

⁸¹ Ella Ficken, 'Singapore Legal Sector Embraces AI' (Global Legal Insights, 19 September 2024) <https://www.globallegalinsights.com/news/singapore-legal-sector-embraces-ai> accessed 26 July 2025.

lawyers and clients digest key points without wading through dozens of pages, though firms must validate the AI's output to ensure no critical nuance is lost or misrepresented.

These implementations demonstrate that **Singapore law firms are harnessing AI primarily as an efficiency tool**. By automating routine, high-volume tasks, AI frees up lawyers' time for higher-order analytical and advisory work. For instance, when due diligence that might have taken hundreds of billable hours can be partially automated, lawyers can redirect their attention to negotiating deal terms or addressing complex legal risks. Indeed, the **Second Minister for Law, Mr. Edwin Tong SC**, observed that generative AI allows lawyers to "apply [AI] directly to the cases and matters they have on hand," resulting in "greater efficiency and time savings" and enabling focus on higher-value work.⁸²

It bears emphasizing that **ethical use and quality control** are paramount in these private-sector adoptions. Law firms remain responsible for the outputs of AI tools – for example, ensuring that document review algorithms do not miss relevant documents or that a contract drafted by AI is legally sound and custom-tailored to the client's needs.⁸³ In practice, firms must implement **human-in-the-loop** oversight: junior lawyers or knowledge management professionals that often validate AI results, correct errors, and train the systems with feedback to improve future performance. Moreover, firms should acutely aware of confidentiality concerns. Sending client data to external AI systems (especially cloud-based ones) can pose risks, so many firms either use AI tools that operate on-premises or in secure cloud environments, or they anonymize and fragment data before processing.⁸⁴ The Personal Data Protection Commission (PDPC) in Singapore has issued directives on the use of personal data in AI consistent with the Personal Data Protection Act (PDPA),⁸⁵ and law firms are mindful to comply by ensuring any personal or sensitive data used by AI tools is handled lawfully and protected against leaks. These precautions align with emerging **ethical guidelines for lawyers using AI** – for example, the Singapore Academy of Law (SAL) and the Law Society are developing guidance to assist legal professionals in the effective and **ethical use of generative AI** in their work.⁸⁶

⁸² Ella Ficken, 'Singapore Legal Sector Embraces AI' (Global Legal Insights, 19 September 2024) <https://www.globallegalinsights.com/news/singapore-legal-sector-embraces-ai> accessed 26 July 2025.

⁸³ John Villasenor, 'Generative Artificial Intelligence and the Practice of Law: Impact, Opportunities, and Risks' (2023) 25 *Minnesota Journal of Law, Science & Technology* 25; Laura A Lorek, 'AI Legal Innovations: The Benefits and Drawbacks of Chat-GPT and Generative AI in the Legal Industry' (2023) 50 *Ohio Northern University Law Review* 513.

⁸⁴ Thomson Reuters, 'Ethical AI for Lawyers in Singapore: Key Responsibilities' (Legal Insight – Southeast Asia, 23 June 2024) <https://insight.thomsonreuters.com/sea/legal/posts/ethical-ai-for-lawyers-in-singapore-key-responsibilities> accessed 26 July 2025.

⁸⁵ *Ibid.*

⁸⁶ Ella Ficken, 'Singapore Legal Sector Embraces AI' (Global Legal Insights, 19 September 2024) <https://www.globallegalinsights.com/news/singapore-legal-sector-embraces-ai> accessed 26 July 2025.

It is worth noting that AI adoption is not limited to large firms. **Small and medium-sized law practices** in Singapore are also beginning to explore AI through accessible platforms. Cloud-based AI services (such as intelligent proofreading tools or language translation services) are available on a subscription basis, sometimes supported by government grants. The Ministry of Law, for instance, has updated its Legal Industry Technology and Innovation Plans to include AI use cases and provides funding support for tech adoption.⁸⁷ This ensures that even smaller firms, which might lack in-house IT infrastructure, can experiment with AI solutions under subsidised programs, helping to democratize the benefits of legal tech across the profession.

One question that remains open is whether these innovations in the legal practice will change the cost of legal services for the general public. The integration of AI into legal practice is reshaping not only how legal services are delivered, but also how they are valued. Traditional time-based billing models—which tie legal fees to hours worked—are increasingly misaligned with the efficiencies enabled by AI, particularly in tasks such as document review, legal research, and due diligence. As AI accelerates the pace of legal work, firms are under growing pressure to adopt alternative billing frameworks that better reflect the value of their legal expertise, judgment, and strategic insight rather than the duration of service.⁸⁸ Embracing client-centred, outcome-based billing models can foster greater transparency, build client trust, and reinforce the relevance of law firms in a tech-driven market.⁸⁹ By rethinking their fee structures, law firms can transform AI adoption from a cost-cutting exercise into a catalyst for innovation, long-term client relationships, and sustainable value creation.⁹⁰

4.2. Copilot And Lift For Singapore Law Firms

The launch of the “Copilot for Singapore Law Firms” in 2024 marked a landmark moment in the integration of GenAI within professional legal practice in Singapore. Developed through a strategic collaboration between the Ministry of Law (MinLaw), the Singapore Academy of Law, Microsoft, and legal technology provider, Lupl, this initiative introduces the first domain-specific

⁸⁷ Ministry of Law (Singapore), *Enhanced Productivity for Law Firms in Singapore with the Integration of Microsoft Copilot into the Legal Technology Platform* (Press Release, 11 September 2024) <https://www.mlaw.gov.sg/enhanced-productivity-for-law-firms-in-singapore-with-the-legal-technology-platform/> accessed 26 July 2025

⁸⁸ Cameron A Parsa, 'Artificial Intelligence and the Pursuit of Fair and Reasonable Fees in Legal Practice' (2022) 47 *Journal of the Legal Profession* 277; Angeline Poon, 'Rethinking Law Firm Billing in the Age of AI' (Law Gazette, 11 January 2025) <https://lawgazette.com.sg/practice/practice-matters/rethinking-law-firm-billing-in-the-age-of-ai> accessed 26 July 2025.

⁸⁹ *AI Will Mean Law Firms Give More for 'Free'* (Artificial Lawyer, 21 July 2025) <https://www.artificiallawyer.com/2025/07/21/ai-will-mean-law-firms-give-more-for-free/> accessed 26 July 2025

⁹⁰ Cameron A Parsa, 'Artificial Intelligence and the Pursuit of Fair and Reasonable Fees in Legal Practice' (2022) 47 *Journal of the Legal Profession* 277.

AI assistant tailored to the operational needs of Singaporean law firms.⁹¹ The Copilot is embedded in the Legal Technology Platform (LTP), a cloud-based case and task management system initially launched in 2021–2022 to promote digital transformation among small and medium-sized law practices.

The Copilot is designed as a plugin to Microsoft 365, leveraging OpenAI's GPT-4 model to augment the LTP's functionality. Lawyers using the platform can interact with the Copilot through natural language prompts to scope new legal matters, generate task lists, monitor case progress, and draft client communications. By drawing on both generative AI capabilities and internal case data stored within the firm's LTP environment, the Copilot acts as a virtual legal project manager.⁹²

The underlying architecture of the Copilot prioritises data security and regulatory compliance. It operates within the Microsoft 365 cloud environment specific to each law firm, ensuring that confidential legal information is not transmitted to public AI services. By localising the AI model and restricting access to authenticated users, the platform satisfies industry expectations regarding client confidentiality, especially under Singapore's Personal Data Protection Act (PDPA). Its sector-specific training also enables the AI to respond appropriately to legal terminology and procedural norms, reducing the risk of inaccurate or non-contextual responses.⁹³

The development of the Co-Pilot has been publicly endorsed as part of Singapore's broader legal digitalisation strategy. In conjunction with TechLaw.Fest 2024, the initiative was accompanied by a Memorandum of Understanding between MinLaw and Microsoft Singapore to promote responsible AI use in the legal sector.⁹⁴ The government has also supported law firms through funding subsidies under the Productivity Solutions Grant (PSG), offering up to 70% support for eligible firms adopting the platform before March 2025.⁹⁵ This public-private collaboration reflects Singapore's policy of making advanced legal technology accessible to smaller firms, thus avoiding a digital divide between large and boutique practices.

⁹¹ Ministry of Law Singapore, 'MinLaw and Microsoft Launch Legal AI Copilot for Singapore Law Firms' (11 September 2024) <https://www.mlaw.gov.sg/news/press-releases/launch-legal-ai-copilot-2024> accessed 1 June 2025.

⁹² Lupl Singapore, 'Legal Technology Platform: Co-Pilot Features' (2024) <https://sg.lupl.com/ltp-copilot> accessed 1 June 2025.

⁹³ Ibid.

⁹⁴ Legal Technology Insider, 'Microsoft and MinLaw Launch AI Copilot' (2024) <https://legaltechnology.com/2024/09/11/minlaw-microsoft-copilot/> accessed 1 June 2025.

⁹⁵ Ministry of Law (Singapore), *Enhanced Productivity for Law Firms in Singapore with the Integration of Microsoft Copilot into the Legal Technology Platform* (Press Release, 11 September 2024) <https://www.mlaw.gov.sg/enhanced-productivity-for-law-firms-in-singapore-with-the-legal-technology-platform/> accessed 26 July 2025

Initial feedback from users has been positive, especially regarding time savings and improved client communication. Lawyers have reported that the Copilot reduces the burden of administrative work and allows them to focus on higher-value tasks such as strategic legal advice and advocacy.⁹⁶ Nevertheless, the judiciary and regulators have stressed the importance of oversight. Lawyers are expected to validate all AI-generated outputs and ensure they conform to ethical standards, including duties of competence and confidentiality. To this end, training resources on responsible AI use have been incorporated into the Legal Industry Digital Plan, and guidelines on disclosure obligations in court proceedings involving AI-generated content are currently under development.⁹⁷

In June 2025, an initiative known as LIFT (Legal Innovation and Future-Readiness Transformation) was launched to broaden legal tech adoption by pairing firms with consultants to recommend and onboard bespoke legaltech solutions tailored to their needs, beyond just Microsoft Copilot.⁹⁸ LIFT seeks to adopt a more holistic and consultative model. Participating firms receive guidance from pre-approved consultants who help identify needs, recommend appropriate legaltech tools, and support onboarding and training.⁹⁹ This approach is intended to promote more tailored digital adoption across diverse practice areas, encourage innovation beyond a single technology provider, and enhance long-term competitiveness within Singapore's legal industry.

5. DATA PROTECTION APPROACH IN SINGAPORE

Singapore's approach to data protection is anchored by the Personal Data Protection Act 2012 (PDPA), which regulates the collection, use, and disclosure of personal data by private sector entities. Enforced by the Personal Data Protection Commission (PDPC), the PDPA establishes a baseline framework of accountability, consent, purpose limitation, data retention, and access rights, alongside obligations concerning data security and breach notification.¹⁰⁰ It has become a foundational element in Singapore's digital economy and plays an indirect but important role in

⁹⁶ Global Legal Insights, 'Singapore's Legal Profession and the AI Revolution' (2024) <https://www.globallegalinsights.com/practice-areas/ai-2024/singapore> accessed 1 June 2025.

⁹⁷ Judiciary of Singapore, 'Upcoming Guidelines on Use of Generative AI in Court Submissions' (2024) <https://www.judiciary.gov.sg/news-and-resources/news/2024-generative-ai-court-guidelines> accessed 1 June 2025.

⁹⁸ Ministry of Law (Singapore), *Driving the Next Stage of Digitalisation through LIFT (Legal Innovation and Future-Readiness Transformation)* (Press Release, date n.d.) <https://www.mlaw.gov.sg/driving-the-next-stage-of-digitalisation-through-lift/> accessed 26 July 2025.

⁹⁹ Ibid.

¹⁰⁰ Personal Data Protection Act 2012 (Singapore), ss 11–26; see also Personal Data Protection Commission (PDPC), 'Overview of the PDPA' <https://www.pdpc.gov.sg/Overview-of-PDPA/What-is-the-PDPA> accessed 1 June 2025.

shaping how courts and ancillary legal bodies engage with emerging technologies such as artificial intelligence (AI), even though the judiciary itself is formally exempt from its provisions.

Under the PDPA, organisations must obtain the consent of individuals before collecting personal data, limit its use to specified purposes, and ensure reasonable security safeguards to protect it.¹⁰¹ There are also rules governing overseas data transfers, which require comparable levels of protection. Since 2021, the Act includes a mandatory data breach notification regime: organisations must report breaches to the PDPC and notify affected individuals where there is a risk of significant harm.¹⁰² The PDPC has further supplemented the statute with sector-specific guidelines, including an advisory on the responsible use of AI. These guidelines underscore the importance of data accuracy, explainability, and human oversight in AI systems, particularly where decisions affect individuals in a material way.¹⁰³

Notably, the PDPA explicitly excludes public sector agencies, including the judiciary, from its ambit. Courts, being organs of state, are not subject to the PDPA's consent or access requirements. Instead, public sector agencies, including the courts, are governed by a parallel framework of data governance and security. Key instruments include the Public Sector (Governance) Act 2018 (PSGA) and the Government Instruction Manuals that prescribe how personal data must be handled across ministries, statutory boards, and organs of state.¹⁰⁴

Following several data security lapses in the broader public sector, the Public Sector Data Security Review Committee was established in 2019 to recommend enhancements to public data protection practices.¹⁰⁵ The result was a comprehensive tightening of measures, such as mandatory cybersecurity audits, restricted access on a need-to-know basis, encryption of sensitive databases, and training for public officers on data handling protocols. Courts were included in this review and implemented changes to their digital infrastructure accordingly ,

¹⁰¹ PDPC, 'Key Obligations Under the PDPA'
<https://www.pdpc.gov.sg/Overview-of-PDPA/Key-Obligations-of-Organisations> accessed 1 June 2025.

¹⁰² PDPC, 'Guide on Managing and Notifying Data Breaches' (2021)
<https://www.pdpc.gov.sg/-/media/Files/PDPC/PDF-Files/Other-Guides/Guide-to-Managing-Data-Breaches-2021.pdf>
 accessed 1 June 2025.

¹⁰³ PDPC, 'Model AI Governance Framework (Second Edition)' (2020)
<https://www.pdpc.gov.sg/Help-and-Resources/2020/01/Model-AI-Governance-Framework-Second-Edition> accessed 1 June 2025.

¹⁰⁴ Public Sector (Governance) Act 2018 (Singapore); see also Smart Nation and Digital Government Office, 'Public Sector Data Security Review Committee'
<https://www.smartnation.gov.sg/what-we-do/secure-smart-nation/data-security-review> accessed 1 June 2025.

¹⁰⁵ DLA Piper, 'Singapore - Data Protection Overview' (Data Protection Laws of the World, 2024)
<https://www.dlapiperdataprotection.com/index.html?t=law&c=SG> accessed 1 June 2025.

including the e-Litigation system. Access to electronic filings is restricted to authorised legal representatives and parties, with audit trails to detect and penalise unauthorised access.

The judiciary has also demonstrated sensitivity to data protection in its public-facing services. The e-Litigation platform—used for filing, serving, and accessing court documents—employs role-based access controls, and litigants must authenticate their identities before using it. In cases involving sensitive information (such as family or sexual offence matters), the courts routinely redact names or publish anonymised judgments. These practices are guided by the Supreme Court Practice Directions, which incorporate data minimisation principles, such as displaying only partial identity numbers where appropriate.¹⁰⁶

Moreover, any use of AI in court operations is ultimately subject to the judiciary’s overarching legal obligations, including confidentiality clauses under the Official Secrets Act (OSA) and oaths of office binding court officers. Additionally, the Guide on the Use of Generative Artificial Intelligence Tools by Court Users (effective October 2024) requires compliance with confidentiality orders, personal data protection laws, and privilege obligations. This Guide states that no unauthorised sharing of protected or sensitive information should occur when using AI systems.¹⁰⁷

In summary, while the PDPA does not apply directly to Singapore’s judiciary, the courts adhere to a comprehensive set of alternative legal and policy frameworks that collectively impose a high standard of data protection. These are reinforced through institutional culture, secure technological systems, and explicit safeguards when integrating AI.

6. REFLECTIONS ON THE IMPLICATIONS OF THE USE OF AI IN THE JUDICIARY

6.1. The Approach To Ai Governance In Singapore

Singapore has adopted a principles-based and technology-neutral approach to AI governance, opting for soft law instruments such as frameworks, guidelines, and toolkits instead of binding statutory regulation. This regulatory strategy reflects a deliberate policy choice: to facilitate innovation while encouraging responsible and ethical AI development through industry guidance

¹⁰⁶ Supreme Court of Singapore, ‘Practice Directions Amendment No. 3 of 2022’
<https://www.judiciary.gov.sg/news-and-resources/news/news-details/practice-directions-amendment-3-of-2022>
 accessed 1 June 2025

¹⁰⁷ Registrar’s Circular No. 1 of 2024, Guide on the Use of Generative Artificial Intelligence Tools by Court Users (Supreme Court of Singapore, issued 23 September 2024, effective 1 October 2024)
https://www.judiciary.gov.sg/docs/default-source/circulars/2024/registrar's_circular_no_1_2024_supreme_court.pdf
 accessed 26 July 2025.

and multistakeholder collaboration. The judiciary, as a user and stakeholder in the broader AI ecosystem, aligns itself with these governance norms, integrating them into its own technological initiatives and court administration processes. Understanding the architecture of Singapore's AI governance regime thus provides insight into how the judiciary safeguards principles such as fairness, transparency, and accountability when experimenting with AI systems.

The cornerstone of Singapore's AI governance model is the Model AI Governance Framework, launched in 2019 by the Personal Data Protection Commission (PDPC) in collaboration with the Infocomm Media Development Authority (IMDA). As one of the earliest comprehensive frameworks of its kind globally, the Model Framework offers a practical guide for organisations deploying AI systems, including recommendations on internal governance, risk management, explainability, and stakeholder communication.¹⁰⁸ It is guided by two overarching principles: first, that AI-assisted decision-making should be explainable, transparent, and fair; and second, that AI systems should be human-centric and support, rather than displace, human judgment.¹⁰⁹

The 2019 edition of the Framework emphasised operational guidance for organisations, recommending measures such as establishing ethics committees, testing for algorithmic bias, and ensuring that consumers are informed when AI is being used. In 2020, a second edition was released following pilot feedback, expanding the framework's focus to include robustness and reproducibility. It introduced the notion that AI systems should be stress-tested under varied scenarios and subject to audit trails to enable post-hoc review or investigation if outcomes deviate from expectations.¹¹⁰ These ideas have relevance for the judiciary, where accountability in decision-making is paramount and the use of AI must never obscure responsibility for legal outcomes.

In response to the rapid advancement of generative AI technologies, Singapore introduced a Model AI Governance Framework for Generative AI in 2024, developed with inputs from industry stakeholders and the AI Verify Foundation. This new guidance addresses the unique risks posed by large language models (LLMs), such as hallucinations, misinformation, or the generation of

¹⁰⁸ Personal Data Protection Commission (PDPC), 'Model AI Governance Framework' (2019) <https://www.pdpc.gov.sg/Help-and-Resources/2020/01/Model-AI-Governance-Framework-Second-Edition> accessed 1 June 2025.

¹⁰⁹ Ibid.

¹¹⁰ PDPC, 'Second Edition of the Model AI Governance Framework' (2020) <https://www.pdpc.gov.sg/Help-and-Resources/2020/01/Model-AI-Governance-Framework-Second-Edition> accessed 1 June 2025.

inappropriate content.¹¹¹ It recommends safeguards like provenance checks on training data, user disclosures for AI-generated content, and human-in-the-loop oversight in high-stakes contexts. Although non-binding, this addendum to the original framework has been welcomed by both regulators and industry actors, who view it as a timely evolution in the country's AI governance strategy.¹¹²

Complementing these frameworks, Singapore has also developed AI Verify, a testing and validation toolkit designed to assess the trustworthiness of AI systems. Initially launched as a minimum viable product in 2022, AI Verify offers a set of metrics and test cases to evaluate AI models against principles such as fairness, explainability, and robustness.¹¹³ While early iterations focused on traditional machine learning models, Singapore has since expanded the initiative through the launch of the AI Verify Foundation in June 2023. The Foundation functions as a global, open-source collaborative platform designed to support standardisation in AI evaluation tools, and includes corporate partners such as Google, IBM, Microsoft, Salesforce, and Singapore's own Aicadium.¹¹⁴

The AI Verify Foundation also introduced a sandbox for testing generative AI applications, allowing developers to simulate model performance in scenarios involving bias, misinformation, and content safety. These sandboxes are linked to an evaluation catalogue built around 11 ethical principles drawn from both international sources (such as the OECD and EU) and Singapore's own Model Framework.¹¹⁵ As of late 2023, the Foundation counted over 60 members collaborating on testing tools and governance benchmarks, many of which are expected to be integrated into vendor procurement processes.

While the frameworks and toolkits are currently voluntary for the public and the private sectors, their practical impact is significant. By fostering a culture of governance, Singapore is creating an ecosystem of trust that empowers institutions to adopt AI tools responsibly.¹¹⁶ As the use of AI in

¹¹¹ PDPC and AI Verify Foundation, 'Model AI Governance Framework for Generative AI' (2024) <https://www.pdpc.gov.sg/Help-and-Resources/Model-AI-Gov-Framework-GenAI-Addendum> accessed 1 June 2025.

¹¹² Thomson Reuters, 'Singapore Issues New Guidelines for Generative AI Governance' (2024) <https://insight.thomsonreuters.com/legal/posts/singapore-model-framework-genai> accessed 1 June 2025.

¹¹³ PDPC, 'AI Verify: Testing Framework and Toolkit' (2022) <https://www.pdpc.gov.sg/Help-and-Resources/2022/06/AI-Verify> accessed 1 June 2025.

¹¹⁴ AI Verify Foundation, 'Our Members and Mission' (2023) <https://www.aiverifyfoundation.sg/about> accessed 1 June 2025.

¹¹⁵ Baker McKenzie, 'Singapore's AI Verify Sandbox: A Tool for Governance Testing' (2023) <https://insightplus.bakermckenzie.com/asiapacific/insight/singapore-ai-verify-sandbox> accessed 1 June 2025.

¹¹⁶ Jason Grant Allen, Jane Loo and Jose Luis Luna Campoverde, 'Governing Intelligence: Singapore's Evolving AI Governance Framework' (2025) 1 *Cambridge Forum on AI: Law and Governance* e12.

legal processes evolves, these governance instruments will continue to play a vital role in ensuring that automation enhances, rather than undermines, the values underpinning the rule of law.

An important opportunity for Singapore's implementation of AI in the judicial system lies in further integrating the perspectives of end-users into the design and governance of AI tools. While Singapore's current AI governance model is rightly shaped by expert-led principles, and public-private partnerships, emerging empirical research underscores the value of community-driven insights in enhancing the relevance and trustworthiness of legal technologies.¹¹⁷ Empirical studies have expressed a general optimism and enthusiasm about the potential of AI to help them understand legal rights, navigate procedures, and regain a sense of control and dignity in legal processes.¹¹⁸ While legal experts often raise concerns about risks such as misinformation or misuse, these concerns require greater specificity and contextual understanding.¹¹⁹

Singapore's judiciary and legal institutions could lead by supporting further research to identify distinct user behaviours, preferences, and risk scenarios. The claimed benefits of the use of AI in the judiciary depend on effective AI governance. There are risks involved in integration into the judicial practice that differ in magnitude and relevance for society, as has been recognised by the Chief Justice¹²⁰ and by the proposed traffic light approach to AI in the judiciary explained above in this chapter.¹²¹ Despite Singapore's early adoption of legal tech and strong institutional trust, the successful deployment of AI tools rely on clear and continuous standards for transparency,

¹¹⁷ Margaret Hagan, 'Towards Human-Centred Standards for Legal Help AI' (2024) 382 *Philosophical Transactions of the Royal Society A* 20230157.

¹¹⁸ Brescia RH, McCarthy WA, McDonald AM, Potts KB, Riva C. Embracing Disruption: How Technological Change in the Delivery of Legal Services Can Improve Access to Justice. *Albany Law Rev* [Internet]. 2015;78(6):553–621; Blomkamp E. The Promise of Co-Design for Public Policy. *Aust J Public Adm*. 2018 Dec 1;77(4):729–43.

¹¹⁹ The AI governance scholarship has explored the importance of public engagement in the development of AI Strategies. See Christopher Wilson, 'Public Engagement and AI: A Values Analysis of National Strategies' (2022) 39(1) *Government Information Quarterly* 101652; Araz Taeihagh, 'Governance of Generative AI' (2025) 44(1) *Policy and Society* 1; Luciano Floridi, 'Artificial Intelligence as a Public Service: Learning from Amsterdam and Helsinki' (2020) 33(4) *Philosophy & Technology* 541; Luciano Floridi et al, 'AI4People—An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles, and Recommendations' (2018) 28(4) *Minds and Machines* 689.

¹²⁰ Sundaresh Menon CJ, 'Sentencing Discretion; The Past, Present and Future', Keynote Address at the Sentencing Conference 2022 (31 October 2022) <https://www.judiciary.gov.sg/news-and-resources/news/news-details/chief-justice-sundaresh-menon-keynote-address-delivered-at-the-sentencing-conference-2022> accessed 26 July 2025.

¹²¹ See section 2 of this chapter. See also Thomson Reuters, *AI in the Judiciary: A Singapore Courts Perspective* (Thomson Reuters Legal Insight Southeast Asia, 14 January 2025) <https://insight.thomsonreuters.com/sea/legal/posts/ai-in-the-judiciary-a-singapore-courts-perspective> accessed 26 July 2025.

accountability, and explainability, tailored for such risks and their materiality.¹²² Without these safeguards, AI-driven decisions risk undermining the legitimacy of the judiciary, particularly if some stakeholder, for example self-represented litigants, cannot understand or challenge automated outputs.

6.2. Translation Of AI Governance Principles Into The AI Developments In Singapore's Judicial System

The judiciary in Singapore has approached the integration of AI guided by national frameworks and institutional leadership. Notably, in 2022, Chief Justice Sundaresh Menon explicitly ruled out the use of AI in judicial sentencing, citing concerns around opacity, fairness, and explainability.¹²³ This decision was taken in a context where other jurisdictions, such as the United States and Malaysia, had piloted AI sentencing tools, but found significant challenges including racial bias and unexplained variance in recommendations.¹²⁴ Singapore established the Sentencing Advisory Panel (SAP) which was established to issue sentencing guidelines to promote consistency and transparency in sentencing while enhancing public awareness of sentencing..¹²⁵ The formation of the SAP represents a significant institutional response to long-standing concerns about sentencing disparity, particularly in cases involving similar offences but differing outcomes. Rather than relying on automated systems or algorithmic tools, the SAP is designed as a human-led body.¹²⁶

Consistently, the Chief Justice Sundaresh Menon has explicitly rejected the use of AI for sentencing in Singapore's courts. He has cited significant concerns over the opacity, potential for bias, and lack of explainability inherent in many algorithmic systems, especially those based on machine learning.¹²⁷ Noting the profound moral and legal consequences of criminal sanctions, the

¹²² Yonathan A Arbel, 'Judicial Economy in the Age of AI' (2025) 96 Colorado Law Review 549

¹²³ Sundaresh Menon CJ, 'Sentencing Discretion; The Past, Present and Future', *Keynote Address* at the Sentencing Conference 2022 (31 October 2022) <https://www.judiciary.gov.sg/news-and-resources/news/news-details/chief-justice-sundaresh-menon-keynote-address-delivered-at-the-sentencing-conference-2022> accessed 26 July 2025.

¹²⁴ The Star, 'Malaysia shelves use of AI in sentencing following criticism' (13 February 2023) <https://www.thestar.com.my/news/nation/2023/02/13/malaysia-shelves-use-of-ai-in-court-sentencing> accessed 1 June 2025.

¹²⁵ Sundaresh Menon CJ, 'Sentencing Discretion; The Past, Present and Future', *Keynote Address* at the Sentencing Conference 2022 (31 October 2022) <https://www.judiciary.gov.sg/news-and-resources/news/news-details/chief-justice-sundaresh-menon-keynote-address-delivered-at-the-sentencing-conference-2022> accessed 26 July 2025.

¹²⁶ It comprises members of the Judiciary, the Ministries of Law and Home Affairs, the Police, the AGC and the Criminal Bar. *Ibid.*

¹²⁷ *Ibid.*

Chief Justice argued that Singapore "must not embrace innovation blindly," particularly when it involves decisions that implicate an individual's liberty or public safety. He emphasised that the current state of AI technology is insufficiently robust, transparent, or trustworthy to take on such consequential roles in the justice system, and that human judges remain best positioned to weigh complex facts, intentions, and societal values in sentencing.¹²⁸

6.3. Stakeholders Role In AI Governance

Governance extends beyond the courts themselves. By grounding future judicial technology in empirical insights and continuous user feedback, Singapore could realise the promise of AI to close the justice gap while ensuring that systems remain trustworthy, transparent, and inclusive. This is a particularly valuable opportunity given that more than 90% of the population express trust in the legal system—a level of public confidence that not all jurisdictions enjoy.¹²⁹ Such trust provides fertile ground for piloting innovative, AI-driven legal services, as users are more likely to adopt and engage with tools endorsed by institutions they view as legitimate and fair.

Moreover, stakeholder engagement in governance is already reflected in the Registra's Circular No 1 of 2024 on the Use of Generative Artificial Intelligence Tools by Court Users.¹³⁰ This document requires disclosures by both lawyers and self-represented litigants who use AI to draft legal submissions or generate content presented in court. For example, a lawyer may be required to disclose that a written submission was prepared with the assistance of a language model, along with a declaration that its accuracy and appropriateness were reviewed by a human lawyer. Such disclosures are aligned with the transparency obligations advocated in Singapore's AI governance documents, and help judges determine whether additional scrutiny is warranted in assessing submissions.

This policy direction strikes a balance: it does not prohibit AI use, but ensures that it is subject to professional responsibility and procedural fairness. Importantly, it also helps pre-empt risks like

¹²⁸ Ibid

¹²⁹ 90% of Singaporeans stated they had trust and confidence in the legal system; 95% agreed that Singapore is governed by the rule of law; 87% agreed that Singapore has a fair legal system; 90% agreed that Singapore has an efficient legal system; 76% agreed that legal aid is accessible to those of limited means; and 61% agreed that the legal system is affordable. The Ministry of Law's perception survey was last conducted in 2020. Cited by Eugene Tan, *Singapore: National Report for the Global Access to Justice Project* (Global Access to Justice Project, September 2021)

¹³⁰ The Guide states that AI can "generate answers that appear to be persuasive and authoritative, but could be extremely inaccurate or even fabricated. [...] They can also include facts which you never provided to them, or make arguments that you never asked them to make. This is also known as "hallucinating"." Registrar, Registrar's Circular No 1 of 2024, Supreme Court (28 February 2024) https://www.judiciary.gov.sg/docs/default-source/circulars/2024/registrar's_circular_no_1_2024_supreme_court.pdf accessed 26 July 2025.

the submission of hallucinated case citations or mischaracterised precedent—a concern already observed in other jurisdictions where lawyers relied on GenAI without verification.¹³¹ Most importantly, this guide does not distinguish between a GenAI system internally developed by a law firm, a GenAI system already available to the public, such as ChatGPT, or a GenAI System developed under a Singapore-led initiative.

6.4. Digital Literacy And Inclusiveness

Singapore’s approach to AI governance in the legal sector includes a concerted emphasis on promoting digital literacy and technological inclusion, recognising that the responsible adoption of AI must be accompanied by upskilling and infrastructural support. Legal professionals—particularly lawyers in practice—are being trained not only in the use of GenAI tools but also in the nuanced task of prompt engineering, which is the formulation of effective and legally appropriate prompts for large language models. The SAL, in collaboration with various stakeholders, has initiated workshops and continuing legal education (CLE) programmes aimed at equipping practitioners with the skills to harness AI tools responsibly. These efforts reflect a broader understanding that effective use of AI in legal practice demands both technical proficiency and ethical sensitivity, especially given the risks of overreliance or misuse of automated outputs in high-stakes legal contexts.¹³²

Beyond capacity building, Singapore’s digital literacy agenda also extends to institutional and financial support for small and medium-sized law firms, which may lack the resources to independently adopt AI-enabled systems. Programmes such as Tech-celerate for Law, jointly administered by the Ministry of Law, the Law Society of Singapore, and the IMDA, provide subsidies for the adoption of legal technology tools, including AI-based document management, practice support, and cloud-based research platforms.¹³³ Through these schemes, the government facilitates the onboarding of firms into the digital ecosystem by offering financial grants, vendor matchmaking services, and technical guidance. Such initiatives are particularly important for promoting equity within the profession, ensuring that the benefits of digital transformation are not confined to larger firms with dedicated IT infrastructure.

¹³¹ BBC, ‘Lawyers Sanctioned for Submitting Fake Case Citations Generated by ChatGPT’ (29 May 2023) <https://www.bbc.com/news/technology-65746448> accessed 1 June 2025.

¹³² Singapore Academy of Law, *AI Prompts Training Series: Prompt Engineering for Legal Professionals* (2024) <https://www.sal.org.sg/events> accessed 1 June 2025.

¹³³ Ministry of Law Singapore, *Tech-celerate for Law* (2020) <https://www.mlaw.gov.sg/news/press-releases/tech-celerate-for-law> accessed 1 June 2025.

These combined strategies of skills development and technological enablement demonstrate Singapore's broader commitment to responsible innovation grounded in ethical, inclusive, and human-centric principles. Rather than assuming that AI proficiency will naturally diffuse across the legal ecosystem, the state and its institutions have taken proactive measures to institutionalise digital literacy. This ensures that legal practitioners are not only passive users of AI but active, informed participants in shaping its responsible application. In doing so, Singapore reinforces the idea that digital transformation in the legal sector must proceed hand-in-hand with professional empowerment and systemic inclusivity, aligning with the broader policy vision outlined in national AI governance strategy.¹³⁴

6.5. GenAI And Legal Education

The rapid advancement of GenAI is reshaping the practice of law in ways that have profound implications for legal education. These developments challenge traditional assumptions about the skills law students need to acquire and the pedagogical methods used to teach them.¹³⁵ As GenAI enters in the judiciary and becomes embedded in legal research platforms and professional workflows, it is no longer sufficient to train students solely in doctrinal knowledge and conventional analytical reasoning. Instead, legal education must adapt to ensure that students are equipped to work alongside AI systems, understand their limitations, and critically assess their outputs.

For instance, students must learn how to evaluate AI-generated outputs for factual accuracy, legal validity, and ethical compliance. This includes understanding issues such as algorithmic bias, hallucinated content, lack of transparency in reasoning, and the potential problem for over-reliance. In this context, new pedagogical priorities emerge: students must develop skills in prompt engineering¹³⁶, AI auditing, and human-AI collaboration, alongside traditional legal reasoning and argumentation. Equally important is cultivating a reflective understanding of when and why to use AI, as well as the institutional and normative consequences of its integration into the legal profession.

If legal education fails to adapt, students risk entering the profession ill-prepared to navigate a legal environment where AI is increasingly pervasive. Conversely, thoughtful integration of GenAI

¹³⁴ Personal Data Protection Commission (PDPC), *Model AI Governance Framework (2nd edn)* (2020) <https://www.pdpc.gov.sg/Help-and-Resources/2020/01/Model-AI-Governance-Framework> accessed 1 June 2025.

¹³⁵ Marjan Ajevski et.al, 'ChatGPT and the Future of Legal Education and Practice' (2023) 57 *The Law Teacher* 352; Jonathan H Choi et.al, 'ChatGPT Goes to Law School' (2021) 71 *Journal of Legal Education* 387; Andrew Perlman, 'The Implications of ChatGPT for Legal Services and Society' (2023) 30 *Michigan Technology Law Review* 1.

¹³⁶ Recent initiatives—such as those by the Singapore Academy of Law (SAL) to develop guidance on prompt design—illustrate the growing recognition that legal education must keep pace with technological change. These efforts highlight the importance of digital literacy as an essential component of legal competence.

into curricula offers an opportunity to enhance critical thinking, innovation, and ethical sensitivity in the next generation of lawyers. Rethinking legal education in the era of GenAI is not simply about adding new tools—it requires a shift in mindset about what it means to think and act like a lawyer in a digitally augmented legal system.

7. CONCLUSION

Singapore's approach to integrating AI into the judiciary offers a model of measured innovation, grounded in institutional accountability, ethical governance, and respect for human judgment. By prioritising low-risk, high-impact use cases such as legal research tools, multilingual support, and AI-assisted self-help systems, Singapore has successfully leveraged AI to enhance procedural efficiency and access to justice without compromising legal integrity.

Crucially, the judiciary's deliberate decision to eschew AI in core judicial functions—such as sentencing—reflects a principled understanding of the limitations and risks of automation in normatively sensitive domains. Through the creation of internal tools like LawNet AI and the SCT assistant, deployed within secure environments and aligned with national governance norms, the courts maintain control over data, process, and outcomes. This internal deployment model, paired with human-in-the-loop safeguards, fosters public trust and institutional legitimacy.

Furthermore, the collaborative role of public institutions in promoting digital literacy and supporting AI adoption across law firms ensures that AI integration in Singapore's legal ecosystem is inclusive, informed, and responsible. The result is a judiciary that not only adapts to digital transformation but also helps shape the norms of ethical AI use. As global interest in AI-enabled justice grows, Singapore's experience serves as a benchmark for jurisdictions seeking to deploy AI with care, foresight, and legitimacy.



Artificial Intelligence Use in the Judiciary | The India Story

Jameela Sahiba¹

Abstract

The adoption of Artificial Intelligence in the judiciary marks a fascinating intersection, sparking diverse discussions on its implications for fair justice delivery, equitable access, and the protection of human rights. In this chapter, we delve into the current landscape of AI's integration within this crucial sector in India by using a mixed-methods approach, examining the emerging use cases and their practical applications. Our aim through this mapping is to spotlight both the current advancements and the existing gaps in effective AI deployment. Against this backdrop, we then analyse the regulatory environment governing AI in the judiciary and propose strategies for its responsible deployment. The chapter concludes by distilling key takeaways for other nations, particularly those in the Global South, offering insights from India's unique journey with AI adoption in the judicial space.

Keywords

artificial intelligence, judiciary, human rights, fairness, accountability, governance, technology, access to justice, risk mitigation, global south.

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1. INTRODUCTION

The rhythmic whir of ceiling fans in overcrowded courtrooms, the towering stacks of paper files, and the weary faces of litigants waiting for years, even decades, for their day in court, this is a familiar, often poignant, image of justice in India. For generations, the pursuit of legal redress has been a test of endurance, a labyrinthine journey often fraught with delays, complexities, and an overwhelming sense of systemic inertia. Consider the plight of a small farmer in rural Uttar Pradesh, battling a land dispute that began before his children were born, or the urban entrepreneur caught in commercial litigation, watching precious capital and time bleed away as adjournments pile up. These are not isolated incidents; they are echoes of a fundamental challenge facing the very bedrock of our democracy, ensuring timely and accessible justice for every Indian.

The sheer volume of pending cases, often cited as exceeding 50 million²³ across various courts, paints a stark picture. This isn't just a statistic; it represents countless lives on hold, dreams deferred, and an erosion of faith in the system's ability to deliver. We are a nation of 1.4 billion people, with a vibrant, often contentious, legal landscape. Yet, the human effort required to navigate this immense judicial ecosystem, from tedious legal research to manual case management, has stretched our human capacity to its limits.

In this context, the advent of artificial intelligence (AI) emerges not as a mere technological trend, but as an urgent, indispensable tool in India's enduring quest for equitable justice. The digital revolution has swept across every other facet of our lives; from our daily commutes to our banking transactions. The hallowed halls of justice are also embracing this transformative power. AI offers a beacon of hope, promising to cut through the Gordian knot of judicial backlogs, streamline antiquated processes, and ultimately, bring the promise of justice closer to every citizen, irrespective of their socio-economic standing or geographical location.

The integration of AI in India's judicial system is no longer a futuristic concept; it is a reality, spurred by a pragmatic understanding of the system's inherent pressures. Automation is quietly but steadily revolutionizing administrative functions. AI is being explored for intelligent scheduling, predicting case delays, and optimizing court calendars to maximise judicial productivity. Some courts are deploying AI for automated filing, reducing human error and

² Mishra, U. (2025). *With 50 million pending cases, India's judicial data gaps are scaring investors*. Fortune India. Available at: <https://www.fortuneindia.com/business-news/with-50-million-pending-cases-indias-judicial-data-gaps-are-scaring-investors/122518> [Accessed on 11th Jun, 2025]

³ PPJ (2024). NJDG-National Judicial Data Grid. [online] [Ecourts.gov.in](https://ecourts.gov.in). Available at: https://nidg.ecourts.gov.in/nidg_v3/ [Accessed on 11th Jun, 2025]

accelerating the initial stages of litigation. While the degree of adoption varies, the undeniable momentum is towards alleviating the human burden of repetitive tasks.

Having said that, as India navigates this digital frontier, it is imperative to proceed with meticulous care. The very promise of AI in expediting justice must be balanced against the sacrosanct principles of human rights, fairness, and accountability. This chapter will delve into these critical considerations, examining the current AI developments within the Indian judiciary and meticulously assessing the extent to which these advancements are being implemented responsibly. It will explore the intricate questions of algorithmic bias, the imperative for transparency in AI-assisted decision-making, the safeguarding of data privacy, and the delicate balance between technological efficiency and the inviolable sanctity of human judgment. By offering an in-depth examination of the ecosystem, trends, and challenges associated with AI implementation in India's judicial system, this paper aims to contribute to a discourse that champions innovation while ensuring that the pursuit of justice remains unequivocally human-centric, equitable, and just.

2. EMERGING AI USE CASES IN THE INDIAN JUDICIARY

“Technology will integrate police, forensics, jails, and courts, and will speed up their work as well. We are moving towards a justice system that will be fully future-ready.”

Prime Minister, Shri Narendra Modi ⁴

The journey of AI integration in the Indian judiciary, while still in its nascent stages, is marked by a fascinating interplay of cautious exploration, bold initiatives, and the inevitable pushback. Far from being a monolithic adoption, the landscape is dotted with diverse use cases, reflecting both the unique challenges of India's legal system and a growing willingness to experiment with cutting-edge technology. From the highest echelons of the Supreme Court to individual High Court benches and even private law firms, the digital transformation is underway, aiming to breathe new life into the traditional pursuit of justice. In this section, we highlight the emerging use-cases of AI and how it is rewriting the access and delivery of justice as we know it.

2.1. Augmenting Legal Research And Judicial Decision-Making

Imagine a judge, grappling with a complex constitutional matter, needing to sift through thousands of judgments, legal articles, and parliamentary debates stretching back decades. This is not just a time-consuming task; it's an intellectual marathon. AI is stepping in as a

⁴ Pib.gov.in. (2025). *Digital Transformation of Justice: Integrating AI in India's Judiciary and Law Enforcement*. [online] Available at: <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2106239> [Accessed 11 Jun. 2025].

sophisticated "co-pilot," revolutionizing how legal research is conducted and aiding in the nuanced process of judicial decision-making.

The most prominent example of this is the Supreme Court Portal for Assistance in Court's Efficiency (SUPACE)⁵. Launched by former Chief Justice S.A. Bobde⁶, SUPACE isn't about replacing human judges; it's about empowering them. Its core function is to intelligently assist judges in swiftly gathering relevant laws and facts pertinent to a case. It acts as an unparalleled digital legal aide, capable of scanning vast databases, identifying pertinent precedents, and even summarizing complex legal documents in a fraction of the time a human researcher would take. This allows judges to dedicate their invaluable cognitive bandwidth to the intricate legal analysis and interpretation, rather than the mechanical drudgery of data retrieval.

Beyond the Supreme Court, individual High Courts are also exploring the frontier of generative AI for research assistance. In a landmark instance on May 23, 2024, the Manipur High Court⁷ garnered significant attention by publicly acknowledging the assistance of ChatGPT in its research before delivering a judgment concerning the Village Development Force ("VDF"). This followed an earlier pioneering move in March 2023 by the Punjab & Haryana High Court⁸, where Justice Anoop Chitra directly engaged ChatGPT to glean insights into bail jurisprudence, particularly concerning 'cruelty' in homicide cases. While deciding on the case involving accused Jaswinder Singh, the AI's input, indicating potential denial of bail in such circumstances, contributed to the judge's understanding. These instances, though limited, signal a willingness of courts to leverage cutting-edge AI for preliminary understanding.

However, this early enthusiasm was met with a healthy dose of judicial skepticism, underscoring the inherent caution required when integrating nascent technologies into a system as

⁵ IndiaAI. (2021). *Enhancing the efficiency of India's courts using AI*. [online] Available at: <https://indiaai.gov.in/case-study/enhancing-the-efficiency-of-india-s-courts-using-ai/> [Accessed 11 Jun. 2025].

⁶ Snehanthu Shekhar (2021). *Supreme Court embraces Artificial Intelligence, CJI Bobde says won't let AI spill over to decision-making*. [online] India Today. Available at: <https://www.indiatoday.in/india/story/supreme-court-india-sc-ai-artificial-intelligence-portal-supace-launch-1788098-2021-04-07>. (Snehanthu Shekhar, 2021)

⁷ Das, S. (2024). *Artificial Intelligence] Manipur High Court Uses Chat-GPT To Conduct Research & Pass Order In Service...* [online] Livelaw.in. Available at: <https://www.livelaw.in/high-court/manipur-high-court/artificial-intelligence-manipur-high-court-uses-chat-gpt-to-conduct-research-on-service-law-matter-pass-order-258742> [Accessed 11 Jun. 2025].

⁸ ANI (2023). *In a first, Punjab and Haryana high court uses Chat GPT to decide bail plea*. [online] The Times of India. Available at: <https://timesofindia.indiatimes.com/india/in-a-first-punjab-and-haryana-high-court-uses-chat-gpt-for-deciding-upon-bail-plea/articleshow/99070238.cm> [Accessed 11 Jun. 2025].

fundamental as justice. In August 2023, the Delhi High Court⁹, through Justice Pratibha Singh, issued a clear admonition against lawyers relying on ChatGPT or other AI models for "legal or factual matters in a court of law." The court expressed palpable concern over the potential for AI models to generate "incorrect information, imaginative data or fictional laws," a risk indeed witnessed in other jurisdictions globally. This cautionary stance highlights the critical need for verifying AI-generated outputs and underscores the paramountcy of human judgment and accountability in legal reasoning.

In stark contrast to this, the Supreme Court has consistently maintained a more measured and balanced, yet undeniably optimistic, stance towards AI's incorporation. Successive Chief Justices, from S.A. Bobde to D.Y. Chandrachud¹⁰, have often hailed AI as a "tremendous asset," advocating for its vigilant adoption while ensuring its intrigued and responsible execution. This proactive outlook led to the constitution of the AI Committee¹¹, chaired by Justice L. Nageshwara Rao, signaling a dedicated institutional commitment to exploring AI's potential strategically.

In 2024, the Supreme Court announced a Hackathon¹² to celebrate its 75th anniversary. The primary objective of this event was to "explore solutions in AI-based technology for improving and further streamlining the official functions performed by the Registry of the Supreme Court of India." This initiative clearly signals a desire to harness AI for practical, operational enhancements within the Court's administrative machinery. Although the Supreme Court hasn't yet formalised an explicit AI policy, its broader vision for the third phase of the eCourts project, detailed in the document "Digital Courts Vision and Roadmap"¹³, offers valuable insights into its underlying philosophy, methodology, and objectives for digital transformation. This document serves as a guiding light, revealing the Court's rationale and aspirational goals for integrating advanced technologies like AI to enhance judicial efficiency and accessibility.

⁹ Pandey, K. (2023). *AI cannot substitute human intelligence in the legal processes: Delhi HC*. [online] MEDIANAMA. Available at: <https://www.medianama.com/2023/08/223-ai-cannot-substitute-human-intelligence-in-legal-process-delhi-hc-3/> [Accessed 11 Jun. 2025].

¹⁰ ANI (2024). *Chief Justice of India DY Chandrachud advocates for ethical AI integration in legal research*. [online] The Times of India. Available at: <https://timesofindia.indiatimes.com/technology/tech-news/chief-justice-of-india-dy-chandrachud-advocates-for-ethical-ai-integration-in-legal-research/articleshow/109265942.cms>.

¹¹ indiaai.gov.in. (2021). *AI is set to reform justice delivery in India*. [online] Available at: <https://indiaai.gov.in/article/ai-is-set-to-reform-justice-delivery-in-india>.

¹² Sci.gov.in. (2024). *Hackathon 2024 | Supreme Court of India | India*. [online] Available at: <https://www.sci.gov.in/hackathon-2024/> [Accessed 11 Jun. 2025].

¹³ Supreme Court of India (2022). *Digital Courts-Vision & Roadmap-e-Courts Project Phase III*. Available at: <https://cdnbbsr.s3waas.gov.in/s388ef51f0bf911e452e8dbb1d807a81ab/uploads/2023/04/2023042088.pdf> [Accessed 11 Jun. 2025]

2.2. Enhancing Access To Justice And Bridging Linguistic Barriers

India's rich linguistic diversity, while a source of immense cultural strength, has historically posed a significant barrier to accessing legal information for a vast segment of the population. Judgments often rendered in English remain inscrutable to millions. AI is emerging as a powerful "democratiser," breaking down these linguistic walls and making justice more accessible.

The Supreme Court's Supreme Court Vidhik Anuvaad Software (SUVAS)¹⁴ is a stellar example. This neural translation tool provides instant, high-quality translation of judicial documents and judgments from English into various Indian vernacular languages. This isn't just about convenience; it's about empowerment. Imagine a litigant in rural Andhra Pradesh finally being able to understand the nuances of a judgment passed in the Supreme Court, without relying solely on intermediaries. This directly impacts transparency and trust in the judicial system.

Furthermore, efforts like the IIT Kharagpur-AWS collaboration¹⁵ in open-sourcing a massive dataset of 15.9 million Indian High Court judgments are crucial for improving access. This public repository of legal documents, complete with available metadata, creates a foundational layer for legal technology startups, researchers, and even individual citizens to build tools and applications that can process, search, and understand judgments more effectively, irrespective of language or technical expertise.

2.3. Streamlining Court Administration And Case Management

The sheer volume of pending cases, coupled with manual processes, often leads to bottlenecks, delays, and a significant drain on judicial resources. AI is acting as an "efficiency engine," streamlining administrative tasks, optimizing workflows, and predicting potential challenges to keep the judicial machinery running smoothly.

The overarching e-Courts project, particularly with its ambitious Phase III and the allocation of ₹7210 Crore¹⁶ (with ₹53.57 Crore specifically for AI and Blockchain), is the bedrock of this transformation. This massive investment underscores a national commitment to digitising and automating court processes. Within this framework, AI is being explored for intelligent scheduling of cases, predicting potential adjournments or delays to optimise resource allocation,

¹⁴ Pib.gov.in. (2023). ACTION PLAN FOR SIMPLE, ACCESSIBLE, AFFORDABLE AND SPEEDY JUSTICE. [online] Available at: <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1947490> [Accessed 11 Jun. 2025].

¹⁵ Opendata.aws. (2025). Indian High Court Judgments. [online] Available at: <https://registry.opendata.aws/indian-high-court-judgments/> [Accessed 11 Jun. 2025].

¹⁶ Pib.gov.in. (2024). E-Courts Mission Mode Project. [online] Available at: <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2085127> [Accessed 11 Jun. 2025].

and automating routine administrative tasks like document filing. Automated filing processes, for instance, significantly reduce human errors and accelerate the initial stages of litigation.

The Supreme Court, in collaboration with the National Informatics Centre (NIC), has also launched a citizen-centric mobile application¹⁷. This app provides authentic, single-click access to crucial information like case status, judgments, important circulars, and daily display boards. This not only enhances transparency but also reduces the need for physical visits to courts for basic information, freeing up court staff for more critical tasks.

2.4 Enhancing Legal Practice And Business Operations

Beyond the courtrooms, AI is rapidly becoming a "productivity multiplier" for legal professionals in private practice, enabling them to handle complex tasks with greater speed and accuracy.

The advent of sophisticated AI tools for contract analysis and review is a game-changer for law firms. Indian legal behemoths like Cyril Amarchand Mangaldas, through its collaboration with Kira Systems, are leveraging AI to automate the painstaking process of reviewing vast volumes of contracts. This drastically reduces the time and human effort required for due diligence, mergers and acquisitions, and other corporate transactions, allowing lawyers to focus on strategic advice rather than repetitive scanning.

Similarly, Shardul Amarchand Mangaldas (SAM) (Tier 1 law firm in India) has taken a significant leap by partnering with Harvey, a leading generative AI platform tailored specifically for legal professionals. As the first Indian law firm to deploy Harvey's full AI suite across all its seven offices, SAM is at the forefront of integrating AI into core legal practice. This move is indicative of a broader trend where AI assists in legal research, drafting, and even preliminary analysis, fundamentally transforming the way legal professionals operate.

3. CURRENT GAPS

While the enthusiasm surrounding AI's potential in the Indian judiciary is palpable, and as the initial use cases come to life, they also bring into sharper focus a myriad of challenges. These aren't merely technical hurdles; they delve into ethical considerations, societal implications, and the very essence of justice. Integrating AI into such a fundamental pillar of democracy demands careful navigation of these complex issues. In this part, we discuss some critical challenges that AI's integration in the Indian judiciary faces, based on current use-cases:

¹⁷ Informatics.nic.in. (2019). *Official Mobile App of Supreme Court launched in New Delhi*. [online] Available at: <https://informatics.nic.in/news/1192> [Accessed 11 Jun. 2025].

3.1 The "Supply-Side" Bias: Overlooking The Human Experience Of Justice

Early AI initiatives, like SUPACE, largely focused on what we might call a "supply-side" approach to judicial reform. The primary aim here is to streamline court processes, tackle administrative bottlenecks, and resolve research challenges, essentially making the internal workings of the judiciary more efficient. The thinking was that by building robust AI tools, the court system could better manage justice, thereby solving its long-standing problems.

However, a critical element has often been missing from these initial discussions: the fundamental question of how technology truly helps people access, realise, and attain justice¹⁸. This perspective requires looking beyond the internal organisation of court systems and considering how individuals actually experience them. It seems the impact of technology on the public's interaction with the court system remains a secondary concern. Any positive effects on the human experience are often viewed as a natural byproduct of the optimism surrounding these new technologies, rather than a direct and intentional focus.

3.2 Unpacking "Accessibility": Beyond Mere Translation

The introduction of tools like SUVAS, which translates judgments into various languages, undoubtedly increases accessibility. However, it prompts a deeper question: what exact barrier to justice is the Court truly aiming to dismantle? Is the problem genuinely one of broad accessibility, or is it a narrower issue of translation?

Critiques of Indian judgments have long highlighted their excessive complexity, often described as being "mired in complexity" or written "by thesaurus."¹⁹ This dense, formal language makes judgments largely inaccessible to ordinary people unfamiliar with legal jargon, regardless of the language they're in. Addressing this requires more than just a symptomatic approach; it demands unraveling the root causes of this inaccessibility.

Therefore, simply offering translations, while helpful, isn't enough. A more comprehensive exploration is needed into how the Court genuinely communicates with the wider public. This approach wouldn't focus solely on the tools that can provide accessibility; in this instance, translations, but also on the outcomes. This means analysing the information produced by the

¹⁸ Sen, A. (2009). *The Idea of Justice*. [online] JSTOR. Harvard University Press. Available at: <https://www.jstor.org/stable/j.ctvjnrv7n>.

¹⁹ Thewire.in. (2025). *The Wire: The Wire News India, Latest News, News from India, Politics, External Affairs, Science, Economics, Gender and Culture*. [online] Available at: <https://thewire.in/law/judgment-by-thesaurus> [Accessed 11 Jun. 2025]

courts and critically examining how that information is actually received and understood by the public.

3.3. The "Enchantment" Of Technology Vs. Fundamental Problems: Bridging The Responsibility Gap

While tools like SUVAS are undeniably beneficial, the narrative surrounding their introduction must not gloss over more fundamental problems. There's a risk that technology, with its apparent potential, can become "enchanting," allowing it to escape necessary scrutiny while deeper systemic issues persist.

Despite the increase in translated judgments, High Court proceedings largely remain in English. Further, the translated versions often come with disclaimers, absolving the Supreme Court registry of responsibility for their accuracy. This raises crucial questions about the Court's overarching vision for accessibility. On one hand, technology is used as an instrument to fulfill a responsibility to make courts more accessible. Yet, on the other, there's an apparent effort to sidestep the consequences of potential errors from these very translations. This tension highlights the ongoing challenge of truly democratising legal knowledge and ensuring accountability in the digital space.²⁰

3.4. Algorithmic Bias And Fairness: The Echoes Of Injustice

One of the most significant and unsettling challenges is the potential for algorithmic bias²¹. AI systems learn from the data they are fed. If this historical judicial data reflects existing societal biases, whether based on caste, gender, socio-economic status, or religion, the AI can inadvertently learn and even amplify these prejudices.

Imagine an AI tool designed to assist in bail decisions or even sentencing. If the training data, accumulated over decades, shows a historical pattern of harsher sentences or fewer bail grants for certain demographic groups due to systemic biases within the human judicial process, the AI might internalise these biases. This could lead to a situation where the technology, instead of promoting fairness, inadvertently perpetuates or even exacerbates existing inequalities. The "black box" nature of some advanced AI models, where the internal reasoning process is opaque,

²⁰ Abhinay Lakshman (2023). *SC's translation projects raced ahead in 2023 as retd. HC judges, law clerks help AI*. [online] The Hindu. Available at: <https://www.thehindu.com/news/national/scs-translation-projects-raced-ahead-in-2023-as-retd-hc-judges-law-clerks-help-ai/article67692773.ece> [Accessed 11 Jun. 2025].

²¹ Andrej Krištofik (2025). Bias in AI (Supported) Decision Making: Old Problems, New Technologies. *International Journal for Court Administration*, 16(1). doi:<https://doi.org/10.36745/ijca.598>.

further complicates this. How can we ensure fairness and accountability if we can't fully understand why an AI made a particular recommendation that seems discriminatory? This raises questions about due process and equal protection under the law, potentially undermining the very principles the judiciary is sworn to uphold.

3.5. Transparency And Explainability: Demystifying The "Black Box"

A related challenge is the lack of transparency and explainability in AI systems. While AI can analyse vast datasets and deliver insights or recommendations, the "how" behind these outputs often remains obscure.²² For a legal system built on the bedrock of reasoned decisions and justifications, this opacity is deeply problematic.

When an AI-powered tool assists a judge, for instance, how does the judge truly understand the basis of the AI's recommendation? If a system like SUPACE suggests a particular line of precedents, can it clearly articulate why those precedents are most relevant? Without this clarity, human judges might be tempted to accept AI suggestions without fully grasping the underlying logic, eroding judicial autonomy and the principle of reasoned decision-making. The absence of explainability makes it challenging to audit decisions, identify potential errors, or even learn from the AI's insights in a truly meaningful way. It also makes it difficult to hold anyone accountable if an AI-assisted decision proves to be flawed.

3.6. Data Privacy And Security: Safeguarding Sensitive Information

The Indian judicial system handles an immense volume of highly sensitive personal and legal information including details about individuals' lives, financial records, criminal histories, and deeply personal disputes. Integrating AI systems, which thrive on vast datasets, introduces significant data privacy and security risks.

The potential for data breaches, unauthorised access, or misuse of this confidential information is a grave concern. Even with the Digital Personal Data Protection Act, 2023,²³ there are complexities. AI models, particularly generative AI, might inadvertently "memorise" or reproduce personal data from their training sets. Ensuring explicit and informed consent for the use of personal data in AI training, and establishing robust mechanisms for data minimisation and deletion, becomes critical. The sheer scale of data involved makes comprehensive auditing for privacy compliance a monumental task. Furthermore, the reliance on cloud-based solutions for

²² Coglianese, C., Grossman, M. and Grimm, P. (2024). *AI in the Courts: How Worried Should We Be?* | *Judicature*. [online] [judicature.duke.edu](https://judicature.duke.edu/articles/ai-in-the-courts-how-worried-should-we-be/). Available at: <https://judicature.duke.edu/articles/ai-in-the-courts-how-worried-should-we-be/>.

²³ Government of India (2023) Digital Personal Data Protection Act, 2023. Available at: <https://www.meity.gov.in/static/uploads/2024/06/2bf1f0e9f04e6fb4f8fef35e82c42aa5.pdf> [Accessed 11 Jun. 2025]

some AI applications raises questions about data sovereignty and vulnerability to cyber threats. The judiciary, as a custodian of justice, must guarantee that the privacy rights of every litigant are uncompromised in this digital age.

3.7. Infrastructure And Digital Divide: Bridging The Accessibility Gap

While the e-Courts project²⁴ has made significant strides, India still faces a substantial digital divide. The implementation of AI in the judiciary, particularly in a country as vast and diverse as India, runs the risk of exacerbating existing inequalities if robust digital infrastructure is not universally available.

Many courts, especially in rural and remote areas, may lack the high-speed internet connectivity, reliable power supply, and necessary hardware to fully leverage AI tools. Furthermore, judges, court staff, and even lawyers in these regions might not possess the digital literacy required to effectively utilise advanced AI applications. If AI tools are primarily deployed in metropolitan courts, it could inadvertently create a two-tiered justice system, where access to efficiency and enhanced legal support is disproportionately available to those in digitally advanced regions. Ensuring equitable access to AI benefits requires massive investment in infrastructure and comprehensive digital training programs across all levels of the judiciary.

3.8. Regulatory Vacuum And Accountability Frameworks: The Uncharted Legal Territory

The rapid advancement of AI technology has largely outpaced the development of specific legal and regulatory frameworks to govern its use, particularly in sensitive sectors like the judiciary. This creates a significant regulatory vacuum and raises complex questions about accountability.

Who is responsible if an AI algorithm makes a recommendation that leads to an unjust outcome? Is it the AI developer, the deploying court, the judge who accepts the recommendation, or the data used to train the AI? Without clear legal guidelines on AI liability and responsibility, determining culpability in cases of algorithmic error or bias becomes incredibly challenging. India, currently, lacks comprehensive legislation specifically addressing AI in the judiciary. This necessitates an approach to develop robust ethical guidelines, industry standards, and legal frameworks that define accountability, ensure transparency, and provide redressal mechanisms for AI-related harms.

²⁴ Pib.gov.in. (2024). *E-Courts Mission Mode Project*. [online] Available at: <https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2085127>.

The integration of AI into the Indian judiciary, while promising unprecedented efficiencies and access, is a delicate balancing act. These emerging challenges highlight the need for continuous dialogue, rigorous ethical oversight, and a human-centric approach to ensure that technology serves justice, rather than inadvertently undermining its fundamental principles.

4. SAFEGUARDING HUMAN RIGHTS IN INDIA'S AI-POWERED JUDICIARY

To genuinely maximise AI's transformative potential in Judiciary, India must adopt a sophisticated framework that places human rights at its core, moving beyond simplistic notions of technological progress.

4.1. Localisation Of Rights: Understanding Justice In Context

The deployment of AI in the judiciary demands a rigorous examination of the "localisation of rights." This concept moves beyond universalist assumptions, recognising that the implications of data and AI are not homogenous; they are deeply shaped by situated contexts and diverse human experiences. Justice, in this sense, is not a singular construct. Drawing from scholars like Merry and Levitt suggest, who speak of a similar term called "vernacularisation" which involves the appropriation and translation of global concepts and technologies, sometimes fragmented or incoherent, at the interface of transnational, national, and local ideologies.²⁵ For India, this implies exploring how questions of AI and rights emerge within specific cultural, social, and political landscapes. It means understanding how diverse populations comprehend and engage with technology, acknowledging varying epistemic realities. This necessitates a framework that foregrounds place, space, people, time, and their interdependence. We must consider individual and collective interests, the relational aspects of rights, and the varied ways in which rights are realised in distinct local contexts. Further, the nature and stability of institutions responsible for securing these rights, their expertise, situated realities, and afforded powers, all require meticulous analysis. This "vernacularisation" demands a new vocabulary for understanding how rights emerge, are deployed, and can be enforced in an AI-infused judicial system. Even concepts like "efficiency," "productivity," and "pendency," often central to AI's justification, require critical interrogation. It is important to examine the cultural origins of these concepts, how people engage with their implications, and how they embody claims for justice.

4.2. Amplifying Silenced Voices

There is a need for a more global understanding of AI, explicitly accounting for questions of race, caste, sexuality, and tribal identities, thereby decentring Western perspectives. This involves

²⁵ Merry, S.E. and Levitt, P. (2017). The Vernacularisation of Women's Human Rights. *Human Rights Futures*, pp.213–236. doi:<https://doi.org/10.1017/9781108147767.009>.

acknowledging power imbalances in digitalisation, the enduring legacies of colonialism on record-keeping, and the global disparities in digital infrastructure. This will help create alternative imaginaries of AI, ensuring its design and deployment reflect the plural and diverse knowledge forms essential for a rights-based framework. The challenge for the judiciary, then, is to critically examine the "imaginaries" created by AI, understanding how technology impacts institutional independence, structural discrimination within its own data, and its long-term effects on people's lives and work.²⁶

4.3. Beyond Risk Mitigation: Prioritising Rights And Preventing Systemic Harms

The judiciary's approach to AI has often been characterised by a risk-based model, focusing on distinguishing between permissible and impermissible uses. For instance, former Chief Justice Bobde's²⁷ clear pronouncement against AI for automated decision-making, while permitting its use for administrative functions as well as the more recent statement made by the present Chief Justice, BR Gavai²⁸ underscoring the need for cautious integration, reflects an awareness of AI's adverse effects (e.g., racial misclassification in recidivism risk profiles in the U.S.).

However, a purely risk-based approach has inherent limitations²⁹:

- **Subjectivity and Unpredictability:** It can lead to subjective assessments of harm and overlooks the unpredictable nature of AI outcomes. It risks prioritising efficiency over potential harms in seemingly "routine" domains, where challenges can still be significant.
- **Cumulative and Collective Harms:** A risk-based approach often fails to account for cumulative harms (harms accumulating over time) or collective harms (affecting groups or communities, not just individuals). A rights-based approach, conversely, focuses on empowerment, equity, agency, and fundamental rights.

²⁶ Institute, A.N. (2021). *Launching 'A New AI Lexicon: Responses and Challenges to the Critical AI Discourse'*. [online] AI Now Institute. Available at: <https://ainowinstitute.org/news/launching-a-new-ai-lexicon-responses-and-challenges-to-the-critical-ai-discourse> [Accessed 11 Jun. 2025].

²⁷ Vaibhav Ganjapure (2019). *AI will not replace judicial decision making: Bobde*. [online] The Times of India. Available at: <https://timesofindia.indiatimes.com/city/nagpur/ai-will-not-replace-judicial-decision-making-bobde/articleshow/72625892.cms> [Accessed 11 Jun. 2025].

²⁸ Livelaw (2025). *'Technology Must Not Replace Judicial Functions': CJI BR Gavai Sounds Caution About Use Of AI &...* [online] Livelaw.in. Available at: <https://www.livelaw.in/top-stories/cji-br-gavai-sounds-caution-about-use-of-ai-automated-systems-artificial-intelligence-294635> [Accessed 11 Jun. 2025].

²⁹ Ballot Jones, L., Thornton, J. and De Silva, D. (2025). Limitations of risk-based artificial intelligence regulation: a structuration theory approach. *Discover Artificial Intelligence*, 5(1). doi:<https://doi.org/10.1007/s44163-025-00233-9>.

- **Root Causes of Inequality:** AI inequalities are more complex than mere technical fixes. Taking an "infrastructural view" reveals power concentration in AI development; a "production view" exposes labor and environmental concerns; and an "organisational view" reveals dependencies on third parties. Addressing these underlying issues, rather than just technical fixes, is essential for a truly rights-based approach.

The UN Human Rights Commissioner Office³⁰ has aptly underscored the imperative of proactive human rights guardrails for AI, stating that "Action is needed now to put human rights guardrails on the use of AI, for the good of all of us." In the Indian context, the Supreme Court needs a clear policy directive delineating "redlines", explicit prohibitions for unacceptable AI uses in judicial functions, particularly concerning human rights.

4.4. Global Best Practices

The UNESCO draft guidelines on AI in courts and tribunals³¹, emphasising principles like human rights protection, fairness, non-discrimination, procedural fairness, and data protection, offers a valuable template. These guidelines offer comprehensive policy guidance on AI's development, design, and deployment within the judiciary, coupled with thorough impact assessments on how technology will affect people and their rights. For us in India, a document like this can offer much-needed guidance. This directs towards a profound examination of the "imaginaries" being created by AI, assessing its impact on institutional independence, its capacity to address structural discrimination inherent in its own data, the lifecycle of these technologies beyond immediate functions, and their diverse impacts on individuals.

5. CURRENT GOVERNANCE LANDSCAPE

As of June 2025, India's approach to governing AI is evolving. Rather than enacting a single, dedicated AI law, the regulatory landscape is characterised by a blend of foundational policies, guiding principles, and targeted sector-specific regulations/circulars. This strategy aims to foster innovation while cautiously addressing the emerging risks posed by AI's rapid development and deployment.

³⁰ Pathak, D.G. (2021). *Call by UN Human Rights body's chief to ban AI systems prone to be misused by States must be complied with*. [online] National Herald. Available at: <https://www.nationalheraldindia.com/opinion/call-by-un-human-rights-bodys-chief-to-ban-ai-systems-prone-to-be-misused-by-states-must-be-complied-with> [Accessed 11 Jun. 2025].

³¹ Unesco.org. (2024). Available at: <https://www.unesco.org/en/articles/unesco-launches-open-consultation-new-guidelines-ai-use-judicial-systems>.

5.1. Foundational Strategy And Principles: Niti Aayog's Vision

The groundwork for India's AI ambitions was laid in 2018 with NITI Aayog's "National Strategy for Artificial Intelligence."³² This pivotal document, often referred to as "#AIFORALL," set an ambitious goal: positioning India as a global leader in AI. It underscored AI's potential across vital sectors, including healthcare, agriculture, education, smart cities, and smart mobility. The strategy also highlighted the critical need for robust research and development, continuous workforce reskilling, and the establishment of robust infrastructure to catalyse AI innovation across the nation.

Building on this, NITI Aayog further articulated its ethical stance in 2022³³ with the publication of the "Principles for Responsible AI." This framework outlines key ethical standards, emphasising safety, inclusivity, privacy, and accountability in AI applications. To this date, it serves as a guiding document for organisations developing or deploying AI systems, urging them to integrate ethical considerations throughout the entire AI lifecycle. Key tenets include promoting transparency, ensuring accountability, safeguarding privacy, and bolstering security in all AI deployments.

5.2. Data Protection As A Cornerstone: The Dpdp Act, 2023

Recognising that data is the lifeblood of any technological transformation, the Indian government enacted the Digital Personal Data Protection (DPDP) Act in 2023³⁴. While not exclusively focused on AI, this landmark legislation provides a comprehensive framework for processing personal data. It significantly empowers individual data principals, outlines clear consent mechanisms, and defines stringent obligations for data fiduciaries. The DPDP Act directly addresses critical data privacy concerns integral to AI applications, ensuring that personal data used in AI systems is handled responsibly, legally, and ethically.

5.3. Sub-Committee's Report On Ai Governance Guidelines

In late 2023, the Office of the Principal Scientific Advisor (PSA) to the Government of India took on the mandate to look into aspects of AI governance. Recognising AI's profound impact across diverse sectors, the PSA established an Advisory Group tasked with guiding AI governance within the nation. Consequently, on November 9, 2023, a dedicated Sub-Committee on 'AI Governance

³² NITI (2018). *National Strategy for Artificial Intelligence*. Available at: <https://www.niti.gov.in/sites/default/files/2023-03/National-Strategy-for-Artificial-Intelligence.pdf>

³³ NITI (2022). *Responsible AI for All*. Available at: https://www.niti.gov.in/sites/default/files/2022-11/Ai_for_All_2022_02112022_0.pdf.

³⁴ Government of India (2023) *Digital Personal Data Protection Act, 2023*. Available at: <https://www.meity.gov.in/static/uploads/2024/06/2bf1f0e9f04e6fb4f8fef35e82c42aa5.pdf> [Accessed 11 Jun. 2025]

and Guidelines Development' was formed under this Advisory Group to craft actionable recommendations for AI governance in India. The Sub-Committee, in January 2025, unveiled its recommendations in a comprehensive AI Governance Guidelines Report, which was made open for public consultations. This report put out a unified, "whole-of-government" strategy to ensure effective compliance and enforcement as India's AI landscape continues to expand. After extensive deliberations, the report presented a series of recommendations designed to shape the future of AI governance in India, proposing a foundational set of AI Governance principles including Transparency, Accountability, Safety, reliability & robustness, Privacy & security, Fairness & non-discrimination, Human-centred values & 'do no harm', Inclusive & sustainable innovation, and Digital by design governance.

While the report does not offer a universal definition for AI, it contends that existing definitions are either inadequate for regulating rapidly evolving technology or are overly broad. Instead, the Sub-Committee suggests that specific technologies should be defined only when necessary to regulate their potential for harm. The report champions harm mitigation as a central regulatory principle for any prospective AI laws, clarifying that any risk of harm must be real and specific to warrant regulation. It proposes that India should regulate AI through a combination of voluntary commitments/standards from AI developers and deployers, along with sectoral and/or risk-based regulations applicable to specific AI uses.

5.4. Kerala High Court's Policy On AI

In a first in the country, in July 2025, the High Court of Kerala, promulgated a comprehensive policy³⁵ governing the use of AI technologies within the state's district judiciary. This policy underscores a clear boundary that while technological tools may support judicial operations, the core of adjudication, ie., human intellect and reasoning, remains indispensable to the administration of justice.

Under the new framework, AI may be employed in a limited and closely supervised manner, strictly for administrative functions. The use of generative AI systems, like ChatGPT, Gemini, Copilot, and Deepseek, is explicitly prohibited in any form of judicial decision-making. Judges are barred from relying on such tools to establish factual findings, determine legal remedies, or draft orders and judgments. Further, the policy stipulates that only AI tools formally sanctioned by the High Court or the Supreme Court of India may be deployed, and even then solely for non-judicial purposes. Any divergence from this mandate must be meticulously documented and reported. Each district court is required to maintain a comprehensive audit log detailing instances of AI

³⁵ Kerala High Court (July 2025), [Policy Regarding the Use of Artificial Intelligence Tools in District Judiciary](#), as accessed on 28th July, 2025

usage, including the specific tool utilised and the procedural safeguards employed to verify the accuracy of its output.

While the use of AI-driven translation tools is permitted, their outputs must be carefully reviewed and validated by either qualified human translators or the presiding judicial officers. The High Court's directive firmly reiterates that AI may assist in judicial processes but cannot supplant the cognitive and ethical responsibilities of the judiciary. The focus is to reiterate that the accountability for any judicial pronouncement rests solely with the judge who affixes their signature to it.

5.5. Sector-Specific Regulations: Tailored Governance

In a nod to the diverse applications and unique risks of AI across various domains, the government has also opted for sector-specific guidelines. These tailored regulations aim to mitigate industry-specific risks while ensuring AI-driven innovations adhere to established ethical and legal standards. This granular approach helps build trust among stakeholders by establishing clear accountability and governance mechanisms relevant to each sector's nuances.

- **Financial Sector Initiatives:** As early as January 2019, Securities and Exchange Board of India (SEBI) issued circulars³⁶ mandating reporting requirements for AI and Machine Learning (ML) applications used by market participants. This aims to enhance transparency and manage AI's impact on financial markets. These "AI and ML Circulars" cover a broad scope of applications, from those offered to investors for trading to internal compliance systems. Furthermore, SEBI has released a Consultation Paper³⁷ proposing to place greater onus on regulated entities for their use of AI tools, moving beyond mere reporting to direct responsibility for AI-generated outputs.

The Reserve Bank of India (RBI) has also stepped in significantly. It formed an eight-member panel called the Framework for Responsible and Ethical Enablement of Artificial Intelligence (FREE-AI)³⁸, led by Pushpak Bhattacharyya of IIT Bombay. This

³⁶ Sebi.gov.in. (2019). *SEBI | Reporting for Artificial Intelligence (AI) and Machine Learning (ML) applications and systems offered and used by Market Infrastructure Institutions (MIIs)*. [online] Available at: <https://www.sebi.gov.in/legal/circulars/jan-2019/reporting-for-artificial-intelligence-ai-and-machine-learning-ml-applications-and-systems-offered-and-used-by-market-infrastructure-institutions-miis-41927.html>.

³⁷ NASSCOM (2024). *Call for Inputs: SEBI's proposed amendments with respect to the use of AI tools*. [online] nasscom | The Official Community of Indian IT Industry. Available at: <https://community.nasscom.in/index.php/communities/public-policy/call-inputs-sebis-proposed-amendments-respect-to-ai-tools> [Accessed 12 Jun. 2025].

³⁸ PTI (2024). *RBI sets up 8-member panel on ethical use of AI*. [online] The Economic Times. Available at: <https://economictimes.indiatimes.com/news/economy/policy/rbi-sets-up-8-member-panel-on-ethical-use-of-ai/articleshow/116681267.cms?from=mdr> [Accessed 11 Jun. 2025].

committee's mandate is to develop a robust framework for the responsible and ethical adoption of AI within the financial sector. The FREE-AI committee is tasked with reviewing current AI adoption levels in financial services, examining global regulatory approaches, and recommending comprehensive governance and risk mitigation frameworks. This position by financial regulators underscores the high-stakes nature of AI in this sector.

- **Healthcare Sector Standards:** The National Digital Health Mission³⁹ has set crucial standards for AI's deployment in healthcare. These standards focus on ensuring the reliability and safety of AI-driven healthcare systems. They include specific protocols for sensitive data handling, securing patient consent, and rigorously validating AI-powered diagnostic tools before their widespread use. This aims to build patient trust and ensure AI augments, rather than compromises, healthcare quality.

5.6. Supreme Court's Ai Stance: A Vision Without A Policy

While the broader government is navigating AI governance through policies and sector-specific rules, the Supreme Court of India presents a unique scenario. Despite its clear enthusiasm for AI, demonstrated through public speeches by successive Chief Justices (from S.A. Bobde to D.Y. Chandrachud), the launch of AI tools like SUPACE, a recent hackathon, and specific budget allocations within the e-Courts project, the Court has not yet published a dedicated AI policy.

Its "Digital Courts Vision and Roadmap" for Phase III of the eCourts project does provide some insights into its rationale and goals for digital transformation, however, the absence of a clear, articulated AI-specific policy is concerning. The Court is looking to actively develop and deploy AI solutions without a discernible set of guidelines on how such technologies will impact its functioning and, crucially, the public at large. This regulatory vacuum, even amidst increasing AI adoption by courts, presents a pivotal moment. It offers an opportunity for the Indian judiciary to adopt an approach that explicitly places justice and equity at the forefront when leveraging AI for judicial services.

³⁹ National Health Authority (2020). *National Digital Health Mission Strategy Overview*. [online] Available at: https://www.niti.gov.in/sites/default/files/2023-02/ndhm_strategy_overview.pdf.

5.7. Future Directions: Towards A Comprehensive Framework?

India's overall approach to AI regulation is generally described as "pro-innovation."⁴⁰ It seeks to unlock AI's immense potential while proactively addressing anticipated risks. The government is carefully balancing a hands-off approach with more direct interventions. Currently, the emphasis remains on developing guiding policies and frameworks that acknowledge ethical concerns and risks, rather than enacting overarching, binding AI-specific laws.

However, in the past, there have been calls for more centralised regulating authority. India's telecom regulator, TRAI, for instance, has notably recommended the establishment of an independent statutory authority, the Artificial Intelligence and Data Authority of India (AIDAI)⁴¹. Such a body was to be tasked with regulating responsible AI use across all sectors. This recommendation brings to light an important concern around if a fragmented regulatory landscape might become inefficient as AI becomes more pervasive.

6. HOW TO DEPLOY THE TECHNOLOGY RESPONSIBLY?

The integration of AI across various sectors in India, including the judiciary, presents a complex landscape. Initial efforts often zero in on internal process optimisation, as seen with AI in courts. However, this "supply-side" approach frequently overlooks the nuanced human experience. Further, inherent challenges like algorithmic bias, the opacity of "black box" AI, critical data privacy concerns, the persistent digital divide, and an evolving regulatory environment all demand a more holistic and human-centric strategy. To truly unlock AI's immense potential and ensure its responsible deployment, India must embrace a multi-faceted approach that re-centers the human experience in its broader governance and public service delivery.

6.1. Cultivating A Human-Centric Ai Design And Deployment Philosophy

The foremost imperative across all government sectors embracing AI is a fundamental shift in design philosophy. Instead of merely automating existing processes, the goal must be to genuinely enhance the human experience of public service delivery. This means moving beyond internal departmental efficiencies to prioritise how citizens, businesses, and public servants interact with and perceive AI-powered government services.

⁴⁰ Carnegie Endowment for International Peace. (2024). *India's Advance on AI Regulation*. [online] Available at: <https://carnegieendowment.org/research/2024/11/indias-advance-on-ai-regulation?lang=en>.

⁴¹ Aulakh, G. (2023). *Trai recommends regulatory framework for AI, risk-based framework for AI specific use cases*. [online] mint. Available at: <https://www.livemint.com/technology/tech-news/trai-issues-recommendations-on-ai-says-regulatory-framework-for-development-of-responsible-ai-urgently-needed-11689859911432.html> [Accessed 11 Jun. 2025].

This approach necessitates extensive user research and co-creation with diverse stakeholders, from rural farmers interacting with agricultural AI tools to urban citizens using smart mobility solutions, and even civil servants utilising AI for policy analysis. AI solutions shouldn't be developed in isolation; they must be collaboratively designed and iteratively refined based on real-world feedback. Crucially, accessibility by design must be a core principle, ensuring that AI-powered platforms are intuitive, multilingual, and accommodate varying digital proficiencies and disabilities. The aim is to simplify access to government services, not to introduce new layers of technological complexity.

6.2. Ensuring Algorithmic Integrity And Trust Through Robust Ethical Governance

The specter of algorithmic bias and opacity is a profound ethical challenge that permeates all AI applications, particularly in sensitive government domains like law enforcement, social welfare, or public health. If historical data reflects societal prejudices, AI can inadvertently perpetuate or amplify existing inequalities. The "black box" nature of some AI models also undermines principles of transparency and accountability.

To address this, India must champion algorithmic integrity through a robust ethical governance framework. This begins with meticulous data auditing and debiasing techniques before any AI system is trained, actively identifying and mitigating historical prejudices embedded in government datasets. Mandating Explainable AI standards is crucial; decision-makers and affected citizens must understand *how* an AI reached a particular recommendation or outcome, maintaining accountability and enabling critical evaluation. Further, the "human-in-the-loop" principle must be inviolable, ensuring that AI remains an assistive tool, augmenting human capabilities, and never usurping ultimate human judgment or responsibility for decisions that impact rights, livelihoods, or public safety. Regular, independent ethical audits of deployed AI systems, with multidisciplinary expertise, are essential for continuous oversight and public trust.

6.3. Fortifying Data Privacy And Security With Proactive Measures

Government departments handle an immense volume of highly sensitive personal and public information. Integrating AI, which thrives on vast datasets, inherently introduces significant data privacy and security risks. Even with the Digital Personal Data Protection Act, 2023, the unique characteristics of government data and AI's capacity to "memorise" information necessitate additional safeguards.

A robust strategy requires comprehensive data governance frameworks specifically tailored for public sector AI. These frameworks must outline stringent protocols for data collection, anonymisation, storage, access control, and deletion. Investing in Privacy-Preserving AI (PPAI)

techniques⁴² should be a priority, allowing AI models to learn without direct exposure to raw sensitive data. Regular, independent security audits of AI systems and their underlying infrastructure are paramount to guarding against breaches and cyber threats. Moreover, clear guidelines for explicit and informed consent for data use in AI training, coupled with accessible mechanisms for data access, correction, and deletion, are non-negotiable for upholding citizens' fundamental privacy rights.

6.4. Bridging The Digital Divide And Cultivating Widespread Digital Literacy

India's substantial digital divide poses a significant threat to equitable AI implementation across all government services. Without universal access to robust digital infrastructure and adequate digital literacy, AI's benefits risk being confined to urban centers, potentially exacerbating existing inequalities in access to public services.

Addressing this requires massive, sustained investment in infrastructure development, ensuring reliable high-speed internet, power supply, and hardware even in the most remote regions. This must be complemented by comprehensive, practical, and localised digital literacy programs for all citizens and public servants, from frontline workers to senior administrators. These programs should focus not just on operating AI tools, but on understanding their implications and limitations. Furthermore, exploring "offline-first" AI solutions and leveraging existing public digital infrastructure can help bridge connectivity gaps and ensure that AI's promise reaches every citizen, regardless of their location or socio-economic background.

6.5. Establishing A Proactive And Adaptive Regulatory Framework

The rapid pace of AI development has created a regulatory vacuum across many government sectors, raising complex questions of accountability. Without clear legal guidelines, determining responsibility for AI-related errors or biases remains challenging.

India needs to explore a more proactive and adaptive regulatory framework. This entails developing sector-specific AI policies or guidelines for high-impact areas, mandatory ethical standards, and explicit accountability models. Establishing clear liability frameworks for AI-induced harms is crucial. India can develop agile regulatory mechanisms that evolve with the technology, by fostering a collaborative ecosystem involving government bodies, academia, industry, and civil society, thereby ensuring that innovation proceeds hand-in-hand with robust governance and an unwavering commitment to public trust and equitable service delivery.

⁴² IndiaAI. (2024). *undefined*. [online] Available at: <https://indiaai.gov.in/article/understanding-privacy-preserving-ai> [Accessed 11 Jun. 2025].

7. CONCLUSION

India's journey, fraught with both promise and predicament, offers a pragmatic blueprint for navigating the complex intersection of AI's adoption across sectors, specifically in judiciary and its implications on human rights in deeply diverse and resource-constrained environments.

The first lesson is to resist the temptation to adopt "off-the-shelf" Western AI solutions without deep contextualisation. Prioritise understanding local nuances, diverse knowledge forms, and how technology is perceived and appropriated by different communities. This requires investing in extensive grassroots user research, co-creation models, and ensuring that AI outputs are not just translated, but genuinely comprehensible and culturally relevant to the end-user. This approach ensures AI solutions are truly inclusive, rather than inadvertently creating new forms of digital exclusion.

Second, is to define "success" for AI in public service beyond purely quantitative metrics. While efficiency is important, it is important to prioritise qualitative outcomes related to public trust, equitable access, and the safeguarding of fundamental rights. It is imperative to always maintain a "human-in-the-loop" for any AI application impacting citizens' rights or well-being. This acts as an ethical circuit breaker, ensuring that technological expediency never overrides the nuanced, human-centric application of law and policy.

Third, another key learning for other developing nations is to embed ethical considerations from the very inception of AI projects. Crucially, it is important to recognise that harms can be cumulative, collective, and often manifest in subtle ways that a simple risk assessment might miss. As a result, it is essential that we prioritise building AI systems that are inherently transparent, fair, and accountable, proactively addressing systemic inequalities rather than merely reacting to individual incidents.

Fourth, it's important to not view AI deployment in isolation. It demands concurrent, significant investment in universal digital infrastructure, extending reliable connectivity and hardware to underserved regions. This must be complemented by comprehensive, localised digital literacy programs for citizens and public servants alike, ensuring widespread digital empowerment. Further, establishing a multidisciplinary, adaptive regulatory framework is crucial, addressing not only AI-specific guidelines but also the broader data governance landscape. This involves fostering genuine collaboration between government, judiciary, industry, academia, and civil society to build a resilient, equitable, and trustworthy digital future for all.

In summary, India's approach to AI integration offers a compelling narrative; one that recognises technology's power but insists on its subservience to human rights, prioritises inclusivity, and meticulously builds trust through transparency and accountability. The path forward lies in integrating AI not merely as a tool for efficiency, but as a catalyst for a more just and equitable society.



AI in the Judiciary: Chapter on Taiwan

Kuan-Wei Chen¹

Abstract

This chapter explores the development, contestation, and governance of judicial AI in Taiwan, focusing on its applications, institutional responses, and normative frameworks. It begins with the 2023 introduction of the Intelligent Judgment Draft Generation System, designed to assist judges in routine criminal cases. Although positioned as a support tool under a judge-in-the-loop model, the system provoked public criticism over fairness and transparency, prompting its suspension and the subsequent release of six constitutional principles and internal development guidelines (2024–2025) by the Judicial Yuan.

The chapter situates this controversy within the broader context of Taiwan’s judicial digitalisation, from the 1990s to the current “Digital Policy 2.0.” It examines five AI applications: the Intelligent Judgment Draft Generation System, AI-Assisted Sentencing Information System, Courtroom Speech Recognition and Summarisation System, Intelligent Analysis System for Electronic Dossier, and Intelligent Service Chatbot—each reflecting efforts to improve efficiency, access, and data processing while maintaining legal legitimacy.

It further reviews the normative and institutional frameworks responding to these developments, including Taiwan’s lack of binding AI legislation, the role of soft law, and the 2024 Draft AI Basic Law. It highlights the constitutional principles proposed by former Judicial Yuan President Tzong-li Hsu, stressing human accountability, transparency, legal reservation, and the right to human judgment.

The chapter concludes with four key lessons: the importance of public trust, the need for a legal foundation even for assistive AI, the role of continuous oversight and judicial literacy, and the significance of human-machine boundaries in judicial contexts. Taiwan’s experience offers useful insights for other democracies grappling with similar issues.

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Keywords

Taiwan, judicial digitalisation, artificial intelligence, judgment drafting, legal automation, digitalisation, constitutionalism, public trust, transparency, legal reform.

1. INTRODUCTION²

In August 2023, Taiwan's Judicial Yuan announced a pilot program for an “Intelligent Judgment Draft Generation System (智慧化裁判草稿系統),” intended to assist judges in handling large volumes of routine criminal cases, such as drunk driving and aiding fraud.³ The system was designed as a support mechanism: it would generate draft judgments based on indictments, while judges retained full authority over fact-finding, legal reasoning, and sentencing.

Despite its auxiliary nature, as emphasised by the Judicial Yuan, the initiative quickly generated widespread concern. Legal professionals, civil society organisations, and scholars questioned whether the use of AI⁴ in judgment drafting might undermine procedural fairness, erode the symbolic and institutional role of judges, and proceed without adequate legal basis or public engagement.⁵ Notably, this controversy stood in contrast to other AI applications, such as the Sentencing Information System, which had been operating with relatively little objection. The difference in public response highlights a critical policy question: under what conditions can AI be meaningfully and legitimately integrated into which judicial processes? It also highlights the importance of public perceptions in AI applications in the judiciary.

² This chapter is inspired from the keynote speech delivered by Professor Tzong-li Hsu, former President of the Judicial Yuan, at Ritsumeikan University in Kyoto, Japan, on March 1, 2025. As a tribute to that lecture, this chapter compiles and organises related materials. The author expresses herein the great appreciate for the support from Prof. Hsu during the writing process. Besides, the author appreciates the great comments from the reviewer which means a lot in refining this chapter.

³ 司法院, ‘司法院審慎發展生成式AI應用, 以撰寫刑事裁判草稿初試啼聲; 期望減輕法官工作負荷, 審判核心仍由法官自行決定-司法院全球資訊網-查詢服務-司法新聞查詢-本院新聞’ (司法院全球資訊網, 27 August 2023) <<https://www.judicial.gov.tw/tw/cp-1887-929494-8a9fb-1.html>> accessed 14 June 2024.

⁴ It should first be noted that whether such applications qualify as “artificial intelligence (AI)” depends on how AI is defined. In this chapter, a broader interpretation is adopted. Given that these applications are generally discussed in society as part of the broader conversation on AI—and that the Judicial Yuan itself classifies them as components of its initiative toward “intelligent/smart justice”—they are included within the scope of analysis here.

⁵ 民間司法改革基金會, ‘記者會 | AI草擬判決的三大疑問與三大風險 要減輕負擔, 也要控制AI風險’ (財團法人民間司法改革基金會, 26 September 2023) <<https://www.jrf.org.tw/articles/2550>> accessed 28 May 2025; 法律白話文運動, ‘民團憂AI助寫裁判書風險 司法院:未取代法官審判權限’ (法律白話文運動, 24 October 2023) <<https://plainlaw.me/posts/plainlaw-daily-news-20231023>> accessed 27 May 2025.

In response to public criticism, the Judicial Yuan suspended the pilot program in October 2023 and committed to a comprehensive reassessment.⁶ In January 2024, the then-President of Judicial Yuan, Tzong-li Hsu (許宗力), introduced six guiding principles to the use of generative AI in judicial practice, emphasising transparency, human accountability, and the right to human judgment. This was followed in March 2025 by internal development of formal guidelines applicable across the judiciary (司法院及所屬各機關發展人工智慧參考指引). This set of guidelines can be seen as an internal response to external public concerns. At the same time, it was the external criticism that reminded the authorities of the need to establish corresponding “regulations,” even if only in the form of non-binding reference guidelines.

Based on the developments mentioned above, the case of Taiwan offers a particularly valuable example for rethinking the institutional, normative, and policy conditions under which AI can be introduced into judicial systems. As a democratic jurisdiction with an active civil society and an evolving digital governance agenda, Taiwan is situated in a context where legal innovation is pursued with technological interest and constitutional caution. This makes it a meaningful case for comparative reflection on domestic and international policy development.

This chapter aims to provide a comprehensive account of how judicial AI has been introduced, evaluated, and contested in Taiwan. The purpose of this chapter is to introduce Taiwan's digital landscape, raise points worthy of reflection towards a more holistic governance strategy for judicial AI. The following section begins by outlining the evolution of Taiwan's approach to judicial AI, including both implemented and proposed systems, namely the **Intelligent Judgment Draft Generation System**, the **AI-Assisted Sentencing Information System** (AI量刑資訊系統), the **Courtroom Speech Recognition and Summarisation System** (法庭語音辨識系統), the **Intelligent Analysis System for Electronic Dossier** (電子卷證智慧化分析系統), and the **Intelligent Service Chatbot** (智慧客服機器人) (Section II). It then examines the normative and regulatory frameworks which should serve as the legal basis or have been developed in response (Section III). Given the dynamic and iterative nature of Taiwan's policy process, the chapter concludes with lessons from Taiwan, as observations on the continuing challenges and future directions of AI adoption in the judiciary (Section IV).

2. APPLICATIONS OF AI IN TAIWAN'S JUDICIARY

This section begins by situating the development of AI technologies within the broader trajectory of judicial digitalisation in Taiwan. It then provides a detailed overview of both implemented AI applications and those under development in the judiciary, aiming to offer a clearer picture of

⁶ 司法院, '回應各界對於「智慧化裁判草稿系統」之疑慮 司法院:刻正研擬參考指引、審慎評估上線期程' (6 October 2023) <<https://www.judicial.gov.tw/tw/cp-1887-957225-f18a0-1.html>> accessed 27 May 2025.

what “intelligent justice”⁷ currently entails in the Taiwanese context as of 2025. By examining the specific design, functions, and policy rationale of each system, this section aims to illustrate how Taiwan’s judiciary has engaged with emerging technologies.⁸

2.1. Developments

The use of technology in the judiciary is not a new phenomenon. As a country often recognised internationally for its achievements in digital democracy,⁹ Taiwan has consistently performed well in e-government rankings despite areas for improvements.¹⁰ The digitalisation of the judiciary has also been a long-standing policy objective of the Judicial Yuan, Taiwan’s highest judicial administrative institution.¹¹ As early as 1997, Taiwan launched a legal information retrieval system (法學資料檢索系統) and began publishing court judgments on this online system. By January 2001, all courts had fully digitised court transcripts, followed in 2002 by a pilot program for electronic access to these transcripts, which became fully operational in 2003.

Following the rapid developments of technology, a more structured integration of advanced technologies in the judiciary began in the 2010s and has unfolded in two major phases. According to Wu-Chih Lai (賴武志), Director of the Judicial Yuan’s Department of Information, “If the first

⁷ It is worth noting here that both “smart” and “intelligent” could be considered acceptable translations of the original Chinese term. However, this chapter opts for “intelligent” as it is a more neutral and descriptive term for artificial intelligence, whereas “smart” carries stronger value-laden connotations. That said, a deeper examination of the linguistic origins and value assumptions embedded in the corresponding Chinese and English terminology would be a fascinating subject for further research in its own right.

⁸ Given the fast-evolving nature of this field, readers are encouraged to view the information presented here as a snapshot in time and to continue monitoring developments as Taiwan’s legal-technical ecosystem continues to evolve.

⁹ Audrey Tang, ‘Opinion | A Strong Democracy Is a Digital Democracy’ *The New York Times* (15 October 2019) <<https://www.nytimes.com/2019/10/15/opinion/taiwan-digital-democracy.html>> accessed 26 May 2023; Dominik Hierlemann and Stefan Roch, ‘Digital Democracy: What Europe Can Learn from Taiwan. Bertelsmann Stiftung September 2020.’ (September 2020) <<http://aei.pitt.edu/103223/>> accessed 13 May 2023; Michael Caster, ‘Confronting Digital Authoritarianism Through Digital Democracy: Lessons From Taiwan’ (*The Diplomat*, 20 January 2024) <<https://thediplomat.com/2024/01/confronting-digital-authoritarianism-through-digital-democracy-lessons-from-taiwan/>> accessed 9 February 2024.

¹⁰ Waseda University Institute of Digital Government, ‘Institute of Digital Government - Waseda University’ (2025) <<https://idg-waseda.jp/ranking.htm>> accessed 28 May 2025.

¹¹ In recent years, the Judicial Yuan has actively promoted the digital transformation of the judiciary with the aims of enhancing transparency, strengthening public trust in the judicial system, reducing judges’ workloads, and improving the quality of case adjudication. By 2019, these efforts had yielded significant progress in three main areas. See Table 1. Information source: 司法院, ‘司法院數位政策2.0’ (司法院全球資訊網, 9 August 2023) <<https://www.judicial.gov.tw/tw/cp-247-919057-c3448-1.html>> accessed 27 May 2025.

wave of IT reform in the judiciary was about paperless processes, the second was about the integration of AI to transform technology-enabled courts into intelligent courts.”¹²

During the first phase, starting in the 2010s, the Judicial Yuan promoted the concept of the “technology court (科技法庭),” aiming to improve judicial efficiency through digital file management and equipping courtrooms with projection and display systems. After the former President of the Judicial Yuan, Tzong-li Hsu, took office in 2016, the Judicial Yuan not only followed the policy before such as technology court, but also launched its first five-year digital policy plan, outlining four main goals: enhancing IT infrastructure and efficiency, upgrading information systems and services, strengthening data and cybersecurity, and moving toward intelligent courts.¹³ This plan served as a blueprint for the digital transformation of Taiwan’s judiciary.

Table 1. Key Measures in Taiwan’s Judicial Digitalisation by 2019

Category	Initiatives	Description
ENHANCING ADJUDICATION EFFICIENCY	(1) Technology Courtrooms	Nationwide rollout equipped with projection tools and electronic case files to enhance focus, transparency, and efficiency.
	(2) Upgraded Adjudication Information System	Launched in 1990 and continuously updated; the third-generation system (2019) integrates databases and electronic documents to assist with judgment writing and case management.
	(3) New Functional Systems	Tools for Constitutional Court cases, online detention hearings, automatic recusal checks, and restricted access to juvenile criminal records. Also includes ADR, interpreters, notaries, and mediation systems.

¹² 郭又華, ‘從徹底無紙化邁向智慧化法庭, AI掀起司法院IT第二次變革’ (iThome, 5 June 2023) <<https://www.ithome.com.tw/people/157177>> accessed 28 May 2025.

¹³ 司法院, ‘司法院數位政策2.0’ (n 10).

	(4) Inter-Agency Information Exchange	Automated exchanges with prosecutors, OCR tools, and document system integration. Examples: electronic rulings sent to police, criminal record data shared with EPA.
IMPROVING PUBLIC ACCESS TO JUDICIAL INFORMATION	(1) Electronic Litigation Services	Civil and tax cases support e-filing, case access, online payment, and real-time updates—improving speed, convenience, and sustainability.
	(2) Legal Information Services	Redesigned legal database and lawyer portal allow full access to documents and sentencing trends (for 8 criminal offences).
	(3) Judicial Yuan Website	Improved multimedia features, user-targeted services, and better public communication.
IMPROVING JUDICIAL PERSONNEL'S IT ENVIRONMENT	(1) Hardware Upgrades	Investment in new PCs, devices, servers, and network bandwidth.
	(2) Administrative Streamlining	Updated internal systems improve workflow; tools include upgraded transcription, execution timeline alerts, mediation scheduling, and automated guardianship notifications.

In 2023, Taiwan entered the second phase of judicial digitalisation, which focused on a more comprehensive transformation of litigation processes. Informed by comparative experiences from other jurisdictions, recommendations from scholars, and feedback from front-line practitioners, the Judicial Yuan introduced the “Digital Policy 2.0,” centered on the digital transformation of litigation procedures. The second-phase policy included four main components.¹⁴

¹⁴ Ibid.

- **Remote Proceedings (遠距法庭):** Leveraging internet communications and video conferencing technologies to enable greater accessibility to court proceedings, especially for participants affected by geographic or pandemic-related constraints.¹⁵ This approach aims to promote access to justice through convenience and inclusivity.¹⁶
- **e-Procedure (電子程序):** Promoting a paperless and automated litigation process through electronic filings, electronic service of process, electronic evidence management, and electronic receipts. These measures not only enhance efficiency but also support environmental sustainability.
- **e-Management (電子案件管理):** Integrating AI-driven tools to support case management, including the automatic generation of bookmarks in electronic files, automated redaction of personal information, and statistical processing of court decisions. Public-facing services such as online appointment and query systems were also expanded to improve administrative efficiency.
- **i-Justice (智慧司法)¹⁷:** Deepening the application of AI by optimising and expanding existing tools, which will be the focus of this chapter. New initiatives to be proposed also include introducing generative AI for tasks like drafting media statements in high-profile cases. Data governance improvements aim to enable more effective use of legal data and support innovation in legal technology (LegalTech).

Digital Policy 2.0 thus builds upon earlier efforts in paperless administration while also placing greater emphasis on intelligent systems, namely the i-Justice goal. The Judicial Yuan describes its strategy as structured around three operational goals—efficiency, convenience, and decarbonisation—and two technological themes—intelligent automation and paperless processing.¹⁸ The five AI applications introduced in the following subsections have been developed within this evolving framework of judicial digital transformation.

¹⁵ So, the COVID-19 pandemic plays a role here, which provide more motivation or need to the digitalisation.

¹⁶ Related challenges, see: 司法數位化與接近正義, 沈冠伶編, 元照出版, 2025年。

¹⁷ The “i-Justice” is the official translation by the Judicial Yuan. The original word may be also translated into “smart justice” or “intelligent justice”.

¹⁸ 司法院, ‘司法院數位政策2.0’ (n 10).

Before entering the details of the five main applications, it is worth clarifying the distinction made between so-called “digitalisation” and the use of AI (i-Justice). Many of the systems officially classified as part of the judiciary’s “digitalisation” efforts but not explicitly labelled as involving AI still rely on specific algorithmic designs. This raises the broader question of how we define AI in the first place. If we take a broader view, as earlier mentioned, we can say the key to distinguish the new “i-Justice” application is that judicial administration is shifting from introducing AI merely as a tool for technology and data management toward employing it in more cognitively demanding roles—assigning to AI tasks that traditionally required human intelligence, rather than limiting its use to routine or repetitive functions.

2.2. Intelligent Judgment Draft Generation System (智慧化裁判草稿系統)

2.2.1. Overview of the System

The proposed but postponed Intelligent Judgment Draft Generation System was developed by Taiwan’s Judicial Yuan as part of its broader effort to modernise judicial operations and alleviate the growing burden on judges handling repetitive and high-volume cases.¹⁹ Initiated under the 2021 resolution of the Judicial Yuan’s “e-Judiciary Promotion Committee (司法e化推動委員會),” its development responds to the significant workload generated by certain criminal case types—especially driving under the influence (DUI) and aiding fraud for the first stage of this system—which alone accounted for nearly 37,000 and 14,000 first-instance criminal cases, respectively, out of approximately 166,000 concluded in 2022.²⁰

The proposed Intelligent Judgment Draft Generation System applies natural language processing (NLP) and a locally hosted generative language model based on the TMT5 architecture. The AI is trained using pairs of indictments and corresponding court decisions, allowing it to extract salient features from the indictment and produce a coherent draft judgment tailored to the case type.²¹ To ensure privacy and data security, all training and inference processes are conducted within a closed, on-premises infrastructure. The system operates under a judge-in-the-loop principle: it is only activated after the judge has reviewed the full case file and made determinations on key legal and factual issues, such as guilt, the defendant’s statements, and applicable legal

¹⁹ 司法院, ‘司法院審慎發展生成式AI應用, 以撰寫刑事裁判草稿初試啼聲; 期望減輕法官工作負荷, 審判核心仍由法官自行決定-司法院全球資訊網-查詢服務-司法新聞查詢-本院新聞’ (n 2).

²⁰ 法律白話文運動 (n 4).

²¹ 司法院, ‘司法院審慎發展生成式AI應用, 以撰寫刑事裁判草稿初試啼聲; 期望減輕法官工作負荷, 審判核心仍由法官自行決定-司法院全球資訊網-查詢服務-司法新聞查詢-本院新聞’ (n 2).

provisions. The judge inputs these parameters into the interface, after which the system generates a preliminary draft that the judge may revise and finalise. The system does not and is not intended to replace judicial reasoning, fact-finding, or legal interpretation.²²

Initially, the system focused on DUI and aiding fraud cases due to their volume and structural regularity. By August 2023, it had completed internal development and was scheduled for trial implementation in selected courts following further validation. In parallel, a version tailored for drug-related offences was under development and planned for pilot deployment in late 2024,²³ which would be a more complicated category of cases. The Judicial Yuan also announced plans to extend the system to civil domains, including traffic accident compensation cases and personal debt restructuring and liquidation proceedings, reflecting the system's broader adaptability across both criminal and civil justice workflows.²⁴ However, the application has all been postponed due to the great controversies in society.²⁵

When proposing the system, the Judicial Yuan has continuously emphasised that it serves only as a tool to assist in drafting and improve efficiency. It does not and will not substitute for judicial discretion or authority.²⁶ Its development forms part of Taiwan's "Judicial Digital Policy 2.0," which promotes a transition toward intelligent, paperless, and accessible court services. To ensure responsible implementation, the Judicial Yuan is aligning system governance with the Executive Yuan's generative AI policy and is preparing dedicated guidelines for AI development in the judicial context.²⁷ It then published in 2025.

²² Ibid.

²³ Ibid.

²⁴ Ibid.

²⁵ See "Societal Reactions and Concerns" below.

²⁶ It is important to emphasise that this is the official narrative—and one that is not beyond scrutiny. While the claim of increased efficiency may appear plausible at first glance, the reality is likely far more complex. For instance, does the time and effort required for judges to review and verify AI-generated drafts truly reduce their workload compared to drafting judgments manually? Or does this approach risk pushing judges to rely heavily on AI drafts in exchange for greater efficiency?

This also raises questions about judicial cognition. The notion of "efficiency" saved may not only refer to physical labour, but also to the cognitive input traditionally expected of judges. All of these aspects warrant more careful and comprehensive consideration.

²⁷ 司法院, '司法院審慎發展生成式AI應用, 以撰寫刑事裁判草稿初試啼聲; 期望減輕法官工作負荷, 審判核心仍由法官自行決定-司法院全球資訊網-查詢服務-司法新聞查詢-本院新聞' (n 2).

In fact, from the above description, this system is more like a writing format assistant and does not make any substantive decisions. It merely fills in the parameters chosen by the judge into the formal document draft. Nevertheless, since this appears to be a document created by the system, the term AI Judge has been featured in the media,²⁸ potentially causing social anxiety.

2.2.2. Societal Reactions and Concerns

On September 26, 2023, several civil society organisations—including the Open Culture Foundation, Taiwan Association for Human Rights, Judicial Reform Foundation, and multiple bar associations—issued a joint statement raising serious concerns about the Intelligent Judgment Draft Generation System.²⁹ They urged the Judicial Yuan to fully disclose information about the system’s development, strengthen risk assessments, and engage in broader public consultation.³⁰

The statement emphasised that the Judicial Yuan must clarify how the AI system is built and trained, including details about *data sourcing, de-identification, database maintenance, and the potential risks of biased or insufficient training data*.³¹ Concerns were also raised about the system’s capabilities, which appear to go beyond merely assisting in evidence organisation and may actively influence judicial reasoning. The statement called for a clear strategy to address risks such as algorithmic error and bias replication.³²

Civil groups cited international literature that warns of “AI hallucinations”—where systems generate seemingly persuasive but factually inaccurate content. They also referenced U.S. experiences with tools like COMPAS (Correctional Offender Management Profiling for Alternative Sanctions), which have been criticised for embedding racial bias in sentencing recommendations. Taiwan’s system, built on the TMT5 language model and intended to generate draft judgments for specific criminal cases (e.g., aiding fraud, unsafe driving), is viewed as similarly susceptible to reinforcing existing judicial inequalities.³³

²⁸ 法律白話文運動, ‘臺灣 AI 判決系統即將上線, 機器徹底取代法官了嗎? | 智財科技’ (法律白話文運動, 23 October 2023) <<https://plainlaw.me/posts/AI-judgment-system>> accessed 13 June 2024.

²⁹ 民間司法改革基金會 (n 4).

³⁰ Ibid.

³¹ Although it is not mentioned by the statement, the contractual terms between the court and the IT/AI provider concerning data use and re-use may also be added to the list, as these are critical components that shape transparency, accountability, and long-term governance.

³² 民間司法改革基金會 (n 4).

³³ Ibid.

Three core risks were identified: (1) judgment errors due to undetected inaccuracies in generated texts, (2) replication of systemic bias stemming from skewed training data, and (3) erosion of public trust in the judiciary, especially given the complexity of human judgment in legal reasoning and the opaque nature of AI assistance. The groups urged the Judicial Yuan to disclose the training dataset, allow for testing by a wider range of stakeholders (including lawyers and prosecutors), and assess its alignment with international standards, such as the EU AI Act.³⁴

While acknowledging that AI might enhance efficiency and reduce judges' workload, the statement stressed the need for transparency and inclusive deliberation. The signatories called for public hearings and the development of comprehensive AI usage guidelines aligned with global norms before the system is made available to judges. They warned against a "launch-first, regulate-later" approach, insisting that trustworthy AI must be implemented with care, accountability, and respect for fundamental rights.³⁵

2.2.3. Judicial Yuan's Response

In response to the public criticism raised by civil society organisations on September 26, 2023, the Judicial Yuan issued an initial statement the following day.³⁶ It clarified that the Intelligent Judgment Draft Generation System is designed to assist with the drafting of judgments only in specific types of criminal cases—namely, dangerous driving and aiding fraud.³⁷ According to the Judicial Yuan, the system employs natural language processing and rule-based techniques, rather than generative AI, and simply extracts factual and evidentiary content from indictments without analyzing full case files. Therefore, it does not interfere with the judge's role in determining guilt or applying the law.³⁸ Furthermore, the training data, which was over 100,000 de-identified indictments and judgments, were deleted after model development. The Judicial Yuan emphasized that the system is intended to reduce the drafting burden on judges while safeguarding judicial independence. It also stated that it was drafting AI use guidelines based on the Executive Yuan's August 2023 policy document.³⁹

³⁴ *ibid.*

³⁵ *ibid.*; 法律白話文運動 (n 4).

³⁶ 司法院, '司法院就民間團體112年9月26日召開「AI草擬判決的三大疑問與三大風險」記者會所提建議之回應新聞稿-司法院全球資訊網-查詢服務-司法新聞查詢-本院新聞' (司法院全球資訊網, 27 September 2023) <<https://www.judicial.gov.tw/tw/cp-1887-951341-9add3-1.html>> accessed 14 June 2024.

³⁷ *Ibid.*

³⁸ *Ibid.*

³⁹ *Ibid.*

Subsequently, on October 3, 2023, the Judicial Yuan issued a follow-up announcement considering continued public concerns. It stated that an external advisory committee would soon be convened to gather diverse stakeholder opinions and finalize its internal guidelines for AI use in the judiciary. The agency reiterated that judges would retain full responsibility for legal reasoning and verdicts, with the system providing only preliminary draft templates based on prior decisions. The Judicial Yuan further underscored that the system's role is strictly supportive and not intended to replace core judicial functions.⁴⁰ As a result of these ongoing evaluations and the commitment to transparency and responsible implementation, the Judicial Yuan confirmed that the pilot launch of the Intelligent Judgment Draft Generation System would be postponed until further notice.⁴¹

This chapter seeks to underscore that, even when authorities describe such systems as merely “assistive,” their actual impact warrants close observation. While the official responses can be seen as a positive step toward more thoughtful and clearly defined guidelines in reaction to public concerns, their practical effectiveness remains to be seen and requires ongoing scrutiny.

2.2.4. Further Discussions

Considering the above developments, this chapter argues that many of the concerns raised by civil society groups appear to extend beyond the actual design and scope of the system in question. The Intelligent Judgment Draft Generation System is, in essence, a template-based tool that produces draft judgments based on pre-selected elements input by judges. It does not engage in substantive decision-making or legal reasoning. Thus, much of the criticism may not be directed at this particular system per se but rather reflects broader anxieties about the use of AI in judicial processes and adjudication. In other words, if critics have understood the nature of the system, which is not certain due to the rapid developments, their concern is that even in a checkbox-based draft generation format, it can still significantly influence the judge's decision-making framework. On this point, the actual impact, such as the extent to which the system reduces workload or induces cognitive reliance, requires more detailed assessment.

However, the primary argument of this chapter here is that the concerns raised by civil society groups reflect broader anxieties regarding all judicial AI applications, not just the specific system in question. These reactions underscore the crucial importance of

⁴⁰ 司法院,「回應各界對於「智慧化裁判草稿系統」之疑慮 司法院:刻正研擬參考指引、審慎評估上線期程」(n 5).

⁴¹ Ibid.

transparent development processes and sustained public engagement in fostering societal trust. They also point to the need for clearer legal foundations governing the use of such technologies within the judiciary.

Prior to the appearance of this system, Taiwan's academic community had already engaged in related discussions. For instance, Prof. Chien-liang Lee (Academia Sinica) highlighted concerns such as algorithmic opacity, bias, and path dependency⁴². Following the controversy, professionals from various fields also offered recommendations from different perspectives. These discussions have further shaped and concretised the imagination and practical possibilities of AI in the judiciary:

Experts in NLP and legal informatics, including Professors Hsuan-Lei Shao (NTNU), Hung-Yu Kao (NCKU), and Lun-Wei Ku (Academia Sinica), broadly agree that while generative AI has advanced significantly in text generation, it still faces severe limitations in legal applications. These include incorrect citation of statutes, hallucinated outputs in complex cases, and a lack of understanding of legal reasoning, evidentiary analysis, and cultural or ethical context due to its binary nature.⁴³ Comparative insights from countries like Estonia, the UK, and the US indicate that AI in judicial contexts is generally limited to support functions, such as document search, risk assessment, and draft suggestions, rather than full-scale judgment writing.⁴⁴

Experts emphasise that AI should be used to assist rather than replace judicial decision-making. They call for multidisciplinary collaboration between legal professionals, AI developers, ethicists, and social scientists. Moreover, ensuring transparency, accountability, and fairness remains essential, particularly to avoid biases and maintain public trust. AI-generated judgments should be treated as recommendations, with human judges retaining final decision-making authority.⁴⁵ However, this chapter also seeks to highlight that even when AI is positioned merely as a supportive tool, the extent to which it is relied upon and the nature of that reliance, along with its potential impacts in real-world practice, are not issues that can be easily resolved by simply defining the system as assistive.

⁴² 研之有物, 'AI 當法官, 會是正義女神的化身嗎? 專訪李建良' (研之有物 | 串聯您與中央研究院的橋梁, 11 September 2020) <<https://research.sinica.edu.tw/ai-judge-justice-chien-liang-lee/>> accessed 13 June 2024.

⁴³ 台灣科技媒體中心, '「運用AI協助法官寫判決書草稿」專家意見' (16 December 2023) <<https://smctw.tw/16853/>> accessed 13 June 2024.

⁴⁴ Ibid.

⁴⁵ Ibid.

2.3. AI-Assisted Sentencing Information System (AI量刑資訊系統)

2.3.1. The System and Its Background: The Lay Judge System Reform

In response to growing public expectations for fair and appropriate sentencing, and in preparation for the implementation of the new Lay Judge System in January 2023, the Judicial Yuan officially launched the AI-Assisted Sentencing Information System on February 6, 2023.⁴⁶ This system predates the proposed Intelligent Judgment Draft Generation System; however, its societal reaction, as observed in the media and civil society groups,⁴⁷ is milder.

The system aims to enhance the fairness, transparency, and consistency of sentencing by leveraging digital technologies to analyse and update large volumes of judicial decisions. The initiative builds upon system improvement efforts that began in September 2020, with a particular focus on equipping lay judges with accessible and relevant sentencing data.⁴⁸ The AI system utilises NLP techniques to automatically annotate sentencing factors within the full text of judgments and to identify applicable aggravating or mitigating legal provisions. These annotations are then used as training data for machine learning models, replacing manual tagging and enabling real-time database updates.⁴⁹

The system operates through two primary modes.⁵⁰ The Fact-Based Mode allows users to search for sentencing trends based on the factual circumstances recognised in prior judgments. It currently supports cases involving reckless driving, fraud, theft, assault, and hit-and-run. The Evaluation-Based Mode enables searches based on sentencing reasoning aligned with Article 57 of the Criminal Code, distinguishing whether each factor is favourable, unfavourable, or neutral to the defendant. This mode currently covers firearm, narcotics, and sexual offence cases. Both modes support advanced search functionalities and allow users to review full judgments directly. Additionally, the system employs semantic annotation strategies to refine the accuracy and efficiency of automated

⁴⁶ 司法院, '因應國民法官新制, 司法院啟用AI量刑資訊系統--具備二種模式、擁有四大優點-司法院全球資訊網-查詢服務-司法新聞查詢-本院新聞' (司法院全球資訊網, 6 February 2023) <<https://www.judicial.gov.tw/tw/cp-1887-806741-d6471-1.html>> accessed 28 May 2025.

⁴⁷ 陳立峰 and 陳冠勳, '啟用AI協助國民法官量刑 法界憂基礎不足恐未能精確 | 公視新聞網 PNN' (公視新聞網 PNN, 6 February 2023) <<https://news.pts.org.tw/article/621527>> accessed 29 May 2025.

⁴⁸ 司法院, '因應國民法官新制, 司法院啟用AI量刑資訊系統--具備二種模式、擁有四大優點-司法院全球資訊網-查詢服務-司法新聞查詢-本院新聞' (n 45).

⁴⁹ Ibid.

⁵⁰ Ibid.

tagging, with a built-in backend allowing users to adjust annotations and thereby enhance machine learning over time.⁵¹



Figure 1. Fact-Based Mode of the AI-Assisted Sentencing Information System (Types of Crime)



Figure 2. Fact-Based Mode of the AI-Assisted Sentencing Information System (Test Search)

⁵¹ *ibid.*



Figure 3. Fact-Based Mode of the AI-Assisted Sentencing Information System (Test Search Result)

The system is initially intended for judicial use but expands access to the general public. The Judicial Yuan emphasises that this AI-powered system is a key tool in advancing proportional, equal, and transparent sentencing practices under the new lay judge framework,⁵² ultimately reinforcing public trust in the judiciary.⁵³

However, it is essential to emphasise that the AI-Assisted Sentencing Information System is merely an informational tool. It does not render binding decisions. Instead, it provides professional and lay judges with data on sentencing trends in similar cases to serve as a reference. The authority and responsibility for making actual sentencing decisions remain entirely with the judges and lay judges.

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⁵² Taiwan's Lay Judge System, officially implemented on January 1, 2023, introduces citizen participation into the criminal adjudication process for the first time in the country's modern judicial history. Under this system, six lay judges (citizen judges) sit alongside three professional judges to jointly deliberate and decide serious criminal cases, such as those involving intentional crimes that result in death, or offenses with a minimum statutory sentence of ten years or more.

⁵³ 司法院, '因應國民法官新制, 司法院啟用AI量刑資訊系統--具備二種模式、擁有四大優點-司法院全球資訊網-查詢服務-司法新聞查詢-本院新聞' (n 45).

proportional, equal, and transparent sentencing practices under the new lay judge framework,⁵⁴ ultimately reinforcing public trust in the judiciary.⁵⁵

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2.3.2. Comparison with the Previous/Other Sentencing System

In addition to the AI-Assisted Sentencing Information System, the Judicial Yuan previously developed the Sentencing Trend Recommendation System, which is a different system launched in 2014 and gradually expanded to cover various criminal offenses. This trend system aimed to support sentencing reform by providing judges with diverse and objective reference data. It collected a large number of court decisions, identified sentencing factors using statistical regression methods, and incorporated feedback from focus group discussions involving judges, prosecutors, defence lawyers, academics, and civil society actors. These insights were used to generate sentencing trend recommendations for different types of crimes. While the system was made publicly accessible in 2017, it was officially restricted to internal reference use as of November 27, 2024, to prevent confusion with the newly introduced AI-Assisted Sentencing Information System.

Unlike the AI-based system, which utilises natural language processing and machine learning to extract sentencing factors directly from judgments in real-time, the Sentencing Trend Recommendation System primarily relies on statistical analysis and expert input to identify and quantify sentencing factors as empirical measures.⁵⁶

⁵⁴ Taiwan's Lay Judge System, officially implemented on January 1, 2023, introduces citizen participation into the criminal adjudication process for the first time in the country's modern judicial history. Under this system, six lay judges (citizen judges) sit alongside three professional judges to jointly deliberate and decide serious criminal cases, such as those involving intentional crimes that result in death, or offenses with a minimum statutory sentence of ten years or more.

⁵⁵ 司法院, '因應國民法官新制, 司法院啟用AI量刑資訊系統--具備二種模式、擁有四大優點-司法院全球資訊網-查詢服務-司法新聞查詢-本院新聞' (n 45).

⁵⁶ In addition, academic institutions have also developed sentencing prediction databases 王道維, '當AI科技應用於司法審判 Part II: 以量刑資訊系統與量刑預測為例 (投影片)' (王道維的部落格, 2 September 2024) <<https://blog.udn.com/dawweiwang/180983004>> accessed 30 May 2025; 盧映潔 and 王道維, 'AI與量刑—以妨害性自主犯罪為例' [2025] 中正大學法學集刊 1..

2.3.3. Relevant Commentary and Feedback

The launch of the AI-Assisted Sentencing Information System did not spark widespread public debate as the proposed Intelligent Judgment Draft Generation System, but it has indeed drawn attention from legal professionals and civic groups. Some have begun to raise specific concerns—such as whether the system sufficiently reflects the full range of sentencing factors required by law, whether its suggested cases are truly comparable to those under review, and how the design of its filtering criteria might influence or limit judicial discretion. These questions highlight the need to scrutinise how such systems may shape sentencing outcomes, even when presented merely as reference tools.⁵⁷

Furthermore, some experts have raised concerns about the design of the AI-Assisted Sentencing Information System, particularly regarding the completeness and relevance of the sentencing factors provided in the system interface.⁵⁸ Although the system offers convenient filtering options for retrieving similar cases, its reliance on a limited set of commonly used factors may fall short of fulfilling the Criminal Code’s requirement to consider “all relevant circumstances.” Additionally, the system’s current structure based on categorical variables and predefined traits does not fully capture more nuanced or continuous factors (such as the severity of harm or the type and quantity of contraband).⁵⁹ Critics also note that the absence of features like temporal filtering and more granular classifications (e.g., variations in post-offense behaviour or types of prior convictions) may reduce the system’s ability to reflect the real-world complexity of sentencing decisions.⁶⁰ Moreover, because the system draws primarily from single-offense judgments (one person, one crime), it may oversimplify the legal reality of multi-offense cases, especially in crimes like drug trafficking.⁶¹ These design limitations suggest that while the system aids transparency, it may not yet serve as a comprehensive tool for evidence-based or context-sensitive sentencing practices.

Overall, although certain concerns have been raised, the system has not triggered significant public opposition. This may be attributed to its informational nature and the fact that it is accessible to the public. Moreover, unlike more intuitive technologies such as “AI-written judgments,” the potential risks associated with this system appear relatively

⁵⁷ 陳立峰 and 陳冠勳 (n 46).

⁵⁸ 中研院法律所, ‘從資料科學觀點看司法院AI量刑資訊系統’ (臺灣人工智慧行動網 *Taiwan AI Wise Agent Network*, 18 June 2024) <<https://ai.iias.sinica.edu.tw/data-science-and-ai-sentencing-system-minutes/>> accessed 29 May 2025.

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ Ibid.

subtle and obscured from a public discourse perspective. However, this chapter seeks to highlight that the potential substantive impact and risks posed by this system may be no less significant than those of the Intelligent Judgment Draft Generation System. While the latter generates draft documents based on decisions that have already been made, the former provides reference information that may actually shape or influence judicial decisions themselves. In other words, this kind of information system is arguably more likely to guide substantive judgments and affect the practice of how judges conceive previous judgments. Yet, because it does not carry the same socially alarming imagery as phrases like “AI judge” or “AI-written judgments,” its associated risks may be underestimated.

2.4. Courtroom Speech Recognition and Summarisation System (法庭語音辨識系統)

The Courtroom Speech Recognition and Summarisation System integrates advanced AI technologies to enhance judicial efficiency through real-time speech-to-text transcription⁶². At its core is the Mandarin Speech Recognition for Court Transcripts, developed using deep neural network models trained on a large corpus of legal documents, including verdicts and transcripts. This system enables the automatic transcription of courtroom proceedings—capturing statements from judges, lay judges, prosecutors, lawyers, defendants, plaintiffs, and witnesses—with high accuracy, thereby reducing the manual workload and expediting hearings.

In addition, an offline version of the speech input software allows judges and clerical staff to dictate judgments or legal documents on their personal computers or tablets without internet access, improving productivity and reducing the risk of repetitive strain injuries. An extended voice command function further supports voice-driven legal research and document retrieval, enabling users to search case law, statutes, and digital files using simple spoken instructions.

Beyond the courtroom, the Mandarin Speech Recognition for Judicial Conference system applies the same technology to facilitate the drafting of meeting minutes within the judiciary and its affiliated bodies.

2.5. Intelligent Analysis System for Electronic Dossier (電子卷證智慧化分析系統)

The Intelligent Analysis System for Electronic Dossier is an AI-driven tool developed to support judges and clerks in managing court documents more efficiently. Instead of relying on manual organisation, the system processes scanned litigation materials using optical character recognition (OCR) and applies machine learning models trained on legal document formats. This

⁶² 郭又華 (n 11).

enables the system to automatically generate structured bookmarks for each dossier, a key function according to Chin-Lung Wang (王金龍), the former Director of the Judicial Yuan's Department of Information, which streamlines navigation and case preparation ⁶³.

In addition, the system identifies and masks sensitive personal data—such as birthdates, addresses, ID numbers, and financial accounts—helping to prevent privacy breaches. By automating both structural and privacy-related tasks, the system reduces administrative workload and enhances the overall efficiency of judicial operations.

2.6. Intelligent Service Chatbot (智慧客服機器人)

The Intelligent Customer Service Chatbot is a digital assistant designed to enhance public access to judicial information. Using natural language processing technologies, the chatbot allows users browsing the Judicial Yuan's official website to receive instant, conversational answers to common questions about the judicial system and litigation procedures.

In addition to general information, according to the official statements, the system also enables users to inquire about specific court schedules and case progress by phrasing their questions naturally.⁶⁴ The aim of the system is to provide accessible and timely guidance, to improve public engagement and to strengthen the quality of citizen-facing judicial services.

3. NORMATIVE FOUNDATIONS AND INSTITUTIONAL RESPONSES

This chapter has introduced five applications, among which the first two have attracted greater public attention due to their potential risks. However, even the remaining applications are not entirely free from concerns, particularly in terms of data protection and the potential for errors. In this context, the legal foundations for AI governance in Taiwan have not been adequately considered, as technological development has often outpaced regulatory responses. Nevertheless, recent controversies have prompted greater awareness and the emergence of initial regulatory efforts. The following section provides a brief overview of Taiwan's current AI regulatory landscape as contextual background, before turning to a more focused introduction on the principles and norms guiding AI applications in the judiciary. Although these efforts are still in their early stages, this chapter argues that they warrant continued attention as a crucial starting point.

⁶³ 翁芊儒, '司法院靠卷證電子化推科技法庭 更引進AI要讓法院數位大轉型' (iThome, 31 October 2019) <<https://www.ithome.com.tw/people/133854>> accessed 29 May 2025.

⁶⁴ 郭又華 (n 11).

3.1. Regulatory Context of AI in Taiwan

As a high-tech island with a globally competitive semiconductor and other tech industries, Taiwan places strong emphasis on the development of AI technology. However, in terms of regulation, the government has so far adopted a deliberately vague approach. Taiwan does not yet have a comprehensive or binding legal framework dedicated to artificial intelligence. Instead, AI governance is currently shaped by a mix of soft-law instruments and sector-specific guidelines. These include the 2023 Reference Guidelines for the Use of Generative AI by the Executive Yuan and Its Agencies (行政院及所屬機關(構)使用生成式AI參考指引) and the Guidelines for the Use of AI in the Financial Sector (金融業運用人工智慧(AI)指引) issued by the Financial Supervisory Commission. Both documents emphasise risk management, information security, and data protection, but remain nonbinding in nature.

In July 2024, Taiwan introduced a Draft AI Basic Law (人工智慧基本法), which lays out high-level principles such as promoting innovation, safeguarding human rights, and ensuring digital equality. However, it does not impose specific obligations or penalties and remains in the drafting stage, with no confirmed date for enactment.

Although these developments are intended to align with existing regulations such as the Personal Data Protection Act, Taiwan has yet to introduce a regulatory instrument tailored specifically to AI technologies. As a result, questions of enforcement and rights protection remain open.

3.2. President Hsu's Six Principles on AI in the Judiciary (2024)

Following the public controversy in the latter half of 2023 surrounding the judiciary's use of AI, President Tsong-li Hsu of the Judicial Yuan addressed the topic during the Judiciary Day (司法節) event in January 2024. In his opening remarks, he emphasised that no matter how advanced AI technology becomes, as long as adjudication remains an exercise of state authority, the spirit of constitutionalism must never be challenged or compromised. On this foundation, he outlined six guiding principles regarding the use and challenges of generative AI in judicial practice:

- **Human accountability:** Regardless of how AI evolves, it must always serve human well-being and remain under human control. Therefore, when AI is applied in judicial processes, accountability remains with humans, not machines. However, this is in fact a highly complex issue. It requires careful consideration of who should bear responsibility, under what circumstances, and for what reasons. These questions must be addressed in advance.

- **Legal reservation (Gesetzesvorbehalt) and fundamental rights:** The more extensively AI is integrated into adjudication, the greater its potential impact on citizens' rights to litigation and other fundamental rights. Such influence may trigger the requirement of legal reservation, and internal judicial guidelines alone may not suffice to justify its use.
- **Transparency and legitimacy:** When AI significantly influences judicial outcomes, its algorithmic opacity—the “black box”—must be subject to scrutiny so parties can assess the correctness and legality of the judgment. In particular, when generative AI is used, it is crucial to examine whether the data used for training aligns with Taiwan's constitutional values of liberty, democracy, and the rule of law.
- **Human judge reservation:** Because judicial decisions directly affect individual rights, as generative AI becomes more advanced, it may be necessary to define specific domains as reserved for human judges—areas that require purely human cognitive judgment and should not be delegated to AI.
- **Right to human judgment:** Correspondingly, there is a growing question of whether individuals should possess a fundamental right not to be judged by AI, or conversely, a fundamental right to be judged by a human.
- **Cybersecurity and confidentiality:** The more AI is applied in the exercise of state authority—including judicial power—the greater the responsibility to safeguard cybersecurity, personal privacy, and the confidentiality of official information.

President Hsu further explained that the Judicial Yuan would not adopt AI applications merely to reduce judges' workloads, but also to improve the quality of judgment.⁶⁵ In addition to learning from international experiences in judicial digitalisation, the Judicial Yuan would continue consulting scholars, experts, and practitioners. The aim is to promote “smart justice” by gradually enhancing and expanding existing AI applications with caution and foresight. In sum, President Hsu, a constitutional law scholar by training, offers observations grounded in the principles of constitutionalism that merit close attention from both practitioners and academics.

3.3. AI Development Guidelines for the Judicial Yuan and Its Agencies (2025)

In March 2025, the Judicial Yuan issued the AI Development Guidelines for the Judicial Yuan and Its Agencies to steer the safe and responsible integration of AI into judicial and its administrative operations. These non-binding internal guidelines aim to enhance efficiency while upholding constitutional principles and protecting fundamental rights. Key principles include:

⁶⁵ However, the potential contribution of models trained on existing data to “improving quality” requires more nuanced and detailed discussion.

- **Human-centered AI:** AI may support tasks such as data processing and error-checking but must never replace a judge's role in fact-finding, legal reasoning, or sentencing.
- **Voluntary use and transparency:** Users must be free to opt in or out of AI assistance, and the inner workings of AI systems, including training data and decision logic, should be appropriately disclosed to ensure explainability.⁶⁶
- **Risk management and bias prevention:** Systems must avoid discrimination based on race, gender, religion, class, or political affiliation, and be periodically reviewed and updated.
- **Security and rights protection:** Personal data processing must comply with privacy laws, and cybersecurity measures must be in place to prevent unauthorized access or misuse.

These guidelines also require all AI-related developments within the judiciary to be reported to the Judicial Yuan's e-Judiciary Promotion Committee and published for accountability. In essence, the document represents Taiwan's attempt to develop trustworthy judicial AI under the rule-of-law framework. However, given the novelty of these initiatives, their concrete effectiveness and future development still require ongoing observation and evaluation.

4. CONCLUSION: LESSONS FROM TAIWAN'S JUDICIAL AI JOURNEY

Taiwan's experience in integrating AI into the judicial system offers meaningful insights for democracies seeking to responsibly navigate the opportunities and risks posed by emerging technologies. Based on current developments and public reactions, this chapter draws four key lessons that may be relevant for other jurisdictions. It also highlights the importance of critically examining how technological categories and claims are constructed and received, even when they are framed in official narratives. No AI application is entirely without risk, and responsible governance requires sustained reflection, not only on what technologies do, but also on how they are framed and used.

First, building and maintaining public trust is essential in the development and deployment of judicial AI. Taiwan's public debate over the proposed rollout of AI-generated draft judgments in 2023 revealed widespread uncertainty about what AI is, how it functions, and what constitutes appropriate use in the judicial context. These debates illustrate the importance of fostering a shared understanding of AI's role in the judiciary. Public trust cannot be achieved through legal safeguards or technical explanations alone. It must be grounded in inclusive, transparent, and sustained dialogue that takes seriously both institutional concerns and citizens' perceptions. In

⁶⁶ Nevertheless, the notion of "voluntariness" must also be considered in light of real-world workload conditions and their effects.

this respect, Taiwan's experience shows how public engagement is not merely an external requirement, but a central component of meaningful and legitimate innovation.

Second, a clear and thoughtful legal foundation remains indispensable. Even when AI tools are described as non-binding or purely assistive, they can still shape legal outcomes and institutional practices in ways that are difficult to foresee. Taiwan's example reminds us that definitions such as "assistive" or "smart" should not be taken at face value. Instead, these classifications must be examined in light of how systems actually operate and influence judicial decision-making. Legal scholars in Taiwan, including former Judicial Yuan President Tzong-li Hsu, have rightly emphasised the need for legal authorisation in contexts where constitutional rights may be affected. Taiwan's situation also echoes international trends. For instance, under the European Union's AI Act, judicial AI is considered a high-risk category. While Taiwan does not need to adopt identical rules, this global perspective reinforces the importance of developing a legal framework that safeguards transparency, fairness, and accountability. Law should be seen not as an obstacle to innovation, but as a guide that ensures technological progress aligns with democratic principles.

Third, Taiwan's experience suggests that even lower-profile AI applications may carry evolving risks that deserve attention. Tools such as sentencing information systems or courtroom transcription platforms may appear purely administrative or technical, but they have the potential to influence how judges approach legal reasoning and precedent. When used repeatedly in high-volume work environments, these tools can gradually shape habits of thought and expectations about what counts as relevant, sufficient, or persuasive. In practice, reliance on AI may increase not because of explicit policy mandates, but because of implicit institutional pressures such as limited time and increasing caseloads. While these tools can be valuable in enhancing consistency and efficiency, their broader impact on judicial discretion and cognitive engagement should not be overlooked. The notion of "voluntary use" also deserves closer scrutiny. In high-pressure environments, the choice to rely on AI may be more constrained than it first appears. Recognising this complexity is crucial for ensuring that human judgment is not diminished by overdependence on automated systems.

Finally, Taiwan's public and institutional responses to judicial AI raise important normative questions about the human-machine relationship in legal decision-making. What tasks should be entrusted to AI, and which should remain the exclusive domain of human judges? What kinds of decisions demand human empathy, context sensitivity, and moral reasoning? These are not merely theoretical concerns. They lie at the heart of current debates over how to design and govern AI in a way that respects the unique responsibilities of the judiciary. Taiwan's judiciary has repeatedly affirmed that AI will not replace human judgment, and that core functions such as fact-finding and sentencing will remain human-led. This position reflects a commendable

commitment to constitutional values. However, to uphold this commitment in practice, it is necessary to develop institutional safeguards, clarify responsibilities, and remain alert to how seemingly neutral technologies may reshape the judicial process over time.

In conclusion, Taiwan's experience demonstrates that constitutional principles, democratic participation, and legal clarity must guide the integration of AI into the judiciary. It also shows that even officially defined categories such as "digitalisation" or "assistive AI" should be subject to ongoing evaluation. There is no entirely risk-free application of AI. What matters is how institutions recognise and respond to those risks. Responsible innovation in the judiciary requires a careful balance between openness to technological experimentation and a firm grounding in values such as transparency, fairness, and human dignity. Taiwan's efforts provide a valuable reference point, not only as a model to follow, but as an invitation to think critically about how to align new technologies with the enduring ideals of justice.

