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Artificial Intelligence in Judicial Systems: Constitutional Frameworks and Democratic Safeguards in Poland and India. A Comparative Governance Analysis

[Sztuczna inteligencja w systemach wymiaru sprawiedliwości – ramy konstytucyjne i gwarancje demokratyczne w Polsce i Indiach. Analiza porównawcza modeli zarządzania]

Abstract

We examine how constitutional structures shape judicial AI governance through a comparative analysis of Poland and India. We propose Sovereign Digital Constitutionalism—constitutional compatibility, technological sovereignty, democratic accountability, and rights preservation—and show how the EU AI Act operationalises these principles for high-risk judicial AI. Poland's *governance-first* sequencing (LEX-AIS within EU AI Act frameworks) contrasts with India's *implementation-first* deployment (SUVAS, SUPACE, e-Courts Phase III), yielding distinct risk profiles and coordination demands. We develop a three-tier safeguards model (constitutional, procedural, technical) and a judge-centred workflow in which AI assists but never decides. We argue that success depends less on technical sophistication than on constitutional safeguards, judicial leadership, and adaptive governance. We conclude with evidence-based recommendations for democratic jurisdictions integrating AI whilst preserving judicial independence and public legitimacy.

Keywords: judicial AI, constitutional governance, digital sovereignty, Poland, India, EU AI Act, democratic safeguards, comparative law.

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I. Introduction: Constitutional Governance and Sovereign Digital Constitutionalism

This section establishes the governance challenge posed by judicial AI, clarifies our analytical scope, presents our research questions and methodology, develops the theoretical framework of Sovereign Digital Constitutionalism, and examines the EU AI Act as concrete regulatory architecture operationalising these principles.

The Governance Challenge

The integration of artificial intelligence into judicial systems represents a fundamental governance challenge requiring careful constitutional analysis. When courts deploy AI for legal research, case management, or administrative functions, they make constitutional choices about how justice is administered in the digital age. As Pasquale (2015) observes, algorithmic systems increasingly shape critical decisions affecting individual rights, yet their opacity challenges traditional accountability mechanisms essential to democratic governance.

Our focus is AI that interfaces with judicial reasoning—legal research, document analysis, translation. General digitisation infrastructure such as case management systems, e-filing platforms, or video conferencing is referenced only to describe governance context. This distinction proves critical: whilst broader digitisation raises important questions, AI systems that interact with judicial reasoning processes and potentially influence adjudicatory outcomes demand distinct constitutional analysis.

Poland's LEX-AIS initiative, developed through partnership between Gdańsk University of Technology and LEX SECURE AI, exemplifies strategic planning within EU regulatory frameworks (Gdańsk University of Technology, 2024). India's e-Courts Phase III programme represents a ₹7,210 crore allocation (approximately €809 million at an exchange rate of INR/EUR ≈ 89.1 on 13 September 2023, the date of Cabinet approval) addressing case backlogs across 18,735 courts (Department of Justice, 2023). These distinct approaches illuminate how constitutional architecture shapes technological governance possibilities.

The stakes extend beyond operational efficiency. As Jasanoff (2015) argues, technological systems embody particular visions of social order and power relations. This concern resonates across democratic jurisdictions, where commentators emphasize that AI systems require careful adaptation to ensure alignment with diverse constitutional traditions and legal frameworks

(Malhotra, 2021). Judicial AI is no exception: systems encode assumptions about legal reasoning, evidentiary weight, and the nature of justice itself—assumptions that may align poorly with particular constitutional contexts. Democratic systems must therefore approach judicial AI not as neutral tools but as constitutional interventions requiring deliberate governance.

Research Questions and Methodology

This comparative analysis addresses three interconnected questions:

- ◆ First, how do constitutional structures shape judicial AI governance whilst preserving democratic institutions and judicial independence? Constitutional architecture—whether federal common law (India) or unitary civil law (Poland)—determines governance approaches, risk profiles, and mitigation strategies.
- ◆ Second, how can procedural safeguards preserve judicial independence whilst enabling technological innovation? We examine mechanisms balancing efficiency gains with maintaining human authority, distinguishing between “governance-first sequencing” (embedding safeguards before deployment) and “implementation-first sequencing” (retrofitting protections after operational pressures emerge).
- ◆ Third, what lessons emerge from early AI implementations in democratic systems regarding safeguards and sovereignty? Drawing from operational experience, we identify critical success factors and warning signals for judicial AI deployment.

Our methodology employs comparative constitutional analysis using verified government sources, EU AI Act documentation, and established legal frameworks. We focus on governance rather than technical evaluation, ensuring policy relevance for legal practitioners and policymakers.

Source selection follows strict verification protocols: (1) primary legislative and constitutional texts accessed through official government repositories; (2) EU regulatory documents from EUR-Lex; (3) government policy documents from ministry websites with verifiable publication dates; (4) peer-reviewed scholarship from established academic publishers. We exclude secondary media reporting, unverified statistics, and pre-publication materials. Jurisdictional generalisation is limited to democratic systems with independent judiciaries; findings may not apply to authoritarian contexts or hybrid regimes.

This approach aligns with Habermas’s (1996) deliberative democracy framework, examining how technological systems can be integrated within communicative rationality essential to legitimate law-making.

Theoretical Framework: Sovereign Digital Constitutionalism

Digital sovereignty in judicial contexts extends beyond territorial control to encompass functional capacity shaping algorithmic systems according to constitutional values. As Couldry and Mejias (2019) argue, data colonization occurs when external systems impose their logic on domestic institutions. When courts deploy AI tools, they risk similar colonization: algorithmic processes trained on datasets or commercial priorities may conflict with domestic constitutional norms.

We adapt Sovereign Digital Constitutionalism to judicial AI as four design requirements derived from but distinct from De Gregorio's (2021) broader conceptualisation:

(i) Constitutional Compatibility requires AI systems align with domestic reasoning traditions—the interpretive methodologies and precedential frameworks embedded in constitutional adjudication. As Sen (2009) argues, procedural rationality cannot be divorced from substantive outcomes—AI systems must respect both process values and substantive constitutional commitments.

(ii) Technological Sovereignty ensures courts retain meaningful control over systems, maintaining human authority as paramount. Sovereignty encompasses both technical control over algorithmic processes and institutional authority determining appropriate AI uses within judicial workflows. This resonates with Hood and Margetts's (2007) analysis of government in the digital age, emphasising how technological choices either enhance or diminish state capacity for autonomous governance.

(iii) Democratic Accountability mandates transparent processes and robust audit mechanisms maintaining public trust and oversight. Democratic legitimacy requires AI systems operate under clear governance structures with accessible documentation, enabling meaningful scrutiny by legal professionals, academics, and civil society. This operationalises Jasanoff's (2015) concept of civic epistemology—how democratic publics assess and validate knowledge claims, including those generated algorithmically.

(iv) Rights Preservation necessitates comprehensive bias prevention measures and effective remedy systems protecting individual rights. This pillar ensures AI implementation creates no new vulnerabilities for litigants nor systematically disadvantages protected groups. Noble's (2018) *Algorithms of Oppression* demonstrates how seemingly neutral systems can embed and amplify discrimination, making proactive safeguards essential.

The EU AI Act as Governance Architecture

The EU Artificial Intelligence Act—Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024—provides compre-

hensive regulatory architecture operationalising constitutional principles for judicial AI governance. The Act's risk-based approach classifies judicial AI as "high-risk," triggering stringent mandatory obligations fundamentally shaping implementation possibilities across member states (European Union, 2024).

As a directly applicable Regulation with phased application dates, the AI Act imposes *ex ante* conformity assessment, logging, and meaningful human oversight for high-risk systems in the judicial domain. Risk management systems must identify, analyse, and mitigate risks throughout AI system lifecycles, with particular attention to fundamental rights impacts. This requirement transforms abstract ethical concerns into legally enforceable compliance obligations with significant financial penalties—fines up to €15 million or 3% of global annual turnover for non-compliance with the high-risk system obligations discussed here (Art. 99[4]); the Act's highest tier, €35 million or 7%, is reserved for the Article 5 prohibited-practices category, which does not apply to judicial AI as classified in this paper.

Data quality standards mandate high-quality, representative training data with bias detection and mitigation measures. Data governance frameworks must ensure accuracy, completeness, and relevance whilst addressing potential discriminatory biases—operationalising Noble's (2018) critique through concrete regulatory requirements.

Human oversight mechanisms ensure meaningful control over AI system decisions and recommendations. Oversight measures must enable humans to understand system capabilities, detect anomalies, and intervene or deactivate systems when necessary. This addresses Pasquale's (2015) black box critique by mandating transparency sufficient for meaningful human evaluation.

The Act represents what De Gregorio (2021) terms "digital constitutionalism"—extending constitutional principles into algorithmic governance through enforceable legal requirements. For Poland, it provides both constraint and opportunity: constraint through mandatory compliance burdens, opportunity through harmonised standards supporting cross-border judicial cooperation.

II. Comparative Constitutional Governance: Poland and India

This section examines how Poland's unitary civil law structure and India's federal common law architecture shape distinct governance possibilities and implementation strategies for judicial AI, revealing characteristic patterns in sequencing choices and regulatory approaches.

Constitutional Architecture and Coordination Capacity

Poland's Unitary Civil Law Structure

Polish judicial AI development operates within constitutional protections established in Articles 173 and 178 of the Constitution of the Republic of Poland (1997). Article 173 establishes courts and tribunals as separate and independent from other authorities, whilst Article 178 guarantees judges' independence and subjection only to the Constitution and statutes. These constitutional guarantees ensure judges remain subject only to the Constitution and law—principles extending to AI systems, which must enhance rather than compromise judicial autonomy.

The LEX-AIS initiative exemplifies strategic planning balancing innovation with constitutional compliance. The research partnership between Gdańsk University of Technology and LEX SECURE AI, publicly announced in November 2024, represents measured methodology prioritising careful development over rapid deployment (Gdańsk University of Technology, 2024).¹ The system remains in pre-deployment research phase with no confirmed operational timeline, allowing thorough constitutional review and stakeholder consultation.

Verified capabilities include speech-to-text transcription systems and comprehensive court ruling database access, designed to assist rather than replace judicial decision-making processes. Government support for judicial AI development is evidenced by ministerial engagement with research initiatives and technical conferences addressing AI applications in justice systems (Polish Ministry of Digital Affairs, 2024).

Poland's unitary structure enables coordinated strategic planning with centralised regulatory authority ensuring uniform standards. The risk concentrates in single governance frameworks, but deployment can proceed systematically with comprehensive stakeholder consultation before operational implementation.

India's Federal Common Law Structure

India's judicial AI implementation operates within constitutional protections established in Articles 21 (protection of life and personal liberty), 50 (separation of judiciary from executive), and 124 (establishment and constitution of Supreme Court) of the Constitution of India (1950). The

¹ As of December 2024, LEX-AIS represents a carefully planned research initiative in pre-deployment phase. The partnership between Gdańsk University of Technology and LEX SECURE AI prioritizes thorough development, constitutional review, and stakeholder consultation before operational deployment, exemplifying governance-first sequencing

Supreme Court's recognition in *Justice K.S. Puttaswamy (Retd.) v. Union of India* (2017) that "Privacy is a constitutionally protected right which emerges primarily from the guarantee of life and personal liberty" establishes constitutional protections applicable to judicial AI systems processing sensitive legal data.

The federal structure creates implementation complexities absent in unitary systems, requiring coordination across 28 states and 8 union territories maintaining distinct judicial administrations.

SUVAS (Supreme Court Vidhik Anuvaad Software), operational since 26 November 2019, addresses multilingual legal complexity through document translation across nine Indian languages. Official documentation confirms over 31,000 judgments have been translated, as per Supreme Court of India public documentation (accessed: December 2024), enhancing access to justice in India's linguistically diverse federal structure (Supreme Court of India, 2023/2024).

SUPACE (Supreme Court Portal for Assistance in Court's Efficiency), launched 6 April 2021, provides legal research platform serving Supreme Court judges. The system enhances judicial research capabilities whilst maintaining human authority over legal interpretation and precedent application (Supreme Court of India, 2021).

E-Courts Phase III (2023–2027) represents nationwide digitisation distinct from these judicial AI tools. Union Cabinet approval on 13 September 2023 authorised ₹7,210 crore for comprehensive digital infrastructure across India's expansive judicial system covering 18,735 courts (as per Department of Justice Phase III documentation, accessed: December 2024), including video conferencing, e-filing, and digital case management (Department of Justice, 2023).

India's federal structure permits experimental variation enabling contextual adaptation and learning from diverse implementations. However, coordination challenges persist, with constitutional consistency requiring continuous monitoring across jurisdictional boundaries. As Watson (1993) observes, federal structures create laboratory conditions for legal innovation but require strong coordinating mechanisms preventing fragmentation.

Comparative Insight: Coordination Versus Experimentation

Poland's unitary structure offers coordination advantages but concentrates governance risk. India's federal structure enables diverse experimentation but faces coordination challenges. Neither proves inherently superior—each enables different governance possibilities with distinct trade-offs requiring contextual assessment.

Implementation Drivers: Governance-First Versus Implementation-First Sequencing

Poland's Strategic Planning

Poland pursues strategic modernisation within EU regulatory frameworks, ensuring constitutional compliance guides deployment. The research-phase approach enables front-loading safeguards before operational pressures emerge—what we term “governance-first sequencing.”

Poland's implementation of the EU AI Act through national legislation demonstrates “sovereignty supplementation”—exceeding minimum requirements through additional protections preserving national constitutional values whilst maintaining EU regulatory alignment (Polish Ministry of Digital Affairs, 2024).

The draft Act on Artificial Intelligence Systems proposes establishing an AI Development and Safety Commission. Effective implementation will require coordination with existing regulatory authorities, including the Personal Data Protection Office (UODO), to ensure coherent oversight of high-risk AI systems whilst respecting established institutional competences (UODO, 2024).

Poland's proposed requirements include independent conformity assessment decoupled from ministry influence, mandatory source code access, and a “four-eyes principle” requiring dual human review for rights-affecting decisions. These sovereignty supplements demonstrate how national legislation can enhance supranational frameworks whilst respecting EU harmonisation objectives.

India's Crisis-Driven Implementation

India's implementation responds to urgent operational imperatives, addressing substantial case backlogs through technological solutions. India's phased roll-out under implementation-first pressures surfaces coordination frictions typical of federal architectures, requiring *ex post* governance consolidation via the e-Committee. Operational systems provide valuable experience but implementation sometimes precedes comprehensive governance framework development—“implementation-first sequencing” requiring subsequent retrofitting.

The phased approach demonstrates adaptive learning, with pilot programmes identifying challenges before national scaling. However, coordination across federal units remains problematic, with uneven implementation across states. The Supreme Court e-Committee provides administrative guid-

ance but lacks statutory authority to ensure uniform compliance across all states (Supreme Court e-Committee, 2024).

India's experience reveals characteristic challenges of crisis-driven implementation at scale. Dunleavy et al.'s (2006) analysis of digital era governance—the transformation of public administration through information technology—illuminates these dynamics: when technological transformation occurs under crisis conditions, governance frameworks often lag behind operational deployment, creating retrofitting challenges.

Comparative Insight: Sequencing Trade-offs

Governance-first sequencing (Poland) risks over-engineering solutions for theoretical problems not encountered in operational contexts, whilst implementation-first sequencing (India) requires careful management of institutional and technical continuities to ensure safeguards integrate effectively as systems evolve and stakeholders gain operational experience. Neither approach proves inherently superior—the optimal sequencing depends on constitutional structure, institutional capacity, urgency of operational pressures, and risk tolerance.

Regulatory Frameworks: EU Harmonisation and Federal Adaptation

Poland's EU Integration

Poland benefits from EU AI Act harmonisation providing detailed compliance requirements and enforcement mechanisms. National legislation supplements rather than duplicates EU requirements, adding sovereignty protections whilst maintaining regulatory alignment.

The EU AI Act creates both constraints and opportunities. Constraints include mandatory compliance burdens and standardised risk classifications. Opportunities include harmonised standards facilitating cross-border judicial cooperation and clear legal frameworks reducing regulatory uncertainty.

For Poland, successful implementation requires resolving coordination challenges between proposed new governance bodies and existing regulatory authorities whilst maintaining alignment with EU requirements. This institutional coordination challenge shapes implementation timelines and governance architecture.

India's Federal Coordination

India operates without comparable supranational framework, developing national governance mechanisms through Supreme Court e-Committee guidelines and pilot programme experience. This creates flexibility enabling contextual adaptation but risks inconsistent implementation across federal units.

The e-Committee approach reflects India's constitutional structure and common law tradition, enabling judicial leadership in technology governance. However, absence of statutory authority limits enforcement capacity, creating dependency on voluntary compliance and professional norms rather than legal mandates.

Federal coordination challenges mean that innovations in one state may not transfer readily to others, and constitutional protections require verification across diverse implementations. This creates ongoing governance overhead but enables learning from diverse contexts.

Comparative Insight: Harmonisation Versus Autonomy

EU harmonisation provides Poland with detailed frameworks reducing governance development costs but limiting flexibility for jurisdictional particularity. India's federal autonomy enables contextual adaptation but requires continuous coordination efforts preventing fragmentation. The comparative analysis reveals that neither regulatory centralisation nor complete autonomy proves optimal—effective governance requires balancing standardisation benefits with contextual adaptation capacity.

III. Three-Tier Safeguards Framework: An Analytical Approach

Effective governance of judicial AI benefits from layered protections operating at distinct institutional levels. Our comparative analysis reveals that successful implementations—whether Poland's governance-first or India's implementation-first sequencing—employ safeguards at constitutional, procedural, and technical levels. This multi-tier architecture prevents AI from compromising judicial independence whilst enabling beneficial innovation. As Hood and Margetts (2007) observe, effective governance requires redundant control mechanisms operating through different logics and institutional levels.

We present this framework not as prescriptive requirements but as analytical categories derived from comparative constitutional analysis. Jurisdictions will adapt these principles according to their constitutional structures, institutional capacities, and governance traditions.

Constitutional Safeguards

Foundational Layer

Constitutional-level protections establish non-derogable boundaries that AI systems cannot transgress regardless of efficiency gains or technological capabilities. As Habermas (1996) argues, constitutional democracy requires maintaining the internal connection between law's coercive force and its claim to legitimacy—AI systems cannot disrupt this connection without undermining legal authority itself.

Our comparative analysis identifies several constitutional principles that emerge across both jurisdictions despite their different legal traditions:

Judicial independence remains paramount, with AI systems serving rather than directing judicial decision-making. Poland's Articles 173 and 178 and India's Articles 50 and 124 establish constitutional guarantees ensuring judges remain subject only to the Constitution and law—principles extending to AI systems, which must enhance rather than compromise judicial autonomy.

Due process protections require meaningful human oversight at critical decision points. Sen's (2009) capability approach illuminates why automated processing cannot substitute for human judgment in rights-affecting determinations: justice requires considering individual circumstances and capabilities in ways that resist algorithmic reduction.

Privacy protections constrain state technology deployment involving personal data. India's *Puttaswamy* judgment (2017) establishes that judicial AI systems must satisfy constitutional scrutiny when processing sensitive legal information.

Proportionality principles—requiring that restrictions on rights be necessary, suitable, and proportionate to legitimate aims—demand that efficiency gains justify any intrusions. This constitutional doctrine prevents AI deployment justified solely by administrative convenience without demonstrating genuine necessity.

Procedural Safeguards

Process Layer

Procedural protections enable litigants to challenge AI-influenced decisions and ensure meaningful human oversight. The CEPEJ European Ethical Charter (2018/2023) articulates foundational principles applicable across democratic systems: respect for fundamental rights, prevention of discrimination, quality and security, transparency, and user control.

Our analysis suggests several procedural mechanisms that enhance accountability:

Human review requirements address what Pasquale (2015) terms automation bias—the tendency to prefer automated outputs even when human judgment would prove superior. Documentation requirements can evidence genuine judicial evaluation rather than passive acceptance of algorithmic recommendations. Where AI input is considered, written reasons should briefly state acceptance, partial acceptance, or rejection, and why—supporting appellate review and public legitimacy.

Contestation mechanisms extend appeal rights to challenging AI-influenced decisions, empowering appellate courts to review algorithmic input and assess its appropriateness. The effectiveness of such mechanisms depends on accessibility and substance rather than mere formality.

Transparency obligations require disclosure of AI involvement enabling informed challenge. The EU AI Act’s explainability requirements (European Union, 2024) illustrate how regulatory frameworks can operationalise transparency principles through concrete mandates, though implementation details will vary across jurisdictions.

Technical Safeguards

System Layer

Technical protections provide measurable safeguards against algorithmic discrimination whilst enabling systematic evaluation. As Noble (2018) demonstrates, technical systems require technical oversight mechanisms capable of detecting and mitigating bias embedded in training data or algorithmic design.

Bias detection systems monitor outputs for discriminatory patterns across protected characteristics. Regular auditing can identify and remediate disparate impacts before they become systemic, operationalising substantive equality principles through continuous technical monitoring. The specific

methodologies and audit frequencies will depend on jurisdictional risk assessments and institutional capacity.

Audit trails enable reconstruction of AI recommendations and assessment of their influence on decisions. Audit trails must be granular enough to reconstruct algorithmic influence on a decision, yet privacy-preserving under constitutional and data-protection norms. Logging requirements support both accountability and organisational learning, creating institutional memory about system performance and limitations.

Explainability mechanisms ensure AI recommendations can be understood by legal professionals. The EU AI Act's restrictions on black-box systems incompatible with transparency requirements illustrate regulatory approaches, though technical implementation varies significantly across different AI architectures and use cases.

Implementation Sequencing: Observed Patterns

Learning from Comparative Experience

Rather than prescribing specific implementation phases, our comparative analysis reveals characteristic patterns in how jurisdictions approach judicial AI deployment. These patterns offer insights for governance design without imposing universal templates.

Governance-first sequencing (exemplified by Poland) prioritises framework development before operational deployment:

- ◆ Constitutional compliance frameworks precede pilot programmes
- ◆ Stakeholder engagement occurs during design phases rather than after deployment
- ◆ Success metrics are established before rather than derived from implementation
- ◆ Judicial AI literacy develops through training before system introduction
- ◆ This approach may reduce retrofitting costs and implementation resistance, though it risks over-engineering solutions for problems not encountered operationally. The research-phase investment enables stakeholder buy-in but extends timelines before efficiency benefits materialise.

Implementation-first sequencing (characteristic of India's approach) deploys systems addressing urgent operational needs whilst developing governance incrementally:

- ◆ Pilot programmes identify practical challenges informing framework development
- ◆ Stakeholder learning occurs through operational experience
- ◆ Success metrics evolve based on observed outcomes
- ◆ Training needs emerge from actual usage patterns

This approach delivers immediate efficiency gains and grounds governance in operational reality, though it requires careful management of institutional and technical continuities to ensure safeguards integrate effectively as systems evolve.

Common success factors across both approaches include:

- ◆ Treating constitutional principles as design requirements rather than implementation constraints
- ◆ Maintaining judicial leadership over technology governance
- ◆ Ensuring transparency protocols appropriate to decision stakes
- ◆ Building institutional capacity for continuous evaluation and adaptation

Poland's experience suggests front-loading governance development enables smoother deployment, whilst India's operational learning demonstrates how adaptive governance can succeed under crisis-driven implementation. Both jurisdictions illustrate that constitutional safeguards, procedural transparency, and technical oversight must operate synergistically regardless of sequencing choices.

IV. Governance Implications for Democratic Jurisdictions

Through comparative analysis of Poland and India, we identify essential governance principles, comparative lessons from both jurisdictions' approaches, and the imperative that judicial AI serve rather than subvert constitutional foundations.

Fundamental Principles

Judicial AI implementation represents not merely technical modernisation but fundamental choices about justice, sovereignty, and human dignity in democratic societies. Through comparative analysis of Poland and India, we identify essential governance principles:

Technology serves justice; human judgment remains paramount. AI systems must function as tools enhancing rather than replacing judicial reasoning, maintaining complete human accountability for legal decisions. As Sen (2009) argues, justice requires human judgment synthesising law, facts, and values—a synthesis resisting algorithmic reduction.

Constitutional principles guide rather than constrain AI adoption when appropriate safeguards are embedded from inception. Democratic governance frameworks provide essential protections enabling responsible innovation whilst preventing technological overreach. The EU AI Act demonstrates

how regulatory architecture can operationalise constitutional values through enforceable requirements (European Union, 2024).

Sovereignty through strategic interdependence: Neither complete technological dependence nor isolation proves sustainable. Both Poland and India demonstrate meaningful autonomy requires choosing dependencies carefully whilst maintaining control over critical functions. This aligns with Hood and Margetts's (2007) analysis: effective digital governance requires managing, not eliminating, dependencies.

Comparative Lessons

Poland's Contribution: Governance-First Sequencing

Poland's strategic planning within EU frameworks demonstrates how supranational regulation can support rather than constrain national sovereignty when supplemented with additional protections. The measured research-phase approach enables constitutional compliance verification before operational deployment.

Key lessons include the importance of resolving coordination challenges before deployment, the value of stakeholder consultation during design phases, and the benefits of regulatory clarity reducing implementation uncertainty. Poland's experience suggests that front-loading governance development, whilst time-intensive, may reduce subsequent retrofitting costs and implementation resistance.

India's Contribution: Implementation-First Learning

India's operational experience reveals both promise and challenges of crisis-driven implementation at scale. Phased deployment addressing urgent backlogs provides valuable learning but risks inadequate governance framework development when urgency overrides deliberation.

Key lessons include the importance of pilot programmes identifying operational challenges, the value of federal diversity enabling contextual learning, and the necessity of strong coordinating mechanisms preventing fragmentation. India's experience demonstrates that implementation-first approaches can succeed when coupled with adaptive governance capacity and institutional learning mechanisms.

Neither Approach Proves Inherently Superior

Watson's (1993) insights on legal transplants apply: successful implementation requires adapting frameworks to constitutional contexts rather than imposing universal templates. The optimal approach depends on constitutional structure, institutional capacity, urgency of operational pressures, and risk tolerance. Jurisdictions must assess their own contexts rather than simply adopting "best practices" from elsewhere.

Justice as Human Endeavour

Successful judicial AI integration requires deliberate institutional design ensuring technology serves rather than subverts constitutional foundations. The framework of Sovereign Digital Constitutionalism offers guidance for courts worldwide navigating algorithmic transformation whilst preserving judicial independence and fundamental rights.

As jurisdictions worldwide confront similar challenges, international learning accelerates progress. Poland can benefit from India's operational experience identifying implementation pitfalls, whilst India can learn from Poland's strategic regulatory approach embedding safeguards before deployment. This comparative learning must respect constitutional particularity whilst identifying universal principles.

The question confronting democratic societies is not whether AI will transform judicial systems but whether transformation strengthens or subverts constitutional foundations upon which legitimate adjudication depends. The answer lies not in technology itself but in governance choices made deploying it.

Judicial AI implementation must be court-driven rather than technology-driven, ensuring administration of justice remains what Habermas (1996) terms a communicative endeavour—one requiring human judgment, dialogue, and moral reasoning that artificial intelligence can assist but never replace. Only through robust constitutional governance, judicial leadership, and unwavering commitment to human dignity can courts harness AI's benefits whilst preserving justice as an essentially human undertaking.

Abstrakt

Badamy, w jaki sposób struktury konstytucyjne kształtują zarządzanie sztuczną inteligencją w wymiarze sprawiedliwości – przez porównawczą analizę sytuacji w Polsce i Indiach. Proponujemy koncepcję „suwerennego konstytucjonalizmu cyfrowego” –

obejmującą zgodność z konstytucją, suwerenność technologiczną, demokratyczną odpowiedzialność oraz ochronę praw – i pokazujemy, w jaki sposób unijne rozporządzenie o sztucznej inteligencji (AI Act) wdraża te zasady w odniesieniu do sztucznej inteligencji stosowanej w sądownictwie, wiążącej się z wysokim ryzykiem. Polskie podejście – oparte na *priorytecie zarządzania* (LEX-AIS w ramach unijnej ustawy o sztucznej inteligencji) – kontrastuje z indyjskim podejściem opartym na *priorytecie wdrażania* (SUVAS, SUPACE, e-Courts Phase III), co skutkuje odmiennymi profilami ryzyka i wymogami w zakresie koordynacji. Wypracowujemy trójstopniowy model zabezpieczeń (konstytucyjnych, proceduralnych, technicznych) oraz model pracy skoncentrowany na sędziach, w którym sztuczna inteligencja pełni rolę pomocniczą, ale nigdy nie podejmuje decyzji. Stwierdzamy, że sukces zależy w mniejszym stopniu od zaawansowania technologicznego, a w większym od gwarancji konstytucyjnych, decydującej roli sądownictwa oraz adaptacyjnego zarządzania. Na zakończenie przedstawiamy potwierdzone naukowo zalecenia dla demokratycznych systemów prawnych wdrażających SI – z jednoczesnym zachowaniem niezależności sądownictwa oraz legitymacji społecznej.

Słowa kluczowe: SI w wymiarze sprawiedliwości, konstytucyjny porządek prawny, suwerenność cyfrowa, Polska, Indie, unijna ustawa o SI, demokratyczne zabezpieczenia, prawo porównawcze.

Disclaimer

The views and analytical frameworks presented in this paper represent the authors' independent academic research and do not reflect the positions, policies, or official views of their affiliated institutions, the Polish judiciary, the Indian judiciary, or any governmental body. This comparative constitutional analysis addresses general governance principles applicable across democratic jurisdictions and does not evaluate specific current governmental policies or initiatives in either Poland or India.

Author Contributions

Both authors contributed equally to this work. Prof. Góra-Błaszczkowska provided expertise on Polish constitutional frameworks and EU regulatory contexts. Prof. Radhakrishnan provided expertise on Indian constitutional systems and comparative public administration. Both authors jointly developed the analytical framework, comparative methodology, and policy recommendations. Both authors reviewed and approved the final manuscript.

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The authors declare no competing interests.

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