



## POLICY BRIEF

# The Use of Artificial Intelligence in Courts for Timely Judgements

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## Executive Summary

The Supreme Court of Pakistan's March 2025 decision in *Ishfaq Ahmed vs. Mushtaq Ahmed* marks a defining moment in the digital evolution of Pakistan's judiciary.<sup>1</sup> Acknowledging the need for systemic reform in the face of overwhelming case backlogs, especially in the lower courts, the Court endorsed Artificial Intelligence (AI) as a tool to enhance judicial efficiency. However, it drew a sharp ethical and constitutional boundary: AI must support, not supplant, human judges.

This policy brief outlines the current and potential uses of AI in the judiciary, identifies risks and ethical concerns, and proposes recommendations for responsible implementation in Pakistan. Drawing from the Supreme Court's judgment and global best practices, it presents a roadmap for the judiciary to adopt AI in ways that promote fairness, efficiency, and public trust.

## Policy Recommendations

- The Ministry of Law and Justice, in collaboration with the National Judicial (Policy Making) Committee and provincial IT boards, should prioritize the rollout of secure internet access, digitized records, and unified case management systems across all courts. Without these foundations, AI tools like Judge-GPT cannot be equitably deployed. This infrastructure should be built using open-source frameworks and hosted on locally controlled servers to safeguard judicial data sovereignty.
- The Supreme Court should formalize an independent Judicial AI Oversight Board under the Law and Justice Commission to review, approve, and monitor all AI applications in the judiciary. This board must include judges, technologists, ethicists, and civil society representatives to ensure transparency, human review, and constitutional compliance. Annual audits and a public registry of AI tools should be mandated to uphold public trust and accountability.
- Parliament should amend the draft Personal Data Protection Bill to include explicit safeguards for judicial data, especially regarding anonymization, encryption, local storage, and restricted access. Any third-party AI vendors must comply with strict procurement rules and host data within Pakistan's jurisdiction. The Law and Justice Commission should conduct yearly data audits to detect vulnerabilities and prevent political or commercial misuse of sensitive case information.

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<sup>1</sup> *Ishfaq Ahmed vs Mushtaq Ahmed* (CPLA No. 1010-L/2022).

- The Federal Judicial Academy and provincial judicial academies should immediately begin offering specialized courses on AI in legal practice, tailored to the needs of judges, clerks, and court administrators.

## CURRENT USE AND READINESS OF AI IN PAKISTAN'S JUDICIAL SYSTEM

Pakistan's judiciary has taken significant first steps toward the integration of AI. Most notably, the Federal Judicial Academy has introduced Judge-GPT, a Large Language Model (LLM) co-developed with ETH Zurich, which is currently being used by over 1,500 district judges.<sup>2</sup> The tool is designed to accelerate legal research and enhance the drafting quality of judicial orders. Judge-GPT is trained on Pakistan's laws, procedural codes, and jurisprudence, enabling judges to focus more on substantive legal reasoning while reducing clerical workloads.

Despite these strides, Pakistan's judicial infrastructure remains unevenly digitized. Many district and lower courts continue to operate without reliable internet access, digitized case records, or standardized data formats.<sup>3</sup> Moreover, the absence of a centralized digital platform across provincial and federal courts limits the scalability of AI-based tools. While the higher judiciary has made commendable progress, there is an urgent need for investment in infrastructure, data harmonization, and capacity-building to ensure nationwide readiness for AI integration.

## POTENTIAL APPLICATIONS OF AI IN THE JUDICIARY

The Supreme Court has outlined several practical uses for AI in judicial functions.<sup>4</sup> Among the most promising is smart legal research, where AI can analyze vast repositories of legal texts and case law to surface relevant precedents, statutes, and commentary. This function can drastically reduce the time judges spend on repetitive search tasks, particularly in complex litigation. Additionally, AI-powered drafting tools can enhance the clarity and structure of judicial writing, contributing to greater transparency and professionalism in judgments.

Another important area is comparative jurisprudence, where AI can facilitate access to foreign case law, supporting the development of a more globally aware judiciary. The Court also highlighted AI's potential in decision-making support, especially for organizing large volumes of evidence and identifying central legal questions in voluminous case files.<sup>5</sup> Perhaps

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<sup>2</sup> Rabia Mustafa, SLD, 'Use of Artificial Intelligence in Law: An Innovative Road Ahead' (SLD, 14 April 2025) <<https://sld.com.pk/2025/04/14/use-of-artificial-intelligence-ai-an-innovative-road-ahead/>> accessed 9 July 2025.

<sup>3</sup> Sahar Iqbal, 'AI in Pakistani courts of law' (International Bar Association, 1 June 2023) <<https://www.ibanet.org/AI-in-Pakistani-courts-of-law>> accessed 9 July 2025.

<sup>4</sup> *Ishfaq Ahmed vs Mushtaq Ahmed* (CPLA No. 1010-L/2022).

<sup>5</sup> *Ishfaq Ahmed vs Mushtaq Ahmed* (CPLA No. 1010-L/2022).

most significantly, AI can bring transparency and objectivity to case allocation which is a longstanding concern in Pakistan, by mimicking systems used in countries like China, Brazil, and Kazakhstan, where cases are distributed randomly or based on algorithms to prevent judge shopping and balance workloads.

The integration of AI in courts should begin with small claims cases such as divorce, child custody, property disputes, and landlord-tenant issues, where the legal questions are often straightforward and the stakes, though important, are comparatively lower than in criminal or constitutional matters. These cases typically involve high volumes and procedural delays, making them ideal for piloting AI tools that can streamline administrative tasks. Starting here allows courts to test AI's reliability and ethical use in a controlled environment while reducing backlogs and improving access to justice for ordinary litigants.

## **ETHICAL AND LEGAL RISKS OF AI IN JUDICIAL DECISION-MAKING**

While the promise of AI is compelling, the Supreme Court cautioned against a blind embrace of the technology. One of the primary concerns is the opacity of AI decision-making, often referred to as the “black box” problem. When judges or court staff cannot understand or explain how an AI tool arrived at a recommendation, it undermines accountability and opens the door to judicial errors or miscarriages of justice. In high-stakes legal decisions, this lack of transparency is incompatible with constitutional guarantees of due process.

Another major concern is the phenomenon of hallucination, where LLMs fabricate case citations or legal doctrines.<sup>6</sup> This is especially dangerous in judicial settings, where even a single erroneous citation can distort precedent or affect the outcome of a case. Additionally, the Court flagged the risk of automation bias; a psychological tendency to over-rely on algorithmic outputs. Without proper oversight, judges may inadvertently defer to AI-generated suggestions, weakening the independence and rigor of human judicial reasoning. The Court made clear that these risks must be proactively managed, not reacted to in hindsight.

In addition to transparency and automation concerns, there are broader constitutional implications if AI tools are not tightly regulated. Judicial decisions in Pakistan carry weight not only because of legal correctness but because they reflect social values, moral reasoning,

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<sup>6</sup> Jack Newsham, ‘AI hallucinations in court documents are a growing problem, and data shows lawyers are responsible for many of the errors’ (Business Insider, 27 May 2025)  
<<https://www.businessinsider.com/increasing-ai-hallucinations-fake-citations-court-records-data-2025-5>>  
accessed 9 July 2025.

and empathetic engagement with lived realities. Delegating even part of that responsibility to opaque, probabilistic systems could violate Article 10A of the Constitution, which guarantees the right to a fair trial and due process.<sup>7</sup> Moreover, AI tools developed using datasets from foreign legal systems may embed alien norms or doctrinal biases that clash with Pakistan’s unique constitutional and socio-cultural framework. The Court’s warning is clear: no matter how “smart” a machine may appear, it cannot be entrusted with adjudicative reasoning, which is a fundamentally human and constitutional function.

## **DATA PROTECTION AND PRIVACY IN JUDICIAL AI USE**

The integration of AI in the judiciary raises urgent questions about data privacy and sovereignty. At present, Pakistan lacks a robust legal framework tailored to the protection of judicial data. The draft Personal Data Protection Bill, though a step forward, does not yet provide specific safeguards for sensitive court records.<sup>8</sup> If AI tools rely on cloud-based processing or third-party vendors, there is a real risk that confidential case information could be exposed or misused, undermining public trust in the courts.

To mitigate these risks, it is essential to establish clear data governance protocols for any AI deployment in the judiciary. Court data must be anonymized, encrypted, and stored on secure, locally managed servers with strict access controls. Judges must also be trained in how to review AI-generated outputs for potential privacy violations or misuse. The judiciary should consider drafting a code of data ethics that governs how judicial data can be used, shared, and processed by AI tools, ensuring compliance with both national and international human rights standards.

Beyond the technical vulnerabilities, the political misuse of judicial data is also a concern in Pakistan’s volatile legal environment. Sensitive case metadata, such as the identities of petitioners, could be used for surveillance, profiling, or political targeting if AI tools are exploited by bad actors. This risk is amplified when AI development is outsourced to external vendors or developed without clear procurement protocols and firewalls. To safeguard judicial independence, there must be strict legal provisions requiring all AI tools used in courts to be open-source, locally hosted, and independently audited. Additionally, the Law and Justice

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<sup>7</sup> Constitution of the Islamic Republic of Pakistan 1973, art 10A.

<sup>8</sup> ‘Data Protection Laws and Regulations: Pakistan’ (ICLG, 2024–2025) <<https://iclg.com/practice-areas/data-protection-laws-and-regulations/pakistan>> accessed 9 July 2025.

Commission should be empowered to conduct annual data audits of AI systems to ensure compliance with both privacy norms and constitutional safeguards.

## **CAPACITY-BUILDING FOR JUDGES AND COURT STAFF**

Technological change cannot succeed without a parallel investment in human capacity. The Supreme Court emphasized that judges must be equipped with the knowledge and skills to engage with AI tools critically.<sup>9</sup> This means going beyond basic computer literacy to include training in AI literacy, data interpretation, and ethical oversight. The Federal Judicial Academy and provincial judicial academies should immediately begin offering specialized courses on AI in legal practice, tailored to the needs of judges, clerks, and court administrators.

Furthermore, the use of AI should be embedded into the judicial training curriculum for incoming judges. Partnerships with academic institutions such as LUMS, Namal University, and ITU Lahore, as well as with international bodies like the UNDP and World Bank could be instrumental in this regard. These collaborations can support not only training but also the development of localized AI tools that reflect Pakistan's legal culture, languages, and procedural norms. Without these human investments, even the most advanced technologies will fail to deliver meaningful reform.

Efforts toward capacity-building must also be inclusive and interdisciplinary. AI in the judiciary will affect not only judges but also litigants, lawyers, clerks, IT staff, and translators. Specialized training programs should be developed for different user groups, particularly in local languages, to ensure that no segment of the judiciary is left behind. For example, AI tools that rely on complex legal English may exclude large portions of the legal community including those working in district courts, family courts, and rural tribunals. The rollout of AI must therefore be accompanied by bilingual training materials, public awareness campaigns, and feedback mechanisms so that court users can report technical or ethical issues. Bridging the digital divide must be a core objective if the benefits of AI are to be distributed equitably.

## **POLICY AND REGULATORY FRAMEWORK FOR RESPONSIBLE AI USE**

The Supreme Court's ruling sets out a clear mandate for regulatory action. It recommends that the National Judicial (Policy Making) Committee (NJPMC), in collaboration with the Law and Justice Commission of Pakistan (LJCP), establish national guidelines on the

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<sup>9</sup> *Ishfaq Ahmed vs Mushtaq Ahmed* (CPLA No. 1010-L/2022).

permissible scope of AI in judicial practice.<sup>10</sup> These should define where AI can assist (e.g. research, scheduling, drafting) and where it must not interfere (e.g. verdicts, sentencing). The policy should also include mechanisms for periodic review, public consultation, and independent audit of all judicial AI systems.

Importantly, the guidelines should promote transparency, contestability, and accountability. Every AI-assisted action must be traceable and subject to human review. Courts should maintain a registry of AI tools in use, including their functions, sources of training data, and evaluation results. A judicial AI oversight board could be established under the Supreme Court's supervision to review new proposals, ensure compliance with ethical standards, and respond to public concerns. By taking a proactive approach to regulation, Pakistan can ensure that the introduction of AI enhances—rather than erodes—the public's faith in judicial independence and integrity.

A further dimension of regulation should involve cross-sectoral consultation, particularly with the Pakistan Bar Council, provincial bar associations, civil society organizations, and academia. AI in the judiciary is not only a technical matter—it affects access to justice, public perceptions of fairness, and the everyday practice of law. A participatory approach to regulation will ensure that AI systems reflect the lived experiences of court users and uphold procedural justice. In addition, Pakistan should consider aligning its judicial AI policies with international human rights standards, such as those promoted by the UN Special Rapporteur on the Independence of Judges and Lawyers and the Council of Europe's Guidelines on AI and the Judiciary. This would enhance Pakistan's global credibility while also creating internal checks against overreach and misuse.

## RECOMMENDATIONS

- The Ministry of Law and Justice, in collaboration with the National Judicial (Policy Making) Committee and provincial IT boards, should prioritize the rollout of secure internet access, digitized records, and unified case management systems across all courts. Without these foundations, AI tools like Judge-GPT cannot be equitably deployed. This infrastructure should be built using open-source frameworks and hosted on locally controlled servers to safeguard judicial data sovereignty.

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<sup>10</sup> Ibid.



- The Supreme Court should formalize an independent Judicial AI Oversight Board under the Law and Justice Commission to review, approve, and monitor all AI applications in the judiciary. This board must include judges, technologists, ethicists, and civil society representatives to ensure transparency, human review, and constitutional compliance. Annual audits and a public registry of AI tools should be mandated to uphold public trust and accountability.
- Parliament should amend the draft Personal Data Protection Bill to include explicit safeguards for judicial data, especially regarding anonymization, encryption, local storage, and restricted access. Any third-party AI vendors must comply with strict procurement rules and host data within Pakistan’s jurisdiction. The Law and Justice Commission should conduct yearly data audits to detect vulnerabilities and prevent political or commercial misuse of sensitive case information.
- The Federal Judicial Academy and provincial judicial academies should immediately begin offering specialized courses on AI in legal practice, tailored to the needs of judges, clerks, and court administrators.

Action Matrix				
Options for Pakistan				
Option	Pathways to Solution	Implementation of Solution	Actors Responsible	Implementation Timelines
<b>Centralize and Digitize Judicial Infrastructure</b>	Develop a national AI-ready digital architecture across all courts	Deploy secure internet in all district courts; digitize case records; create a unified case management system; ensure local server storage	Ministry of Law & Justice, NJPMC, Provincial IT Boards, NADRA	0–6 months (infrastructure assessment, budgeting, platform design)  12–36 months (nationwide deployment, monitoring, updates)
<b>Establish a Judicial AI Oversight and Ethics Board</b>	Create a standing body for approval, monitoring, and audit of AI tools in the judiciary	Form a multi-stakeholder board under the LJCP to vet AI tools, maintain a registry, conduct audits, and ensure transparency	Supreme Court, LJCP, Pakistan Bar Council, civil society	3–6 months (board appointment, rule-setting)  6–12 months (start reviews, maintain AI registry, begin audits)

<b>Launch Nationwide AI Capacity-Building Programs</b>	Embed AI and data ethics into judicial training and professional development	Partner with academic institutions to create AI literacy courses; roll out bilingual materials and workshops for judges, clerks, lawyers	Federal Judicial Academy, Provincial Judicial Academies, LUMS, ITU, World Bank/UNDP	4–10 months (initial batch in major cities) 10–24 months (nationwide training, refresher programs, inclusion in judicial entrance exams)
<b>Amend the draft Personal Data Protection Bill</b>	Propose an amendment to the draft Personal Data Protection Bill to include more comprehensive safeguards	Draft an amendment to the Bill to include explicit safeguards for judicial data, especially regarding anonymization, encryption, local storage, and restricted access.	Parliament, Law and Justice Commission	1-2 months (drafting amendment) 90 days (for approval of amendment)