TECHNOLOGY AND ACCESS TO JUSTICE: A DOUBLE-EDGED SWORD IN THE DIGITAL AGE

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ABSTRACT

Technology can revolutionize India's overworked legal system. The National Judicial Data Grid gives the public access to 32 crore judgments, Tele-Law has reached 50 million rural beneficiaries, and the E-Courts Project has automated 18,735 courts. These improvements have removed geographical barriers, expedited case resolution, and reduced administrative workload by 23.7%. Beneath this story of advancement, however, comes a far more nuanced reality: technology concurrently exacerbates inequality for the people it is meant to help. Through six interrelated lenses, this paper explores the contradictory role of technology in access to justice. First, it lists real advantages of digitalization, such as remote hearings, e-courts, and case management systems that cut across geographical boundaries. Second, it critically examines the digital divide, which is the systematic exclusion of vulnerable groups from digital justice systems due to discrepancies in digital literacy, gender exclusion, caste-based marginalization, and rural connectivity limitations. Third, it addresses algorithmic bias by analyzing the ways in which AI systems massively reinforce past discrimination. Fourth, it discusses the drawbacks of legal technology innovation, such as chatbot delusions and noncompliance in online dispute settlement. Fifth, it offers all-encompassing solutions, including human-centered AI design, digital literacy initiatives, equitable policy frameworks, and infrastructure development via Bharat Net. Lastly, it paints the future of justice by striking a balance between equality concerns and rising technologies. The main point is clear: technology is not neutral. Political considerations are reflected in every design decision. Deliberate decisions made now to guarantee that technology reaches the underprivileged, upholds human judgment, and prioritizes equity over efficiency alone will determine whether India's digital transition promotes justice or inequity.

Introduction

In courts across India and around the world technology interweaves with the dream of justice. Technological nostrum promises to curb the centuries old barriers to access justice and accelerate the slow process of judicial proceedings. Yet beneath this positive perspective lies a much more complex reality, where technology designed to liberalize the process of justice results in the exclusion.

This biface of technology which facilitates and undermines the access to justice sits at contemporary judicial reform across India and internationally.

This article deals with the dual nature of technology through various interconnected lenses. It documents the benefit of technology like e courts in removing the conventional barriers, along with that it critically examines digital divide's impact. It also covers the technologies' role in curbing biasness and long the limitation of legal tech innovation. Finally, it proposes the practical solution and policy frame work that altogether balance innovation with equity.

How technology enhances access to justice

Imagining about courts takes us to large building, stack of large files, lawyers carrying files etc. But it is changing in India and around the world**.** From past two decades India and world is changing this by bringing digitalization in court.

In India this project was started in 2007 as a part of national plan to integrate government services with information technology. The project happened in three main phases;

Phase I was between 2011-2015 where the laptops were provided to the judges and computers were provided to the courts to connect them with the local network. **Phase II** was between 2015-2023 where NJDG (NATIONAL JUDICIAL DATA GRID)[1] was created, it created a massive online library which contains about cases from all the computerized courts. It now provides over 32 crores of judicial data online along with access to common people. **Phase III** was 2023 onwards focuses on the digitization of the old courts records, setting up E-seva Kendra, online payment system overall full digitization of the courts.[2]

[1] The National Judicial Data Grid (NJDG), Ministry of Law & Justice, Govt. of India (Aug. 18, 2025)
[2] Cabinet Approves e Courts Phase III for 4 Years, Ministry of Law & Justice, Govt. of India (Dec. 31, 2022)

This phenomenon is not exclusive to India. Similar changes are being embraced by courts around the world. One of the first entirely online courts in the world, the Civil Resolution Tribunal (CRT) in British Columbia, Canada, opened for business in 2016. It uses a two-step procedure to handle disputes up to $50,000: first, an online "Solution Explorer" attempts to assist parties in resolving conflicts without the need for attorneys; if that fails, an online tribunal member examines the case and renders a ruling. via a computer screen.[3]

In UK during covid the regular hearings of the courts were shifted into online sessions and it was so successful that it is merged with the regular hearings of the UK courts. European union is also developing online dispute resolution platform to handle cases across borders so that dispute cannot be handled online without appearing to court physically.

Now coming to other perspective of the technology which is cost effectiveness, before the process of the courts were very hectic, filing case files, printing etc. filing of documents online does not need manual filing therefore no printing, no papers, no courier services. After implementation of e filing the workload on court staff has decreased by 23.7%, cost implication has been also reduced and proceeding time has also been reduced.

The advantages are significantly greater for regular people who file lawsuits. Without e-filing, a person from a community 100 kilometers away would have to travel to court, pay for transportation, miss a workday, and pay for the printing and courier of documents. They can use their computer or phone to submit documents through e-filing. Because courts do not have to recover paper costs, the price is reduced.[4]

Litigants can monitor the status of their cases online at any time and from any location thanks to NJDG. You don't have to keep going to court to find out what is going on. [5]

HOW TECHNOLOGY BRIDGES GEOGRAPHICAL BARRIERS

The Indian government introduced a program in 2017 called Tele-Law, which connects villagers with attorneys without them having to attend to court by using telephone and video chatting facilities. Think of it as a legal guidance video call on WhatsApp.

[3] Fed. Jud. Affs., Virtual Hearings: Operational Considerations – Benefits and Challenges (2020)
[4] e-Filing under the e Courts Project, Ministry of Law & Justice, Govt. of India (June 2025)
[5] E-Courts Integrated Mission Mode Project, Ministry of Law & Justice, Govt. of India

A Common Service Center (CSC) in a gram panchayat (village council) offers the locals a variety of government services. These CSCs have video conferencing equipment provided by the government. This CSC is staffed by a trained individual known as a Para-Legal Volunteer (PLV), who is typically a woman from the village. The CSC is where people go when they have legal issues. After assisting them in describing their issue, the PLV places them on a video chat with a panel of lawyers who are seated in the state capital. The PLV takes notes and assists the client in understanding what to do next while the attorney gives legal guidance via the screen.[6]

The elimination of the conventional obstacles of time, money, and location is what unites Tele-Law, video conferencing, and case management technologies. A villager does not require costly transportation. Physical files are not necessary for a court to use. It is not necessary for a judge to spend hours merely looking for information. Judges and attorneys are not replaced by technology; rather, it eliminates the barriers that keep them from effectively administering justice[7].

TECHNOLOGY AS A BARRIER TO JUSTICE

The people who most need justice are frequently left behind by the very technology meant to make it accessible. Due to the lack of internet in her community, a farmer in rural Maharashtra is unable to use e-court services. AI algorithms educated on centuries of discriminatory policing data overcharge a Dalit guy who is facing a criminal case. A woman with a disability cannot obtain legal information by completing an e-KYC verification. These aren't isolated incidents; rather, they are systematic trends that demonstrate how technology frequently exacerbates already-existing disparities rather than neutrally increasing access.

Urban homes are four times more likely to have access to fast broadband, with only 3.8% of rural households having optical fiber (high-speed internet) compared to 15.3% of urban households. In contrast, 98.8% of rural households rely on mobile internet, which has data limits, is slower, and is less dependable. Try using a slow mobile internet connection to read court case files or file documents; the experience is frequently so annoying that you give up.

[6] Overview of Tele-Law, Ministry of Law & Justice, Govt. of India
[7] Press Info. Bureau, Govt. of India, Tele-Law Through CSCs To Mainstream Legal Aid in Rural and Remote Areas (June 10, 2017)

Access issues were meant to be resolved by technology. Rather, through novel methods, digital justice systems frequently reproduce historical disparities. The Constitution guarantees free legal aid (Article 39A), equality (Article 14), and dignity (Article 21). Courts violate these fundamental obligations when technology routinely excludes the impoverished, disabled, rural, and underprivileged.

It is no coincidence that there is a digital divide in justice. It is the inevitable outcome of developing technological systems without considering the exclusion of some groups.

LEGAL TECH LIMITATIONS

Artificial intelligence-powered legal chatbots offer just nearly free consultation, round-the-clock access, and quick legal counsel. This sounds revolutionary for someone in poverty who cannot afford a lawyer. However, the truth is more complicated.

To learn about their bail choices, an impoverished person utilizes a legal chatbot. The chatbot imagines a fictitious Supreme Court ruling that purports to provide bail for their offense. They do not hire a lawyer because of this incorrect information. They are ill-prepared for court. Their case is lost. Justice failed because of a machine, not because of the law.

The New York Bar Association attested to the fact that generic chatbots provide erroneous legal answers and fill in the blanks with made-up content. Strict adherence to the law, jurisdiction-specific application, and thorough precedent study are all necessary for legal reasoning. These attributes are not intrinsic to AI chatbots.

ChatGPT and other chatbots are trained on a large amount of imperfect and occasionally out-of-date internet data. They are unable to access current legal databases. They are unable to distinguish between plausible-sounding and true. They identify linguistic patterns rather than legal reasoning. Asking a chatbot, "Is bail available for sedition charges?" Case law is not consulted. It creates linguistic patterns that it has learned from training data.[8]

The law is local. Indian law is not the same as American law. Tamil Nadu and Maharashtra have different legal systems. These jurisdictional distinctions cannot be reliably navigated by AI trained on broad legal data. A chatbot may confidently tell you that Delhi is covered under

[8] The Many Difficulties with Legal AI Chatbots, The Leaflet (Sept. 16, 2025)

Kentucky law. You may file a malpractice lawsuit if a lawyer gives you incorrect advice. Who is at fault if a chatbot provides you incorrect advice? The chatbot business? creator of the software? Who trained it? Vulnerable people have little recourse when AI fails them because of this accountability gap. In terms of fairness, technology cannot take the place of human judgment. Routine chores like arranging hearings, keeping track of deadlines, and organizing papers can be automated by AI. It can speed up analysis and research. However, it is unable to make decisions regarding liberty and dignity, comprehend the human context of pain, or decipher complex legal arguments. Courts run the risk of losing the human aspect that is fundamental to justice when they depend too heavily on technology.

IMPACT OF EMERGING TECHNOLOGIES

Blockchain technology has the potential to produce judgment documents and court records that cannot be altered. A judgment's authenticity is ensured by the fact that once it is recorded on blockchain, it cannot be changed. This transparency may help subordinate courts and litigants avoid corruption and record tampering. However, poorer nations may find blockchain inaccessible due to its energy consumption and technical complexity.

The legal tech industry in India is flourishing. As of 2025, there are over 762 legal tech startups in India that deal with different issues related to access to justice. Businesses like LawSeek.ai, CourtEasy.ai, and others are creating solutions for document automation, legal research, and case management. [9]

Localized solutions—platforms created especially for Indian legal situations, supporting Indian languages, and comprehending Indian law—offer competitive benefits to these startups. Investor trust in the potential of legal tech is indicated by the rise in venture capital funding in this field.

However, there are hazards associated with the startup model. Startups may be purchased by bigger businesses, which could cause them to prioritize profit over the general welfare. There is still little regulatory control of emerging legal technology. Algorithmic bias or a startup's data privacy policies might not be examined until issues arise.

[9] Legal Tech's Second Act: How AI and Indian Startups Are Rewriting the Future of Justice, Indian Startup Times (Sept. 10, 2025)

The digital transformation of Indian courts is neither final nor inevitable. Building infrastructure, educating communities, controlling technology, and putting human dignity at the core of every innovation are all necessary steps on the road ahead. The two-edged sword can be used for either injustice or justice. Our current decisions will determine which edge we sharpen.

CONCLUSION

India is at a turning point in its history. 18,735 courts have been computerized thanks to the E-Courts Project. Fifty million rural residents have benefited from Tele-Law. 32 crore judgments are made available to the public by NJDG. Technology has revolutionized court administration in every efficiency metric. Millions of people are still left out of this digital revolution, though. It is already obvious that technology can enhance courts; the debate is no longer whether it can. The question is whether India will make sure that everyone benefits from this advancement or if technology will just serve as another instrument of inequity.

A recurring theme in this piece is the amplification of preexisting power hierarchies by technology. It expedites and organizes them, but it doesn't produce them. The digitally disconnected are excluded from e-courts. Large-scale historical biases are sustained by algorithmic systems. Those who can afford subscriptions are served by legal chatbots, not the underprivileged. Technically literate people profit from blockchain solutions.

The key realization is that technology is not impartial. Political and ethical issues are reflected in every design decision, including whether to support regional languages, make systems accessible to users with disabilities, or make algorithms understandable. Vulnerable communities are unavoidably disadvantaged when courts digitize without considering these rulings. Faster servers or better algorithms won't fix India's judicial dilemma.

It will be resolved by:

Increasing the number of judges (India has 15–21 per million compared to the global average of 150–220) is one way to address structural inequality. decreasing the number of pointless cases that the government files. Changing procedural laws from the colonial era. Technology is not necessary for them; political will is.

Creating inclusive infrastructure: Digital literacy initiatives, community access centers, and

Bharat Net are important. However, only if it is created with oppressed communities in mind rather than being forced onto them. Technology that is only accessible to those who are connected continues to be exclusive.

Upholding human judgment: Judges decide cases involving family, liberty, and dignity. Human comprehension of context, personal circumstances, and moral reasoning are necessary for these. AI can help, but it cannot take its place. Justice itself is betrayed by courts that delegate decision-making to computers.

Technology has already demonstrated its ability to improve courts. Now, the question is whether India will make sure that this improvement serves justice itself—that is, justice that is accessible, equal, and dignified for everyone—or if it will just serve as another means by which authority defends itself.

Technology is a double-edged sword that awaits our decision. Which edge we sharpen will determine the future of Indian justice.