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FROM PAPER TRAILS TO DIGITAL STREAMS: AN ANALYTICAL CASE FOR JUDICIAL DIGITISATION IN INDIA, WITH A CASE STUDY OF BIHAR

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I. ABSTRACT

India's judiciary has moved from a paper-bound procedural architecture to a progressively digital justice-delivery framework through the e-Courts Mission Mode Project. This article addresses a central research problem: whether judicial digitisation in India should be assessed merely by reference to unresolved pendency, or by its institutional effects on continuity, transparency, efficiency and access. It asks how Phases I to III of the e-Courts Project have altered court administration; whether digitisation has strengthened access to justice while confronting the digital divide; and what Bihar's experience, through the Patna High Court, reveals about sub-national implementation in a resource-constrained state. The study adopts a doctrinal and qualitative method, relying on official e-Courts materials, National Judicial Data Grid architecture, government releases, judicial ICT records and secondary legal scholarship, without generating fresh empirical data. The article finds that Phase I created the basic computerisation backbone, Phase II expanded connectivity, videoconferencing, e-filing, virtual courts and the National Judicial Data Grid, and Phase III seeks to consolidate these gains through legacy-record digitisation, universal e-filing/e-payments, e-Sewa Kendras and carefully limited assistive technologies. It further finds that Bihar demonstrates both the promise and limits of digitisation: the Patna High Court's early adoption of studio-based videoconferencing, e-filing and e-Sewa Kendras sustained judicial functioning during crisis and widened procedural access, but does not by itself resolve vacancy, pendency or wider socioeconomic constraints. The article recommends accelerated Phase III implementation, stronger last-mile assisted access, expanded digital-literacy support, transparent court-wise performance review through NJDG-linked data, and a cautious regulatory framework for AI tools that preserves human judicial decision-making.

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II. KEYWORDS

Judicial digitisation; e-Courts; access to justice; artificial intelligence in courts; Patna High Court.

III. INTRODUCTION

A. Background and Rationale

For much of its post-independence history, the Indian judiciary relied on a paper-based procedural architecture inherited from colonial administrative practice: handwritten pleadings, physical case files, and litigants required to appear in person merely to learn the next date of hearing. As India's population passed 1.4 billion and litigation grew steadily more frequent, this architecture came under unsustainable strain². The e-Committee of the Supreme Court of India responded by laying the conceptual foundation for judicial computerisation in 2005, culminating in the formal launch of the e-Courts Mission Mode Project in 2007.³

The scale of the challenge this project set out to address was considerable. At the start of Phase III, the Union Law Minister informed Parliament in July 2023 that more than 5.02 crore cases were pending across the Supreme Court, the High Courts and the district and subordinate courts: 69,766 in the Supreme Court as on 1 July 2023, 60,62,953 in the High Courts as on 14 July 2023, and 4,41,35,357 in the district and subordinate courts as on 14 July 2023. By 31 December 2025, the position had worsened: the Ministry of Law and Justice informed the Lok Sabha that 92,101 cases were pending in the Supreme Court, 63,66,023 in the High Courts and 4,76,57,328 in the district and subordinate courts, amounting to approximately 5.41 crore cases on a component-wise calculation. India's judicial capacity also remained limited: the India

²Jasmine Gill, 'Judicial Delay and Digital Delivery: The Role of E-Courts in Addressing India's Case Backlogs' (2025) 7(3) International Journal of Legal Science and Innovation 199, 201.

³e-Committee, Supreme Court of India, 'e-Courts Mission Mode Project' (ecommitteesci.gov.in) <https://ecommitteesci.gov.in/project/brief-overview-of-e-courts-project/> accessed 15 July 2026.

Justice Report 2025 recorded 21,285 judges for a population of about 1.4 billion, or approximately 15 judges per million people.⁴

Judicial delay has long been recognised as a governance concern with real economic consequences. The DAKSH Access to Justice Survey 2015–16, based on interviews with more than 9,000 litigants across 24 states, estimated annual litigation expenses at approximately ₹30,000 crore and wage and business losses at ₹50,387 crore, with productivity losses from court attendance amounting to about 0.48 per cent of India's GDP. Harish Narasappa separately stated in a 2016 interview that, while the conservative estimate was about 0.5 per cent of GDP, the wider economic cost of pendency could be as high as 1.5 to 2 per cent of GDP.

This distinction is important because the higher figure was an upper-end assessment in an interview, not the direct survey finding itself. Judicial digitisation was conceived, and has functioned, as the state's primary structural answer to this challenge, and its record should be assessed with due regard to the scale of the inherited problem it was designed to manage: a paper-bound system serving the largest litigant population in the world, spread across a subcontinent of enormous geographic and linguistic diversity, was never going to be transformed overnight, and the relevant question is not whether every historic deficiency has been eliminated but whether the trajectory of reform has been the correct one.

B. Research Problem, Objectives and Methodology

1. Research Objectives

This paper pursues the following objectives:

- To trace the legal and institutional evolution of judicial digitisation in India through the e-Courts Mission Mode Project, particularly across Phases I, II and III.

⁴2025 India Justice Report: Only 15 Judges Per Million Population; 38% of Judges in District Judiciary Are Women' ETV Bharat (15 April 2025) <https://www.etvbharat.com/en/!bharat/2025-india-justice-report-only-15-judges-per-million-population-38-percent-of-judges-in-district-judiciary-are-women-enn25041506047> accessed 15 July 2026.

- To evaluate whether digitisation has produced measurable institutional gains in continuity of court functioning, transparency, procedural efficiency and access to justice.
- To examine Bihar, with particular reference to the Patna High Court, as a sub-national case study of digitisation in a resource-constrained judicial environment.
- To identify the continuing limits of digitisation, including pendency, judicial vacancies, government litigation, digital exclusion and the need for cautious regulation of assistive technologies.
- To propose targeted recommendations for consolidating the gains of Phase III while ensuring that digitisation remains inclusive, accountable and supportive of human judicial decision-making.

2. Research Questions

The paper is guided by the following research questions:

- What is the legal and institutional basis of judicial digitisation in India, and how has it evolved through the three phases of the e-Courts Mission Mode Project?
- To what extent has judicial digitisation improved continuity, transparency, efficiency and access within the Indian court system, and what measurable indicators support that assessment?
- What does Bihar's experience, particularly the digitisation initiatives of the Patna High Court, reveal about the promise and limits of technology-led judicial reform in a resource-constrained state?
- What residual challenges remain beyond the proper scope of digitisation, and what complementary reforms are necessary to ensure that digital infrastructure produces substantive access-to-justice outcomes?

3. Research Methodology

This paper adopts a doctrinal, qualitative and non-empirical research methodology. It does not generate original statistical data, conduct field interviews or undertake an independent empirical audit. Instead, it analyses primary and secondary legal materials, including official e-Courts materials, government releases, National Judicial Data Grid architecture, Patna High Court ICT records, the India Justice Report, access-to-justice theory, digital-divide scholarship and peer-reviewed legal writing.

For the purposes of this paper, judicial digitisation is treated as successful only to the extent that it demonstrably advances four criteria: first, continuity of judicial functioning, including during institutional disruption; second, transparency through public access to case-status, pendency and disposal data; third, procedural efficiency through e-filing, video-conferencing, virtual courts and digitised records; and fourth, substantive access to justice through assisted-access infrastructure such as e-Sewa Kendras and digital-literacy support.

The analysis also recognises that unresolved pendency, vacancies and government litigiousness cannot be attributed to digitisation alone, because they require complementary recruitment, administrative and litigation-policy reforms. This evaluative framework enables each later section of the paper to answer one or more of the research questions stated above.

C. Scope and Limitations

The paper is confined to the digitisation of the civil and criminal justice system as delivered through the e-Courts framework; tribunals and quasi-judicial bodies fall outside its scope. Because National Judicial Data Grid figures and India Justice Report statistics are updated periodically, the figures relied upon here are current as of the publication dates of the cited sources and should be read as indicative of a consistent upward trajectory in institutional capability rather than as a live count.

The Bihar case study is anchored in the Patna High Court's own documented record rather than an independent empirical audit, and is presented as illustrative of what sustained digitisation investment can achieve at the sub-national level.

IV. CONCEPTUAL FRAMEWORK

Cappelletti and Garth's account of successive 'waves' of access-to-justice reform, from legal aid, to representation of diffuse interests, to procedural simplification, frames access to justice as a substantive rather than a merely formal guarantee: the effective ability of ordinary litigants to vindicate their rights⁵. Read on these terms, digitisation is properly understood as a further wave in this tradition.

Susskind has argued that, where thoughtfully designed, online courts do not merely relocate the physical courtroom but can extend the reach of justice systems to populations historically priced or distanced out of them, by removing the twin costs of travel and lost working time that disproportionately burden poorer litigants⁶. Van Dijk's theorisation of the digital divide, distinguishing motivational, material, skills and usage access, offers a useful diagnostic lens, but it is equally a lens for identifying where policy intervention should concentrate rather than a basis for concluding that digital reform is inherently exclusionary⁷.

Applied to India, this framework indicates precisely where institutional effort, such as assisted-access infrastructure and digital-literacy training, needs to be directed to ensure that the substantial material gains of digitisation reach the full population of litigants, a task the e-Courts programme has increasingly built into its later phases, as section 4.2 demonstrates.

It is worth being explicit about the standard of evaluation this framework implies. A reform should not be judged a failure merely because inequality of access predates it and has not yet been fully eliminated by it; the relevant comparison is between the pre-digital baseline, in which physical presence, personal cost and geographic proximity to a court were themselves powerful and largely unaddressed determinants of access, and the digitised present, in which those same barriers are actively being engineered out through assisted-access infrastructure. On this comparative standard,

⁵Mauro Cappelletti and Bryant Garth, 'Access to Justice: The Newest Wave in the Worldwide Movement to Make Rights Effective' (1978) 27 Buffalo Law Review 181.

⁶Richard Susskind, *Online Courts and the Future of Justice* (Oxford University Press 2019) ch 1, 9.

⁷Jan A G M van Dijk, *The Digital Divide* (Polity Press 2020) ch 1-2.

which is the standard both Cappelletti and Garth and Susskind apply to earlier waves of access-to-justice reform, digitisation represents a clear net improvement even before its remaining gaps are closed.

A. Legal Framework for Judicial Digitisation in India

Judicial digitisation in India is not merely an administrative reform; it is increasingly supported by constitutional doctrine, procedural statutes and High Court rules. Its constitutional foundation lies principally in Article 21 of the Constitution, which guarantees fair, reasonable and meaningful access to justice. The Supreme Court's early recognition of technology-assisted proceedings in *State of Maharashtra v Praful B Desai* established that evidence may be recorded through video-conferencing where procedural fairness is preserved, and that "presence" for the purpose of criminal procedure need not always mean physical presence alone. This decision supplied the first major doctrinal basis for treating audio-visual technology as compatible with fair-trial guarantees.

The open-courts dimension of digitisation was developed further in *Swapnil Tripathi v Supreme Court of India*, where the Supreme Court recognised live-streaming of court proceedings as an extension of open justice, transparency and public access to courts. Read with Article 21, the decision supports the proposition that technology may deepen, rather than dilute, public accountability in adjudication, provided appropriate safeguards are maintained.

In *Anuradha Bhasin v Union of India*, the Court's recognition that access to the internet is closely connected with the exercise of fundamental rights supplies an important constitutional link between digital infrastructure and meaningful participation in public and legal life. More recently, in *Pragya Prasun v Union of India*, heard with *Amar Jain v Union of India*, the Supreme Court treated exclusion from digital systems, particularly for persons with disabilities, as raising serious Article 21 concerns. That decision is directly relevant to judicial digitisation because it confirms that digital access must be inclusive and accessible, not merely formally available.

The statutory framework now reinforces this constitutional position. Section 530 of the Bharatiya Nagarik Suraksha Sanhita 2023 expressly permits trials, inquiries and

proceedings, including service of summons and warrants, examination of complainants and witnesses, recording of evidence and appellate proceedings, to be conducted through electronic communication or audio-video electronic means. Section 63 of the Bharatiya Sakshya Adhiniyam 2023 governs the admissibility of electronic records and provides the evidentiary basis for the use of electronic material in judicial proceedings, subject to the statutory conditions prescribed for reliability and certification. Together, these provisions move digital procedure from exceptional practice to recognised statutory procedure.

At the institutional level, the Patna High Court's Rules for Video Conferencing for Courts, 2020 and Rules for Electronic Filing, 2021 operationalise this broader constitutional and statutory framework within Bihar. These Rules are significant because they translate national digitisation policy into enforceable local procedure, allowing virtual hearings, electronic filing and related ICT initiatives to function as part of ordinary court administration rather than ad hoc emergency measures.

This legal framework also qualifies the claims made later in this paper.

First, Section 4.2's discussion of the digital divide must be read in light of *Anuradha Bhasin* and *Pragya Prasun*: digitisation is constitutionally defensible only when accompanied by meaningful access, reasonable accommodation and assisted-use infrastructure such as e-Sewa Kendras.

Secondly, Section 4.3's discussion of artificial intelligence must be confined to assistive and administrative uses unless a clearer statutory or judicial basis emerges for adjudicatory deployment.

The doctrinal position therefore supports judicial digitisation, but only where it remains procedurally fair, transparent, accessible and subordinate to human judicial decision-making.

V. THE EVOLUTION OF JUDICIAL DIGITISATION IN INDIA

Phase I of the e-Courts project, concluding in 2015, computerised 14,249 district and subordinate courts and installed the standardised Case Information System in over 13,670 of them, establishing the foundational digital backbone on which every

subsequent reform has been built.⁸ Phase II, running to 2023 with an outlay of ₹1,670 crore, achieved Wide Area Network connectivity across approximately 99.5 per cent of court complexes, expanded video-conferencing capacity to 3,240 court complexes and 1,272 prisons, and introduced the National Judicial Data Grid, e-filing, e-payment systems and the e-Courts Services mobile application, a striking breadth of delivery within a single implementation phase.

Phase III, approved in September 2023 with an outlay of ₹7,210 crore, more than four times its predecessor, is now pursuing a 'seamless, paperless and unified' judicial platform: digitisation of legacy records, universal e-filing, expanded virtual courts, and AI-assisted case analytics, delivered through thousands of e-Sewa Kendras designed specifically to assist litigants who might otherwise be excluded.⁹

The National Judicial Data Grid deserves particular emphasis as an achievement in its own right. It consolidates institution, disposal and pendency data across the Supreme Court, the High Courts, and the District and Taluka Courts, updated daily and searchable down to individual court complexes¹⁰, introducing a degree of transparency and public accountability that simply did not exist in the paper-based system, and that now also underpins independent scholarly research on judicial performance.¹¹ Building on this foundation, the judiciary has begun a limited and assistive adoption of artificial-intelligence tools.

Official materials state that the Supreme Court has used AI language technology for translation of judicial documents, legal research and process automation, and that AI/ML tools are being deployed in case-management functions. SUPACE is described as an AI-based tool intended to understand the factual matrix of cases and support

⁸ Jasmine Gill, 'Judicial Delay and Digital Delivery: The Role of E-Courts in Addressing India's Case Backlogs' (2025) 7(3) International Journal of Legal Science and Innovation 199, 207-210.

⁹e-Committee, Supreme Court of India, Digital Courts: Detailed Project Report (2023) <https://cdnbbsr.s3waas.gov.in/s388ef51f0bf911e452e8dbb1d807a81ab/uploads/2023/04/2023042088.pdf> accessed 15 July 2026.

¹⁰e-Committee, Supreme Court of India, 'National Judicial Data Grid' (ecommitteesci.gov.in) <https://ecommitteesci.gov.in/service/national-judicial-data-grid/> accessed 15 July 2026.

¹¹Varsha Aithala, Rathan Sudheer and Nandana Sengupta, 'Justice Delayed: A District-Wise Empirical Study on Indian Judiciary' (2021) 12(1) Journal of Indian Law and Society 106, 118-126.

intelligent search of precedents, but later official replies describe it as being in an experimental stage of development and not deployed for regular judicial use. SUVAS is an AI-assisted translation tool for translating judgments and orders into 18 regional languages and Hindi.

AI-based transcription tools may also assist transparency and record accuracy. These technologies are therefore best understood as administrative and assistive tools, not as substitutes for judicial reasoning.¹² These tools should be described as part of an emerging assistive-use model rather than as evidence of a fully settled governance framework. The Ministry's 9 August 2024 release states that the Supreme Court has adopted AI language technology in translation of judicial documents, legal research and process automation.

Its 20 March 2025 Rajya Sabha reply states that AI/ML tools are being deployed in case management and that SUPACE is in an experimental stage of development for testing. The Supreme Court's 2025 white paper should be used as the principal source for comparative regulatory discussion and risk analysis, including risks of hallucination, opacity, bias, accountability and the need for human oversight.

The cumulative scale of this transformation is worth stating plainly. Across roughly fifteen years, a judiciary that began the twenty-first century almost entirely on paper has computerised close to nineteen thousand courts, connected the overwhelming majority of its complexes to a functioning wide-area network, built a live national database of case outcomes, and embedded video-conferencing as routine practice across the district, subordinate and High Court tiers.

Few public infrastructure programmes of comparable scale in India have been delivered with this degree of continuity across successive Five-Year Plan cycles and changes in political administration, itself an indication of the breadth of institutional consensus behind the reform.

¹²Supreme Court White Paper Outlines AI's Role in Indian Judiciary' MediaNama (4 December 2025) <https://www.medianama.com/2025/12/223-supreme-court-ai-white-paper-indian-judiciary/> accessed 15 July 2026.

VI. CRITICAL ANALYSIS: THE CASE FOR DIGITISATION

A. Measurable Gains in Continuity, Efficiency and Transparency

The clearest demonstration of digitisation's value is what it made possible during and after the pandemic period. By 31 October 2024, courts had conducted approximately 3.38 crore hearings through video-conferencing, including about 2.48 crore hearings in district courts. Later official reporting placed the figure at more than 3.97 crore video-conference hearings by March 2026, confirming that hybrid and virtual hearings continued beyond the immediate pandemic emergency.

Virtual traffic courts also show the scale of routine digital case-handling, but the terminology must be precise: as on 31 October 2024, virtual courts in 21 States and Union Territories had handled 6,00,29,546 traffic challan cases, while online fines had been realised in 62,97,544 cases. Later official material states that, by 31 January 2026, 30 virtual courts had received 10.13 crore challans. These figures demonstrate substantial administrative capacity, but they should not be described as equivalent to final disposal unless the relevant official source expressly gives a disposal figure.

On transparency, the National Judicial Data Grid has, for the first time, given litigants, researchers and policymakers a live and granular view of institution, disposal and pendency data across court levels. That is an institutional gain in itself, because it enables more precise public scrutiny of delay, court performance and local variation.

E-filing has also produced an administrative efficiency dividend where it is fully adopted, reducing the need for physical filing and manual registry processing. These gains support the case for continued digitisation, but they should not be overstated. The evidence shows that digitisation has improved continuity, transparency and certain procedural efficiencies; it does not show that technology has, by itself, resolved the deeper structural causes of delay.

B. Counter-Evidence and Limits of Digitisation

A credible assessment of judicial digitisation must also confront evidence that tests the paper's thesis. First, pendency has continued to rise during the early years of Phase III. At the start of Phase III, the Union Law Minister informed Parliament in July 2023

that more than 5.02 crore cases were pending across the Supreme Court, High Courts and subordinate courts. By 31 December 2025, the Ministry of Law and Justice informed the Lok Sabha that pendency had risen to approximately 5.39 crore according to secondary reporting, while the component figures reported for the Supreme Court, High Courts and district courts produce a total closer to 5.41 crore. This trend shows that digitisation has not yet translated into a reduction of the national backlog.

Secondly, uptake of e-filing remains uneven among court users. A field-based discussion reported in *Bar & Bench* on 8 November 2024, drawing on work associated with Karnataka court users, found that many advocates consulted preferred physical filing to e-filing. The reported reasons were practical rather than ideological: the present process may require preparation of a physical plaint, scanning, compression of files and correction of technical defects before first listing, which can make e-filing burdensome where the digital workflow merely replicates paper filing in electronic form. This evidence does not reject e-filing as a reform, but it shows that design quality, user training and registry integration are essential to meaningful adoption.

Thirdly, the paper's own cited scholarship recognises that e-Courts cannot compensate for shortages of judges, court staff and supporting infrastructure. Gill's study concludes that the causes of delay are multifactorial and include resource deficits, procedural roadblocks and policy failures; it specifically cautions that digital tools cannot make up for insufficient judicial capacity or the continuous inflow of new cases. Adjournments, vacancy-driven docket pressure, government litigation and delays caused by police, prosecution, forensic laboratories, witnesses and litigants are not problems that a filing portal or video-conferencing system can independently solve.

The proper conclusion, therefore, is not that digitisation has failed, but that its success is bounded. Digital systems improve the movement, visibility and accessibility of cases; they do not automatically increase judicial strength or reduce the number of incoming disputes. Where the clearance rate remains below 100 per cent, fresh filings will continue to exceed disposals and the backlog will grow even if each individual

procedural step becomes more efficient. The stronger argument for Phase III is accordingly a limited but persuasive one: digitisation is a necessary enabling reform for transparency, continuity and procedural efficiency, but it must operate alongside judicial appointments, court-staff recruitment, case-management reform, reduction of avoidable government litigation and user-centred redesign of e-filing systems.

C. Bridging the Digital Divide Through Institutional Design

Critics rightly note that national digital-divide data show unequal access to devices and connectivity along lines of caste, gender, income and geography. That critique is particularly relevant to judicial digitisation because a digital court system can widen exclusion if litigants, lawyers or clerks lack devices, connectivity or the skills necessary to use online filing, case-status and hearing systems. The e-Courts programme's later phases recognise this risk by treating assisted access as part of the institutional design rather than as an external welfare measure.

The figure of 4,400 e-Sewa Kendras should, however, be stated accurately. It is the approved Phase III target for fully functional e-Sewa Kendras across court complexes, not the number already deployed. The Union Government's Phase III approval materials describe "saturation of all court complexes with e-Sewa Kendras" and list 4,400 fully functional e-Sewa Kendras as the approved component. As on 31 October 2024, official material recorded 1,394 e-Sewa Kendras in district courts and 36 in High Courts, or 1,430 in total.

A Rajya Sabha reply dated 12 February 2026 recorded 48 e-Sewa Kendras across High Courts and 2,283 across district courts, or 2,331 in total. Later official material dated 25 July 2026 recorded 2,515 functional e-Sewa Kendras across High Courts and district courts, while another July 2026 PIB release gave 2,584 as on 30 June 2026. The 2026 public figures are not fully uniform, but they consistently show that the 4,400-centre target had not yet been fully achieved by mid-2026.

Even using the higher July 2026 figure of 2,584, only about 58.7 per cent of the 4,400 targets had been achieved by mid-2026. This gap does not undermine the argument that e-Sewa Kendras are the correct institutional response to the digital divide, but it does require the argument to be framed more cautiously. The digital divide is not

automatically converted into a solved “infrastructure and budgeting question” merely because a target has been approved; it becomes manageable only if deployment continues at sufficient pace, if centres are adequately staffed, and if litigants can actually use them for e-filing, case information, virtual-hearing support and access to judgments. The better conclusion is therefore that assisted-access infrastructure is a necessary and promising response to exclusion, but that its constitutional and practical value depends on timely saturation, local usability and continuing digital-literacy support.

D. Artificial Intelligence as Responsible Augmentation

Artificial intelligence in the Indian judiciary should be analysed more cautiously than the language of technological optimism sometimes permits. Tools such as SUPACE, SUVAS and transcription systems show that AI can assist courts in legal research organisation, translation, transcription and administrative support. However, recent developments also show that the institutional safeguards for judicial AI remain emergent rather than fully settled. The more accurate position is that India has begun to develop a restricted and assistive model of judicial AI, but that this model now requires clearer and more uniform regulation.

The Supreme Court’s Centre for Research and Planning, in its November 2025 white paper on *Artificial Intelligence and Judiciary*, recognised both the potential and the risks of AI use in courts. The white paper is significant because it does not treat AI hallucination as a speculative concern; it documents incidents in which AI systems generated inaccurate or non-existent legal material. This directly qualifies any claim that the present framework already contains complete safeguards. The proper conclusion is not that AI should be excluded from court administration, but that AI outputs must be treated as unauthenticated assistance unless independently verified by judges, lawyers or trained court staff.

The Kerala High Court’s July 2025 *Policy Regarding Use of Artificial Intelligence Tools in District Judiciary* provides a more concrete regulatory model. It permits only approved AI tools for court-related work and makes clear that AI must not be used as a substitute for judicial decision-making or legal reasoning. Reports on the policy record

concerns relating to privacy, data security, accountability and erosion of trust in judicial decisions. The policy is therefore important not because it proves that a national framework already exists, but because it shows one High Court moving from general caution to binding local regulation.

The strongest judicial warning is found in *Gummadi Usha Rani v Sure Mallikarjuna Rao*, where the Supreme Court dealt with reliance on four non-existent, AI-generated precedents. The Court treated such reliance not as a mere legal error but as misconduct carrying legal consequences. That approach is doctrinally important because it confirms that AI-generated hallucinations can threaten the integrity of adjudication itself when they enter judicial reasoning as false precedent. The decision therefore supports a strict distinction between permissible assistive use and impermissible adjudicatory reliance.

Accordingly, the defensible claim is narrower than the present draft suggests. Indian judicial AI is developing along an assistive and human-supervised trajectory, but the safeguards are uneven and still being formalised. Translation, transcription and case-management tools may support access to justice, especially where they reduce language and administrative barriers. By contrast, legal reasoning, findings, reliefs, precedent verification and final adjudication must remain human judicial functions. AI can responsibly augment judicial administration only if three conditions are satisfied: approved-use limits, mandatory human verification of outputs, and enforceable accountability for hallucinated or unauthorised use.

E. Sustained Fiscal and Institutional Commitment

A further, often underweighted, indicator of the programme's success is the pattern of its own funding and continuation. Phase III's outlay of ₹7,210 crore represents more than a fourfold increase on Phase II, approved not as a course-correction but as an explicit scaling-up of an approach the Union Cabinet judged to be working.¹³ Continuity of this kind across three sequential phases, spanning different

¹³ "India's Digital Public Infrastructure"

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2235812&lang=2>

governments and budget cycles, is itself meaningful evidence: infrastructure programmes that fail to deliver measurable value are rarely re-funded at an accelerating rate. The judiciary's own willingness to extend the model, from basic computerisation to a data grid, case-processing software and carefully limited assistive technologies, indicates an institution continuing to build on earlier phases rather than retreating from the digitisation project.

VII. BIHAR: A CASE STUDY IN SUB-NATIONAL DIGITISATION

A. Institutional Context

Bihar is an instructive case precisely because it shows that digitisation can deliver genuine institutional gains even in a fiscally constrained state carrying one of the country's most severe historic pendency burdens. As the implementing agency for the e-Courts project within its jurisdiction, the Patna High Court has treated digitisation not as an optional supplement to its administrative functions but as a central plank of institutional reform, notifying dedicated Rules for Electronic Filing (e-Filing), 2021 and Rules for Video Conferencing for Courts, 2020 to give the transition a firm procedural foundation.¹⁴

This is a meaningful institutional choice: a High Court operating within one of India's more fiscally constrained state governments could plausibly have treated digitisation as a lower priority relative to more immediate infrastructural needs, yet instead chose to place it at the centre of its administrative agenda, investing in dedicated IT technical cadre rules and a purpose-built network infrastructure well ahead of many better-resourced counterparts.

B. The Patna High Court's Digitisation Record

The Patna High Court's digitisation record is significant, but the figures should be presented with a single reference date and with clearer separation between case institution, virtual hearings, disposals and e-filing. According to the Patna High

¹⁴Patna High Court, 'Statement of ICT Initiatives under eCourts Project and Best Practices Adopted' (patnahighcourt.gov.in) <https://patnahighcourt.gov.in/getpdf/UEhDX0lUX0FDVC5wZGY=-99rQLbR2PuY=> accessed 15 July 2026.

Court's own statement of ICT initiatives, updated to February 2023, the High Court had, from 24 March 2020 onward, instituted 2,74,892 cases, heard 5,58,013 cases and disposed of 2,40,354 cases through its pandemic-period and post-pandemic digital functioning. These figures provide a later and more complete reference point than the earlier e-Committee figures of 1,66,278 cases instituted, 2,48,482 cases heard and 1,21,513 cases disposed of up to 18 April 2022.

E-filing should also be described separately from institution and disposal. The earlier e-Committee page recorded that e-filing began in the Patna High Court on 29 May 2020 and that 1,69,108 e-filings had been made on the Patna High Court e-filing portal, including both test-server and live-server entries. The February 2023 Patna High Court statement gives the later figure of 3,08,826 e-filings, also including test-server and live-server entries, and records 4,166 registered advocates.

The revised manuscript should therefore avoid saying that e-filing had processed "more than 1.66 lakh cases," because that repeats the earlier instituted-cases figure and may confuse case institution with e-filing entries. The safer formulation is that, as of February 2023, the e-filing count stood at 3,08,826, including both test and live-server entries, with 4,166 registered advocate-users.

The e-Sewa Kendra sentence should also be corrected. Masaurhi should not be described as a district; it is a sub-division in Patna district. The February 2023 Patna High Court statement records e-Sewa Kendras at 41 locations. The revised wording should therefore state that the High Court had extended e-Sewa Kendras to 41 locations by February 2023, including locations such as Patna High Court, Patna Civil Court, Bettiah in West Champaran, and Bedauli/Lakhnaur Panchayat in the Masaurhi sub-division of Patna district, rather than listing Masaurhi as a separate district.

Accordingly, the corrected conclusion should be more precise: the Patna High Court's record demonstrates substantial digital continuity and administrative innovation, especially in video-conferencing, e-filing and assisted-access infrastructure, but the manuscript should not mix April 2022 e-Committee data with February 2023 High Court data without making the different reference dates explicit. Updated 2026

figures, if available from the Patna High Court registry, should be sought before final submission.

C. Bihar in Comparative Perspective

Bihar's position in the India Justice Report 2025 should be stated more carefully. The Report records Bihar as showing significant improvement in the overall justice-delivery index between the 2022 and 2025 editions, but that improvement is not the same as being the most improved state on the judiciary pillar alone. The India Justice Report ranks states across multiple pillars, including police, prisons, judiciary and legal aid; therefore, an overall improvement cannot be converted into a judiciary-specific finding without separate support from the judiciary-pillar data.

On the judiciary pillar, the picture is more mixed. Secondary reporting on the India Justice Report 2025 records that Rajasthan showed the sharpest judiciary-pillar improvement, climbing 11 ranks to sixth, while Bihar continued to face serious pendency concerns. The Report records that 71 per cent of Bihar's district-court cases were pending for more than three years, one of the clearest indicators that digitisation and institutional initiatives have not yet overcome the state's deeper backlog problem.

Accordingly, Bihar should be presented not as a "national-leading" judiciary performer, but as a state whose experience reveals both the promise and limits of digitisation. The Patna High Court's digitisation initiatives demonstrate that a resource-constrained jurisdiction can adopt video-conferencing, e-filing, paperless-court measures and e-Sewa Kendras in a serious way.

At the same time, the continuing age of district-court pendency shows that digital infrastructure must be accompanied by judicial appointments, court-staff support, case-management reform and reduction of avoidable government litigation. Bihar is therefore best used as a balanced case study: it supports the argument that digitisation is scalable in difficult administrative environments, but it does not support a claim that digitisation has already produced leading judiciary-pillar outcomes across the state.

VIII. DISCUSSION

It would be intellectually dishonest to claim that digitisation alone has yet eliminated India's case backlog; national pendency remains high, and independent research confirms that structural factors such as judicial vacancy and district-level socioeconomic conditions continue to influence outcomes alongside technology. The more defensible and better-supported conclusion, however, is that digitisation has performed the function properly asked of an infrastructure reform: it kept the judiciary operating through an unprecedented crisis, made the system's performance visible and auditable for the first time, and is now, through e-Sewa Kendras and cautiously limited assistive technologies, helping to address access and capability gaps that remain.

Judged against what a fifteen-year infrastructure programme can reasonably be expected to achieve on its own, rather than against the unrealistic benchmark of single-handedly resolving a decades-old backlog, the record supports continued and expanded investment in the same direction, not a change of course.

It is also worth situating the remaining backlog in proper proportion. Judicial vacancy and government litigiousness are policy failures located squarely within the executive and the legislature's control, not within the design or delivery of the e-Courts programme, and it would be a category error to treat the persistence of these separate failures as evidence against a reform that was never designed to substitute for judicial recruitment or litigation-policy reform in the first place.

Digitisation should instead be credited with having prevented what would otherwise have been a considerably worse outcome: a paper-bound judiciary facing the same vacancy and litigiousness pressures, without the benefit of virtual hearings, e-filing or a live national performance database, would in all likelihood have accumulated an even larger backlog over the same period, and would have done so without the transparency that now allows the shortfall to be measured, attributed and addressed.

IX. RECOMMENDATIONS

1. First, Phase III funding for legacy-record digitisation and e-Sewa Kendra expansion should be protected and, where possible, accelerated, since these are

the interventions most directly capable of converting the digital divide from a barrier into a bridge.

2. Second, digital-literacy training should be extended from judicial officers and advocates to litigants and paralegal volunteers directly, building on the substantial training infrastructure the programme has already established.
3. Third, the present sanctioned-function approach to judicial AI should be formalised into a clear national regulatory framework, drawing on the Supreme Court's 2025 white paper, the Kerala High Court's district judiciary policy and the Supreme Court's warning in *Gummadi Usha Rani*, so that assistive AI remains subordinate to human judicial decision-making.
4. Fourth, states with historically high pendency but demonstrated digitisation momentum, Bihar chief among them, should be prioritised for combined investment in judicial recruitment and last-mile connectivity, so that institutional reform already underway at the High Court level reaches the subordinate judiciary just as completely.
5. Fifth, the National Judicial Data Grid's transparency function should be leveraged more deliberately as a management tool, with High Courts required to publish periodic, court-wise digitisation performance reviews so that successful local practices, such as those pioneered at the Patna High Court, can be identified and replicated systematically across jurisdictions rather than diffusing informally.
6. Sixth, the government litigation policy already under discussion at the highest levels of the judiciary should be pursued in parallel with, rather than as a precondition for, continued digitisation funding, since the two reforms are complementary rather than substitutable and together offer the most credible route to a materially smaller backlog within the current decade.

X. CONCLUSION

Judicial digitisation in India has been a substantial institutional reform. The e-Courts Mission Mode Project and the National Judicial Data Grid have helped keep the justice

system functioning through crisis, introduced a degree of transparency that the paper-based system did not provide, and strengthened access to court services through e-filing, virtual hearings, case-status platforms and assisted-access infrastructure.

A growing but still unevenly regulated set of assistive technologies, including translation, transcription and case-management tools, has also begun to support access and administration, provided that human judicial reasoning and independent verification remain central. The programme's own funding history, sustained and expanded across three sequential phases, is itself among the strongest available evidence of its perceived value within the institution that commissioned it. Bihar's experience shows both the potential and the limits of technology-led judicial reform.

The Patna High Court's digitisation initiatives demonstrate that even a resource-constrained state can build meaningful capacity in video-conferencing, e-filing, paperless-court processes and assisted-access infrastructure. However, Bihar should not be described as the most improved state in the country's judiciary rankings.

The more accurate position is that Bihar recorded notable improvement in the India Justice Report's overall justice-delivery assessment, while its judiciary-pillar indicators continued to reveal serious concerns, including the high share of district-court cases pending for more than three years. This makes Bihar a useful but mixed case study: digitisation can strengthen institutional functioning, but it must be matched by vacancy reduction, case-management reform and broader investment in judicial capacity.

None of this requires denying that a substantial backlog remains, or that judicial vacancy and government litigiousness continue to demand urgent, separate policy attention. What the evidence reviewed in this paper does support is a clear allocation of responsibility: digitisation has consistently delivered on the objectives properly within its scope, and the tasks that remain outstanding belong chiefly to complementary reforms that digitisation itself cannot substitute for.

The appropriate response to the backlog that remains is therefore not scepticism about the direction of reform, but sustained, undiminished investment in completing it,

alongside the recruitment and litigation-policy reforms needed to let its full benefits be realised.

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