ACADEMIA International Journal for Social Sciences
Volume 4, Issue 3, 2025 ISSN-L (Online): 3006-6638

AI Judges and Robotic Justice: Are Pakistani Courts Ready for the Future?

Shakaib Aleem Arshad
aleemalrai700@gmail.com
Lecturer Law, Minhaj University Lahore

Muhammad Ahsan Iqbal Hashmi
ahsanhashmi@bzu.edu.pk
Assistant Professor of Law, Bahauddin Zakariya University, Mulan (Vehari Campus)

Nazia Bano
naziabano570@gmail.com
Visiting Lecturer Department of Law, University of Sahiwal

Dr. Hafiz Abdul Rehman Saleem
h.a.rehman@hotmail.com
Assistant Professor Law, Department of Law, University of Sahiwal
Corresponding Author: * Muhammad Ahsan Iqbal Hashmi ahsanhashmi@bzu.edu.pk

Received: 17-05-2025 **Revised:** 28-06-2025 **Accepted:** 10-07-2025 **Published:** 17-07-2025

ABSTRACT

The introduction of Artificial Intelligence (AI) into the judicial system has caused a spark that captured the attention of the worldwide community. China has smart courts with the help of Artificial Intelligence (AI) and Estonia is working to use algorithmic judges to adjudicate in small claims cases. The above developments pose important questions regarding what constitutes justice, the morality of adjudicators of different species and the ethics of automation. With the use of AI-based applications to resolve the issue of delays, corruption, and backlog in courts, countries adopt a more resolute discourse on whether AI can/should be used to replace human judges to distribute justice.

The current paper addresses the question of whether or not the Pakistani judicial system is ready on a legal, technological, and ethical level to see the arrival of AI judges and robo justice. Having over two million cases in the Pakistani courts, the proponents state that AI has the potential to enhance efficiency, uniformity, and accessibility. However, there is no developed legal framework of AI regulation, data protection, or judicial automation in Pakistan at present. What is more, such basic constitutional rights as due process and judicial independence bring serious obstacles to the mass use of AI in courtrooms.

Reinforced with the comparative findings of China, Estonia, and the United Kingdom, the work critically looks into the normative validity, theoretical base and practical viability of artificial intelligence in the judicial system. It is also an assessment of the philosophical dilemma of whether machines can possess values like empathy, fairness, and moral reasoning that form the main part of an argument of justice. In the end, the paper provides findings that even though AI has the potential to become the potent assistant in enhancing the work of the court in Pakistan, the fully-autonomous AI judges, however, do not seem fitting with the legal, ethical, and institutional realities in this country. A well poetry tuned change, testing programs, and legislation protection need to be implemented before any shift towards robotic form of justice is implemented.

Keywords: *Artificial Intelligence (AI), Robotic justice, Courts*

INTRODUCTION

The legal profession is evolving quite fast due to the implementation of Artificial Intelligence (AI) and major advancements are being made on a global level in judicial automation, predictive legal analytics, and even adjudication by machine. Among the most controversial trends is the appearance of AI judges algorithms that can make legal decisions, handle caseload, or facilitate the court proceedings. Although this innovative solution is useful in terms of efficiency and regularity, it generates critical concerns regarding equity, the sense of accountability, and even the sense of justice.

On the international level, the idea of AI-based small claims courts has already been tested in such countries as Estonia where the legal disputes of a preset value are judged without the presence of human judges.[1] The Smart Court System of China includes AI technology capable of helping to evaluate evidence and even make decisions in specific cases, with some courts already being AI-ready (they feature AI avatars and complete automation).[2] Such inventions show the possibility of AI judges on a technological level, but also raise the high-intensity debate related to legal, ethical and constitutional acceptability.

On the contrary, the justice system in Pakistan still lacks resolution with backlogs, inefficiencies in proceedings, and slow delivery of justice, which AI may be able to rectify. There are more than 2 million outstanding cases in courts nationally, and the supporters of judicial automation say that the technology may make things more transparent and hasten the decision.[3] Yet there is a wide gap in the existence of a detailed AI legal framework, and the digital infrastructure that is required to implement algorithm adjudication in Pakistan. No discussion is also made on the possibility such systems might fulfill the constitutional right of fair trial as guaranteed by Article 10-A.

This paper attempts to examine the question of whether Pakistan courts are prepared in terms of law, technology or ethically to introduce AI judges. It analyzes overseas precedents, Pakistan contains a constitutional and legal system, dilemmas, and problems that may be met and the philosophical aspects of outsourcing justice to a machine. Finally, the focus should be not on whether one should or should not have AI judges but on whether Pakistan is ready and what is ahead.

UNDERSTANDING AI IN THE JUDICIAL CONTEXT

The term Artificial Intelligence (AI) within a judicial setting can be taken to refer to the application of computer programmes, and specifically those with the capacity to experience machine learning and natural language processing, in order to duplicate or to support, human-based legal reasoning. Fundamentally, an AI judge is not a humanoid robot, it is an algorithm that performs legal knowledge, analyze information and in specific cases provides a decision or recommendation carried out according to a predetermined legal rationale or mathematical statistics system. They may be as rudimentary as AI-aided decision aids, or as sophisticated as completely autonomous adjudicators, and it is important to know this continuum first before the evaluation of the role of these systems in judicial process.

---

[1] "Chapter 18: Artificial Intelligence and the Judiciary System in: Research Handbook in Data Science and Law," accessed January 8, 2025, https://www.elgaronline.com/edcollchap/book/9781035316458/book-part-9781035316458-25.xml.

[2] "Smart Courts: The Expansion of Technology in the Chinese Judicial System - Advance," accessed January 8, 2025, https://advance.sagepub.com/doi/full/10.31124/advance.12402980.v.

[3] "(PDF) An Evaluation of Pending Cases in the Judiciary of Pakistan: Figures and Statistics," accessed January 8, 2025, https://www.researchgate.net/publication/373981030_An_Evaluation_of_Pending_Cases_in_the_Judiciary_of_Pakistan_Figures_and_Statistics.

According to the applications of AI in the judicial context the following three groups out there:

1. Tools used by human judges with the assistance of AI: tools that assist human judges to either manage their workflow (e.g. Caseload management systems), Paralegal types of tools that are used by the judge to help in the analysis of precedent, or to formulate a draft opinion (e.g. LexisNexis tools);
2. Bidirectional semi-autonomous systems that offer risk estimation or even sentencing recommendation, such as COMPAS in the United States;
3. Robotic judges is one use-case are autonomous adjudicators like ex-experimental small claims AI judge in Estonia, which decide cases without human oversight in limited conditions.[4]

The possible advantages of AI in judicial decision-making are quite significant. The systems are able to analyze so much data, inconsistencies in it, and find applicable case law much faster and without any emotion in comparison to human judges. They hold prospects to make systems more efficient, consistent as well as transparent, particularly when such systems such as that of Pakistan are overburdened.[5] With traditional adjudication, AIs can also limit human bias, which influences the law adversely, including favoritism, or fatigue-related mistake.

However, the risks are equally significant. AI systems can inherit biases from training data, especially if that data reflects historical injustices or discriminatory practices. For instance, algorithms trained on datasets where certain communities were disproportionately punished may reinforce those biases.[6] Moreover, the "black box" problem, the opacity of how AI reaches its conclusions, makes accountability difficult. If an AI judge makes an error, it is unclear who is responsible: the programmer, the government, or the judiciary itself?

Furthermore, critics argue that AI lacks the qualitative judgment, empathy, and discretion that human judges exercise, especially in cases involving family disputes, human dignity, or moral interpretation. Law is not merely about applying rules to facts; it involves interpreting evolving societal values, which may not be reducible to code.[7]

In short, while AI offers remarkable tools to assist judicial systems, its transition from support to autonomous adjudication raises deeply legal and philosophical questions. For a country like Pakistan, where legal formalism is dominant and public trust in justice is fragile, the question is not merely about capability but about legitimacy and acceptability.

COMPARATIVE EXPERIENCES

[4] "Chapter 18: Artificial Intelligence and the Judiciary System in: Research Handbook in Data Science and Law," accessed January 8, 2025, https://www.elgaronline.com/edcollchap/book/9781035316458/book-part-9781035316458-25.xml.
[5] "Algorithmic Enforcement Tools: Governing Opacity with Due Process | SpringerLink," accessed January 8, 2025, https://link.springer.com/chapter/10.1007/978-3-031-56556-4_9.
[6] Giancarlo Frosio, "Algorithmic Enforcement Tools: Governing Opacity with Due Process," in *Driving Forensic Innovation in the 21st Century: Crossing the Valley of Death*, ed. Simona Francese and Roberto S. P. King (Cham: Springer International Publishing, 2024), 195–218, https://doi.org/10.1007/978-3-031-56556-4_9.
[7] "When Should a Computer Decide? Judicial Decision-Making in the Age of Automation, Algorithms and Generative Artificial Intelligence by John Morison, Tomás Mclnerney :: SSRN," accessed January 8, 2025, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4723280.

While the idea of AI judges may seem futuristic in many jurisdictions, several countries have already begun experimenting with judicial automation, offering valuable case studies for Pakistan. These international experiences reveal both the promises and perils of integrating AI into courtrooms.

China: The Rise of Smart Courts

China is currently the global leader in AI-driven justice. Its Smart Court System, implemented in provinces like Zhejiang and Beijing, uses AI to automate evidence review, generate judgments, and conduct entire proceedings online through virtual courtrooms. Some courts even employ AI-powered avatars that deliver verdicts and interact with litigants.[8] The Chinese Supreme People's Court reported that over 3 million cases were handled through digital platforms with AI assistance in 2022 alone.[9]

While China's model boasts speed and scalability, it also raises questions about transparency, accountability, and state control over the judiciary. These AI systems are largely opaque, with limited access to the algorithms used. Moreover, critics argue that the centralized political control in China allows for AI to be used not only for efficiency but for ideological conformity and surveillance.[10]

Estonia: Automated Small Claims Courts

Estonia has taken a different path by using AI in small claims courts, especially for disputes under 7,000 euros. The AI system processes filings, evaluates evidence, and renders decisions in straightforward contractual disputes without human intervention. Importantly, decisions by AI can be appealed before a human judge, ensuring a human-in-the-loop model.[11]

Estonia's approach is notable for being transparent, limited in scope, and legally accountable, ensuring that automation does not undermine due process. This model could serve as a viable pilot project in jurisdictions like Pakistan, particularly in areas like traffic fines or minor contract disputes.

United States and the UK: Risk Assessment and AI Tools

In the United States, the use of AI is more fragmented. Tools like COMPAS (Correctional Offender Management Profiling for Alternative Sanctions) are used to predict recidivism and assist in sentencing decisions. However, these systems have been heavily criticized for racial bias and lack of transparency, as they often produce results that disproportionately disadvantage minority defendants.[12]

The United Kingdom, on the other hand, has adopted AI-assisted tools to support judicial functions rather than replace judges. The UK's emphasis has been on using AI for case management, research, and

---

[8] Jingjing Hao and Meng Chen, "Smart Courts: The Expansion of Technology in the Chinese Judicial System," accessed January 8, 2025, https://www.authorea.com/doi/full/10.31124/advance.12402980.v?commit=860dcd8bd79c7baf6544126d2c4d1cb0874d7410.

[9] "The Supreme People's Court Of The People's Republic Of China," accessed January 8, 2025, https://english.court.gov.cn/.

[10] Mette Thunø and Yiwen Wang, "China's Smart Diaspora Governance: Extraterritorial Social Control Through Digital Platforms," *Journal of Current Chinese Affairs* 54, no. 1 (April 1, 2025): 48–72, https://doi.org/10.1177/18681026241232998.

[11] "Chapter 18: Artificial Intelligence and the Judiciary System in: Research Handbook in Data Science and Law," accessed January 8, 2025, https://www.elgaronline.com/edcollchap/book/9781035316458/book-part-9781035316458-25.xml.

[12] "Machine Bias — ProPublica," accessed January 8, 2025, https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing.

evidence analysis while maintaining strict judicial oversight. This cautious approach highlights the importance of balancing efficiency with legal safeguards.

Lessons for Pakistan

The comparative experience suggests that while AI judges are technically feasible, their implementation must be gradual, transparent, and carefully regulated. Countries that have succeeded in adopting AI in courts, like Estonia, have done so within a strong legal framework, robust data systems, and clear lines of accountability. In contrast, unregulated or opaque systems like those in the US and China show the dangers of bias and loss of trust.

For Pakistan, any attempt to introduce AI into the judicial system must first focus on basic digitization, legal reforms, and public confidence-building. Blind replication without structural preparedness could undermine the integrity of justice rather than enhance it.

LEGAL AND CONSTITUTIONAL FRAMEWORK IN PAKISTAN

For the idea of AI judges to take root in Pakistan, a rigorous analysis of the existing legal and constitutional framework is indispensable. The current laws governing the judiciary, the constitutional mandate for fair trial, and the absence of a digital or AI regulatory regime form significant barriers to the direct application of automated adjudication.

Structure and Mandate of the Judiciary

Pakistan's judicial system is established under Articles 175 to 190 of the Constitution, which define the hierarchy, independence, and functioning of the judiciary. These provisions implicitly require that judicial functions be carried out by natural persons, i.e., human judges appointed under constitutional procedures. Article 175(3) mandates the separation of the judiciary from the executive, reinforcing the idea of human discretion and independence as foundational principles of justice.[13]

Moreover, judicial appointments are governed by Article 193 (for High Courts) and Article 177 (for the Supreme Court), which involve a complex process of human evaluation, nomination, and approval, implying that judicial roles are inherently non-delegable to machines.[14]

Right to Fair Trial and Due Process

Perhaps the most formidable constitutional barrier to AI-based adjudication is Article 10-A, which guarantees every citizen the right to a fair trial and due process. This includes the right to be heard, the right to a reasoned judgment, and the opportunity to question the competence and impartiality of the adjudicator. It remains doubtful whether a litigant would receive a "fair trial" from a non-human entity that cannot explain its reasoning in accessible terms or adjust to contextual factors such as emotional nuance or social complexity.[15]

The absence of judicial discretion, empathy, and accountability in AI systems may therefore violate this fundamental right, especially in criminal or family law matters where human judgment plays a critical role.

---

[13] "The Constitution of Pakistan," accessed January 8, 2025, https://www.pakistani.org/pakistan/constitution/#gsc.tab=0.
[14] "The Constitution of Pakistan."
[15] Muhammad Usman Mairaj, Muhammad Rustam Abbas Tullah, and Hafiz Muhammad Azeem, "Fair Trial Rights of the Accused: Evaluating Compliance with International Human Rights Standards in Pakistan," *Pakistan Research Journal of Social Sciences* 3, no. 2 (June 30, 2024), https://prjss.com/index.php/prjss/article/view/144.

Absence of Legal Infrastructure for AI

Pakistan currently lacks any comprehensive legislation on AI or automated decision-making in the public sector. While the Personal Data Protection Bill 2023 was proposed to regulate data collection and usage, it has not yet been passed into law, leaving a significant regulatory vacuum.[16] Furthermore, there is no guidance on the use of algorithms in public decision-making, judicial or otherwise. Without laws ensuring transparency, explainability, and recourse mechanisms, AI implementation in courts would likely lead to legal challenges.

Judicial Interpretation and Legal Conservatism

Pakistani courts have traditionally adopted a conservative approach to technology and innovation, especially when fundamental rights are at stake. The judiciary has, on numerous occasions, struck down laws or executive actions that compromised human dignity and procedural fairness, even in cases involving administrative automation or biometric systems[17].

Thus, unless the Constitution is amended or interpreted expansively, the deployment of AI judges, especially autonomous ones, would face strong constitutional resistance. A more feasible path might involve AI-assisted tools, which aid but do not replace human adjudication.

CHALLENGES TO AI-BASED JUSTICE IN PAKISTAN

While AI judges present a vision of streamlined, efficient, and consistent justice, their adoption in Pakistan is obstructed by deep-rooted structural, legal, and socio-cultural challenges. These barriers extend beyond mere technological readiness and touch upon the institutional, ethical, and normative foundations of Pakistan's legal system.

Lack of Judicial Digitization and Data Infrastructure

The successful deployment of AI judges depends on robust digital infrastructure, including digitized court records, structured legal databases, and interoperable case management systems. Unfortunately, Pakistan's judicial system remains largely manual and paper-based, especially in district courts, which handle the majority of cases.[18] Without digitized and reliable data, AI algorithms cannot be trained effectively or deployed meaningfully.

Even initiatives such as the Case Flow Management System and Judicial Automation Projects remain confined to limited jurisdictions or face issues of consistency and funding.[19] The absence of standardized legal datasets makes it impossible to build the algorithmic foundation needed for AI decision-making.

Human Capital and Technological Resistance

The legal fraternity in Pakistan, comprising judges, lawyers, clerks, and support staff, has shown limited exposure to emerging technologies. Resistance to automation is compounded by fears of job displacement,

---

[16] "THE FUTURE OF CONSTITUTIONAL GOVERNANCE IN PAKISTAN: PROSPECTS AND CHALLENGES | Journal of Religion and Society," accessed January 8, 2025, https://islamicreligious.com/index.php/Journal/article/view/59.

[17] "THE FUTURE OF CONSTITUTIONAL GOVERNANCE IN PAKISTAN: PROSPECTS AND CHALLENGES | Journal of Religion and Society."

[18] "Law and Justice Commission of Pakistan -," accessed January 8, 2025, http://www.commonlii.org/pk/other/PKLJC/reports.html.

[19] "MINISTRY OF INFORMATION AND BROADCASTING (MOIB), PAKISTAN," accessed January 8, 2025, https://moib.gov.pk/News/58591.

loss of discretion, and erosion of professional authority.[20] Training programs on legal tech remain scarce, and there is no systematic incorporation of AI literacy in judicial education programs.

This technological inertia reinforces a status quo bias, making it difficult for AI tools to be accepted, let alone AI judges. Even well-intentioned digital reforms are often viewed with suspicion by stakeholders who fear undermining traditional legal hierarchies.

Public Trust and Legal Legitimacy

Judicial legitimacy in Pakistan, while fragile, still rests on the symbolic authority of human judges, perceived as interpreters of divine and constitutional law. Introducing machine adjudication risks eroding public trust, especially when litigants already feel alienated by complex legal procedures. Trust is unlikely to be extended to an emotionless algorithm incapable of understanding human suffering, cultural nuance, or moral complexity.[21]

Moreover, AI decisions, especially in criminal or family law cases, could provoke social backlash, especially if errors or injustices occur without a clear path for appeal or accountability.

Accountability and the "Black Box" Problem

A significant concern in AI decision-making is algorithmic opacity, often referred to as the "black box" problem. Even developers of AI systems often cannot explain how certain decisions are reached, especially when deep learning is used. This lack of transparency and interpretability poses serious challenges for legal accountability. If a litigant is harmed by an AI-generated verdict, it remains unclear whether liability lies with the state, the developer, or the judiciary.[22]

This ambiguity is incompatible with Pakistan's principles of natural justice, where reasoned judgments and appeal rights are constitutionally protected. Without clear chains of responsibility, AI-based justice may undermine the core values it claims to enhance.

ETHICAL AND PHILOSOPHICAL DILEMMAS

The debate on AI judges is not merely a matter of technological readiness or legal reform; it is deeply rooted in moral philosophy and legal theory. Even if artificial intelligence systems become more accurate and efficient than human judges, the question remains: can justice be automated without losing its essence? This section explores the ethical implications and philosophical limitations of delegating legal adjudication to machines.

The Human Element in Justice

Justice, in its truest sense, is not merely the mechanical application of rules to facts. It involves empathy, moral reasoning, social understanding, and context-sensitive judgment, qualities that AI inherently lacks. A machine cannot grasp the emotional nuances in a family custody battle or interpret the pain of a victim seeking redress for a rights violation.[23] These intangible dimensions of human experience are central to

[20] "Artificial Intelligence and Machine Learning in Legal Research: A Comprehensive Analysis | Qlantic Journal of Social Sciences," accessed January 8, 2025, https://qjss.com.pk/index.php/qjss/article/view/252.
[21] Osama Siddique, *Pakistan's Experience with Formal Law: An Alien Justice*, 1st ed. (Cambridge University Press, 2013), https://doi.org/10.1017/cbo9781139814508.
[22] Siddique.
[23] Nicoletta Rangone, "Artificial Intelligence Challenging Core State Functions: A Focus on Law-Making and Rule-Making," *Revista de Derecho Público: Teoría y Método* 8 (November 14, 2023): 95–126, https://doi.org/10.37417/RDP/vol_8_2023_1949.

the idea of justice in societies like Pakistan, where legal outcomes are expected to align not just with law, but also with ethical, religious, and cultural expectations.

AI systems are trained on historical data and statistical models, which may improve efficiency but do not guarantee moral correctness. For instance, a decision that is legally accurate but socially unjust (e.g., denying bail to a poor defendant based on predictive risk) might still violate the ethical core of fairness.[24]

The Problem of Algorithmic Bias and Ethics

AI systems reflect the **biases of their designers and datasets**. If historical legal decisions were discriminatory, the AI will likely replicate those injustices, creating a feedback loop of systemic inequality. For example, in the United States, algorithms used in criminal sentencing were shown to disproportionately label Black defendants as high-risk compared to white defendants with similar records.[25]

In the Pakistani context, if AI systems were trained on case law involving gender discrimination, class bias, or sectarian prejudice, they could institutionalize those inequities under the guise of neutrality. Moreover, without a clearly defined AI ethics framework, there is little assurance that automated systems would prioritize human dignity, procedural fairness, or restorative justice.

Can Machines Understand Justice?

A core philosophical dilemma arises from the nature of legal interpretation. Legal realism, as a school of thought, emphasizes that judges do not simply apply laws; they interpret, adapt, and sometimes evolve the law based on changing societal norms. This dynamic interpretive role is beyond the reach of even the most advanced AI systems.

The philosopher John Rawls argued that justice is essentially a human construct grounded in social cooperation and moral reciprocity, neither of which can be authentically replicated by machines.[26] Similarly, Amartya Sen notes that justice is not just about institutions but about people's lived experiences and perceptions of fairness.[27] These insights question the very foundation of robotic justice and caution against reducing law to algorithmic logic.

Moral Responsibility and the Absence of Accountability

Another ethical concern is that machines cannot be held morally accountable for their decisions. While a human judge can be impeached, held liable, or shamed, an algorithm cannot feel guilt, learn from ethical failures, or be punished. This absence of moral responsibility undermines the principle of accountability in democratic legal systems.

Without consciousness or conscience, an AI judge cannot understand the emotional weight of its rulings or the lived consequences for litigants. This raises the profound question: can justice be truly delivered by an entity that cannot feel, regret, or reflect?

THE WAY FORWARD: RECOMMENDATIONS

[24] Hadar Y Jabotinsky and Michal Lavi, "AI in the Courtroom: The Boundaries of RoboLawyers and RoboJudges," n.d.
[25] "Bias in AI (Supported) Decision Making: Old Problems, New Technologies | International Journal for Court Administration," accessed January 8, 2025, https://iacajournal.org/articles/10.36745/ijca.598.
[26] "Justice as Fairness — Harvard University Press," accessed January 8, 2025, https://www.hup.harvard.edu/books/9780674005112.
[27] "The Idea of Justice," accessed January 8, 2025, https://www.penguin.co.uk/books/56627/the-idea-of-justice-by-amartya-sen/9780141037851.

Given the considerable constitutional, infrastructural, and ethical challenges detailed in earlier sections, Pakistan must adopt a cautious, phased, and rights-oriented approach to introducing AI into its judicial system. Rather than seeking to replace human judges, the goal should be to augment judicial functions while preserving fairness, accountability, and public confidence in justice. The following recommendations propose a roadmap tailored to Pakistan's legal, institutional, and technological context.

Begin with AI-Assisted Tools, Not Autonomous Judges

Pakistan should start by incorporating AI-assisted tools rather than deploying fully autonomous decision-makers. These may include:

- Automated case classification and prioritization systems,
- Legal research and precedent discovery engines, and
- Drafting aids for judgment summaries or procedural orders.

Such tools have been successfully implemented in India's Supreme Court, where AI helps sort large volumes of cases for urgent listing and scheduling, without interfering in judicial discretion[28]. These technologies can reduce workloads and backlogs while leaving final decision-making to human judges.

Establish a National AI and Justice Policy

There is an urgent need to develop a regulatory framework specifically addressing the use of AI in legal and judicial contexts. This policy should:

- Define the legal status of algorithmic decisions,
- Establish standards for transparency and explainability,
- Mandate human oversight, and
- Ensure avenues for appeal and redress in cases involving AI assistance.

Such policy initiatives could be led by the Ministry of Law and Justice, in coordination with the Supreme Court, the Pakistan Bar Council, and AI governance experts.[29]

Invest in Judicial Digitization and Legal Data Infrastructure

Before implementing AI, the government must invest in digitizing court records, judgments, and case files, especially at the district level. A centralized and structured legal database is the foundation upon which any effective judicial AI system must rest.

The Law and Justice Commission of Pakistan and the National Judicial Automation Committee should collaborate to build interoperable digital systems across all provinces[30]. Simultaneously, attention should be given to data privacy, cybersecurity, and the standardization of legal terminology to make such data usable by AI models.

---

[28] "Measures to Translate and Publish Proceeding and Judgments of Supreme Court and High Courts," accessed January 8, 2025, https://www.pib.gov.in/www.pib.gov.in/Pressreleaseshare.aspx?PRID=2078399.
[29] M. Fazail Basharat et al., "National Policy and Legislative Framework for AI Governance in Law Enforcement Agencies and Criminal Justice System of Pakistan," SSRN Scholarly Paper (Rochester, NY: Social Science Research Network, April 30, 2025), https://doi.org/10.2139/ssrn.5248649.
[30] "MINISTRY OF INFORMATION AND BROADCASTING (MOIB), PAKISTAN," accessed January 8, 2025, https://moib.gov.pk/News/58591.

Launch Pilot Projects in Low-Stakes Legal Domains

Rather than introducing AI in sensitive criminal or constitutional matters, Pakistan could pilot AI adjudication in low-risk areas, such as:

- Small claims,
- Traffic violations,
- Tax assessment disputes,
- Consumer complaints.

Estonia's success in using AI for small claims courts under €7,000 demonstrates how AI can deliver quick, cost-effective justice when confined to narrow legal domains and supplemented with human appellate review.[31]

Build Capacity and Public Awareness

Capacity building is critical. Judicial academies and law schools must incorporate legal technology and AI ethics into their curricula. Judges, lawyers, and court staff should receive regular training on:

- How AI works,
- Its limitations and biases,
- Ethical implications, and
- Best practices for oversight.

Additionally, public awareness campaigns should explain the role of AI in enhancing, not replacing, judicial authority. This would help cultivate public trust, which is essential for any legal reform to succeed.[32]

CONCLUSION

Though we may have thought that the concept of AI judges was a science fiction, it is soon becoming a legal and technological reality. The need to investigate the effect of artificial intelligence on justice, fairness, and constitutional integrity has never been as pressing as countries test ways of how it can make inroads into judicial systems, and how far it can take us, whether only as a sort of adjudicative assistant or an entirely automated system. The charms of technological intrusion are hard to resist in the case of Pakistan which is a nation plagued by systemic judicial delays, resource deficiencies, and an overwhelming case back-log. Still, the utilization of the AI judges should be considered not only within the efficiency aspect, but rather with a strict awareness of the law, ethical norms, and institutional realities.

The present paper has critically reviewed as to whether or not Pakistan is ready (legal, technological, philosophical dimensions) to the advent of AI-based judicial decision-making. It concludes that currently the non-human adjudication lacks support within the constitutional framework. The independence of the

[31] "Estonia Is Building a 'robot Judge' to Help Clear a Legal Backlog | World Economic Forum," accessed January 8, 2025, https://www.weforum.org/stories/2019/03/estonia-is-building-a-robot-judge-to-help-clear-legal-backlog/.
[32] "(PDF) Artificial Intelligence and Legal Decision-Making in the USA and Pakistan: A Critical Appreciation of Regulatory Frameworks," accessed January 8, 2025, https://www.researchgate.net/publication/388192979_Artificial_Intelligence_and_Legal_Decision-Making_in_the_USA_and_Pakistan_A_Critical_Appreciation_of_Regulatory_Frameworks.

judiciary, which is under the stipulation of the Articles 175 190 of the Constitution assumes that there must be a human judge with the discretion, empathy and interpretative ability. Moreover, Article 10-A also assures the right of a just trial, right that is inevitably connected to the possibility of the litigants to appeal not only the law cause, but also the professionalism and honesty of the person who is passing a legal judgment. Just a machine however delightful can only satisfy these conditions.

It is also true that Pakistan does not have the necessary basic infrastructure in terms of digital things to enable AI-based justice. The court data are mostly un-digitized; the structure of legal texts is irregular and there is little focus on automation and artificial intelligence decision making in the judicial system. Lack of a national law on artificial intelligence, data protection regulations, and ethical guidelines also increase the threat of nonregulated and possibly unfair automated decisions. One more serious challenge is the resistance of the legal fraternity and the low level of awareness among people and their trust in technological systems.

There is more to it than just the legal and logistical hurdles. Justice cannot be a mere mechanical process; it is a moral undertaking that is anchored on empathy, circumstance and human perception. By its composition, AI has no moral intuition, emotional intelligence and the ability to think ethically, which has to be practiced by the judges, especially in complicated or sensitive cases. Such notion of leaving justice in the hands of an organization that cannot tell the difference between the suffering of an individual and the moral sophistication could make justice an agency of brass rather than protector of rights.

However, at the same time, the paper does not promote you to abandon the AI completely. It is not aggressive, but instead suggests a gradualist program. AI potentially has a potent role to play in helping human judges and streamlining administrative overheads as well as in increasing access to justice, especially in routine or low-risk law cases. Once executed in a sensible way, incorporating suitable protections, human control and public input, AI can become a big help to Pakistani judiciary instead of debilitating its work.

To conclude, the future of AI in the legal system of Pakistan should not be treated with technocratic optimism or blind enthusiasm, but total democratic responsibility, legal humility and moral clarity. In a future considered by many to be futuristic but not unrealistic, there may be robotic justice, but never, ever and under no circumstances in a world that believes that dignity, fairness, and the rule of law are present in our welfare system.

REFERENCES

"Algorithmic Enforcement Tools: Governing Opacity with Due Process | SpringerLink." Accessed January 8, 2025. https://link.springer.com/chapter/10.1007/978-3-031-56556-4_9.

"Artificial Intelligence and Machine Learning in Legal Research: A Comprehensive Analysis | Qlantic Journal of Social Sciences." Accessed January 8, 2025. https://qjss.com.pk/index.php/qjss/article/view/252.

Basharat, M. Fazail, Nouman Sajid, Syed Abdul Fattah Shah, and Syed Ghafoor Abbas Kazmi. "National Policy and Legislative Framework for AI Governance in Law Enforcement Agencies and Criminal Justice System of Pakistan." SSRN Scholarly Paper. Rochester, NY: Social Science Research Network, April 30, 2025. https://doi.org/10.2139/ssrn.5248649.

"Bias in AI (Supported) Decision Making: Old Problems, New Technologies | International Journal for Court Administration." Accessed January 8, 2025. https://iacajournal.org/articles/10.36745/ijca.598.

"Chapter 18: Artificial Intelligence and the Judiciary System in: Research Handbook in Data Science and Law." Accessed January 8, 2025. https://www.elgaronline.com/edcollchap/book/9781035316458/book-part-9781035316458-25.xml.

"Chapter 18: Artificial Intelligence and the Judiciary System in: Research Handbook in Data Science and Law." Accessed January 8, 2025. https://www.elgaronline.com/edcollchap/book/9781035316458/book-part-9781035316458-25.xml.

"Chapter 18: Artificial Intelligence and the Judiciary System in: Research Handbook in Data Science and Law." Accessed January 8, 2025. https://www.elgaronline.com/edcollchap/book/9781035316458/book-part-9781035316458-25.xml.

"Estonia Is Building a 'robot Judge' to Help Clear a Legal Backlog | World Economic Forum." Accessed January 8, 2025. https://www.weforum.org/stories/2019/03/estonia-is-building-a-robot-judge-to-help-clear-legal-backlog/.

Frosio, Giancarlo. "Algorithmic Enforcement Tools: Governing Opacity with Due Process." In *Driving Forensic Innovation in the 21st Century: Crossing the Valley of Death*, edited by Simona Francese and Roberto S. P. King, 195–218. Cham: Springer International Publishing, 2024. https://doi.org/10.1007/978-3-031-56556-4_9.

Hao, Jingjing, and Meng Chen. "Smart Courts: The Expansion of Technology in the Chinese Judicial System." Accessed January 8, 2025. https://www.authorea.com/doi/full/10.31124/advance.12402980.v?commit=860dcd8bd79c7baf6544126d2c4d1cb0874d7410.

Jabotinsky, Hadar Y, and Michal Lavi. "AI in the Courtroom: The Boundaries of RoboLawyers and RoboJudges," n.d.

"Justice as Fairness — Harvard University Press." Accessed January 8, 2025. https://www.hup.harvard.edu/books/9780674005112.

"Law and Justice Commission of Pakistan -." Accessed January 8, 2025. http://www.commonlii.org/pk/other/PKLJC/reports.html.

"Machine Bias — ProPublica." Accessed January 8, 2025. https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing.

Mairaj, Muhammad Usman, Muhammad Rustam Abbas Tullah, and Hafiz Muhammad Azeem. "Fair Trial Rights of the Accused: Evaluating Compliance with International Human Rights Standards in Pakistan." *Pakistan Research Journal of Social Sciences* 3, no. 2 (June 30, 2024). https://prjss.com/index.php/prjss/article/view/144.

"Measures to Translate and Publish Proceeding and Judgments of Supreme Court and High Courts." Accessed January 8, 2025. https://www.pib.gov.in/www.pib.gov.in/Pressreleaseshare.aspx?PRID=2078399.

"MINISTRY OF INFORMATION AND BROADCASTING (MOIB), PAKISTAN." Accessed January 8, 2025. https://moib.gov.pk/News/58591.

"MINISTRY OF INFORMATION AND BROADCASTING (MOIB), PAKISTAN." Accessed January 8, 2025. https://moib.gov.pk/News/58591.

"(PDF) An Evaluation of Pending Cases in the Judiciary of Pakistan: Figures and Statistics." Accessed January 8, 2025. https://www.researchgate.net/publication/373981030_An_Evaluation_of_Pending_Cases_in_the_Judiciary_of_Pakistan_Figures_and_Statistics.

"(PDF) Artificial Intelligence and Legal Decision-Making in the USA and Pakistan: A Critical Appreciation of Regulatory Frameworks." Accessed January 8, 2025. https://www.researchgate.net/publication/388192979_Artificial_Intelligence_and_Legal_Decision-Making_in_the_USA_and_Pakistan_A_Critical_Appreciation_of_Regulatory_Frameworks.

Rangone, Nicoletta. "Artificial Intelligence Challenging Core State Functions: A Focus on Law-Making and Rule-Making." *Revista de Derecho Público: Teoría y Método* 8 (November 14, 2023): 95–126. https://doi.org/10.37417/RDP/vol_8_2023_1949.

Siddique, Osama. *Pakistan's Experience with Formal Law: An Alien Justice*. 1st ed. Cambridge University Press, 2013. https://doi.org/10.1017/cbo9781139814508.

"Smart Courts: The Expansion of Technology in the Chinese Judicial System - Advance." Accessed January 8, 2025. https://advance.sagepub.com/doi/full/10.31124/advance.12402980.v.

"The Constitution of Pakistan." Accessed January 8, 2025. https://www.pakistani.org/pakistan/constitution/#gsc.tab=0.

"THE FUTURE OF CONSTITUTIONAL GOVERNANCE IN PAKISTAN: PROSPECTS AND CHALLENGES | Journal of Religion and Society." Accessed January 8, 2025. https://islamicreligious.com/index.php/Journal/article/view/59.

"The Idea of Justice." Accessed January 8, 2025. https://www.penguin.co.uk/books/56627/the-idea-of-justice-by-amartya-sen/9780141037851.

"The Supreme People's Court Of The People's Republic Of China." Accessed January 8, 2025. https://english.court.gov.cn/.

Thunø, Mette, and Yiwen Wang. "China's Smart Diaspora Governance: Extraterritorial Social Control Through Digital Platforms." *Journal of Current Chinese Affairs* 54, no. 1 (April 1, 2025): 48–72. https://doi.org/10.1177/18681026241232998.

"When Should a Computer Decide? Judicial Decision-Making in the Age of Automation, Algorithms and Generative Artificial Intelligence by John Morison, Tomás Mclnerney :: SSRN." Accessed January 8, 2025. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4723280.