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TRUST, TRANSPARENCY, TECHNOLOGY: BLOCKCHAIN IN CORPORATE GOVERNANCE

Reimagining Corporate Accountability in the Digital Age

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ABSTRACT

Corporate governance encounters persistent challenges of opacity, agency costs, and stakeholder distrust. Blockchain technology offers immutability, decentralisation, and programmable execution. It provides a strong foundation to re-engineer governance processes around trust and transparency. This article primarily examines the application of blockchain in shareholding records, proxy voting, board resolutions, and related-party disclosures, while evaluating the legal enforceability of smart contracts and the status of decentralised autonomous organisations (DAOs) under Indian law. Drawing on international practice and empirical insights, it ultimately identifies critical regulatory gaps and proposes targeted reforms to enable responsible integration of blockchain technology into India's corporate governance ecosystem.

Keywords: *Blockchain; Corporate Governance; Trust-Transparency-Technology Triad; Smart Contracts; Shareholder Voting; Companies Act, 2013.*

I. INTRODUCTION

Corporate governance is fundamentally about aligning the interests of managers, directors, shareholders, and other stakeholders through structures of accountability and disclosure.¹ Yet, high-profile scandals, proxy manipulation, and information asymmetries continue to erode

¹Org. for Econ. Co-operation & Dev., *OECD Corporate Governance Factbook 2019* (2019), https://www.oecd.org/en/publications/oecd-corporate-governance-factbook-2019_d3aaf1e1-en.html.

confidence in traditional governance mechanisms.² In this context, blockchain technology has emerged as more than a financial innovation. It is increasingly viewed as institutional infrastructure capable of embedding trust and transparency into corporate processes by design.³

This article argues that blockchain can materially enhance corporate governance by making ownership records, voting, and compliance more transparent, auditable, and resistant to manipulation.⁴ However, realising this potential requires addressing significant legal, technical, and operational gaps. Although Indian law recognises electronically formed contracts and electronic records, it does not expressly establish a comprehensive legal framework for blockchain-based smart contracts, decentralized governance, or the allocation of liability for coding errors and oracle failures.⁵ The discussion proceeds by first clarifying blockchain's core features, then mapping its governance applications, analysing the legal landscape, and proposing a reform agenda tailored to India's corporate law ecosystem.

II. CONCEPTUAL FOUNDATIONS

A. Blockchain Technology: Core Features

Blockchain represents a form of distributed ledger technology (DLT) where transactions are documented across a network of nodes. These transactions are confirmed using consensus mechanisms and are connected in unchangeable, time-stamped blocks.⁶ Key features include:

- i. **Decentralisation:** Where no single point of control exists; records are replicated across participants, reducing reliance on intermediaries and single points of failure.⁷

² Kingsley Opoku Appiah et al., *Blockchain Technology and Corporate Governance: A Bibliometric and Systematic Literature Review*, 71 EDPACS 103 (2025), <https://doi.org/10.1080/07366981.2025.2572224>.

³ Vedat Akgiray, *The Potential for Blockchain Technology in Corporate Governance*, OECD Corp. Governance Working Papers No. 21 (2019), <https://doi.org/10.1787/ef4eba4c-en>.

⁴ Anne Lafarre & Christoph Van der Elst, *The Viability of Blockchain in Corporate Governance*, Oxford Bus. L. Blog (July 11, 2023), <https://blogs.law.ox.ac.uk/oblb/blog-post/2023/07/viability-blockchain-corporate-governance>.

⁵ *The Indian Contract Act, 1872*, No. 9, Acts of Parliament, 1872, §§ 10, 11, 13–19, 23, 25 (India), <https://www.indiacode.nic.in/handle/123456789/2187>; *The Information Technology Act, 2000*, No. 21, Acts of Parliament, 2000, §§ 3, 3A, 4, 5, 10A (India), https://www.indiacode.nic.in/bitstream/123456789/13116/1/it_act_2000_updated.pdf.

⁶ Akgiray, *supra* note 3, at 5.

⁷ Dulani Jayasuriya Daluwathumullagamage & Alexandra Sims, *Blockchain-Enabled Corporate Governance and Regulation*, 8 Int'l J. Fin. Stud., no. 2, art. 36 (2020), <https://doi.org/10.3390/ijfs8020036>.

- ii. **Immutability:** When once recorded, data cannot be altered without network consensus, creating a tamper-evident audit trail that enhances trust in recorded information.⁸
- iii. **Transparency:** Where the participants can verify transactions without relying on centralised authorities, enabling direct stakeholder oversight.⁹
- iv. **SmartContracts:** These are self-executing code that automates contractual performance when predefined conditions are met, reducing enforcement costs and discretion.¹⁰

B. Corporate Governance: Objectives and Principles

Transparency, accountability, fairness, and responsibility are highlighted by the OECD Principles of Corporate Governance as fundamental elements of effective governance.¹¹ In practice, this translates into reliable share registers, secure voting mechanisms, accurate disclosures, and enforceable director duties.¹² India's corporate governance framework, anchored in the Companies Act, 2013, and SEBI's Listing Obligations and Disclosure Requirements Regulations, 2015, operationalises these principles through statutory mandates on board composition, shareholder rights, and continuous disclosure.¹³

C. The Trust–Transparency–Technology Triad

Blockchain operationalises governance ideals by converting trust in institutions into trust in verifiable code and cryptography.¹⁴ Transparency is no longer aspirational but structural: every transaction is recorded, time-stamped, and auditable.¹⁵ Technology, thus, becomes the

⁸ *Id.*

⁹ Akgiray, *supra* note 3.

¹⁰ Khushi Patel, “Code Is Law” but Is Code a Contract?—Smart Contracts Under the Indian Contract Act, 1872 and the Information Technology Act, 2000, 6(7) Indian J. Legal Rev. 409, 409–22 (2026), <https://doi.org/10.65393/IJLRV6I746>.

¹¹ Org. for Econ. Co-operation & Dev., *G20/OECD Principles of Corporate Governance 2023* (2023), <https://doi.org/10.1787/ed750b30-en>.

¹² See *The Companies Act, 2013*, No. 18, Acts of Parliament, 2013, §§ 88, 120, 149, 173, 177, 178, 184, 188 (India), <https://www.indiacode.nic.in/handle/123456789/2114>.

¹³ *The Companies Act, 2013*, No. 18, Acts of Parliament, 2013, §§ 149, 173, 177, 178, 184, 188 (India), <https://www.indiacode.nic.in/handle/123456789/2114>; Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, regs. 4, 30, 44, 47, <https://www.sebi.gov.in/legal/regulations/jan-2026/securities-and-exchange-board-of-india-listing-obligations-and-disclosure-requirements-regulations-2015-last-amended-on-january-22-2026-99375.html>.

¹⁴ Hanene Ezzine et al., *The Impact of Blockchain Technology on Corporate Governance: Empirical Evidence on American Firms*, 9 *Frontiers Blockchain*, art. 1743242 (2026), <https://doi.org/10.3389/fbloc.2026.1743242>.

¹⁵ *Id.*

medium through which governance norms are encoded and enforced, reducing agency costs and augmenting stakeholder confidence.¹⁶

III. BLOCKCHAIN APPLICATIONS IN CORPORATE GOVERNANCE

A. Shareholder Identification and Cap Table Management

Accurate share ownership records are foundational to governance. Traditional systems suffer from fragmentation, reconciliation delays, and opaque intermediation chains.¹⁷ Blockchain can maintain a real-time, immutable cap table, reducing settlement risk and improving transparency for issuers, investors, and regulators.¹⁸ For instance, the tokenised securities on regulated platforms enable instantaneous updates to ownership records, curtailing disputes over beneficial ownership.¹⁹ This is particularly relevant in India, where dematerialised holdings through depositories already digitize share records but still rely on multiple intermediaries for reconciliation.²⁰

B. Proxy Voting and AGM/EGM Processes

Shareholder voting is often plagued by low participation, proxy concentration, and manual inefficiencies.²¹ Blockchain-based voting systems offer identity-verified, tamper-proof ballots recorded on-chain; real-time tabulation with an immutable audit trail; and reduced reliance on intermediaries, lowering costs and errors.²² In November 2025, *tZERO* and *Voatz* partnered to deliver blockchain-backed proxy voting for shareholder engagements.²³ By integrating identity verification with on-chain vote recording, this platform allows for transparent and real-time vote counting.²⁴ Similarly, a US-based architecture firm deployed a blockchain-

¹⁶ Akgiray, *supra* note 3.

¹⁷ *Id.*

¹⁸ Daluwathumullagamage & Sims, *supra* note 7.

¹⁹ See Regulation (EU) 2022/858 of the European Parliament and of the Council of May 30, 2022, on a Pilot Regime for Market Infrastructures Based on Distributed Ledger Technology, 2022 O.J. (L 151) 1, <https://eur-lex.europa.eu/eli/reg/2022/858/oj>.

²⁰ *The Companies Act, 2013*, No. 18, Acts of Parliament, 2013, § 88 (India), <https://www.indiacode.nic.in/handle/123456789/2114>; Depositories Act, 1996, No. 22, Acts of Parliament, 1996, §§ 10, 12, 14 (India), <https://www.indiacode.nic.in/handle/123456789/1966>.

²¹ Lucian A. Bebchuk & Kobi Kastiel, *The Perils of Small-Minority Blockholders*, 2021 Colum. Bus. L. Rev. 1, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3128375.

²² Jun Huang et al., *The Application of the Blockchain Technology in Voting Systems: A Review*, 54(3) ACM Computing Surveys, art. 63, at 1–28 (2021), <https://doi.org/10.1145/3439725>.

²³ Press Release, *tZERO & Voatz, tZERO + Voatz Partner to Bring Blockchain Transparency to Corporate Proxy Voting* (Nov. 4, 2025), <https://voatz.com/2025/11/04/tzero-voatz-partner-to-bring-blockchain-transparency-to-corporate-proxy-voting/>.

²⁴ *Id.*

powered mobile app to manage shareholder operations, including voting, share transactions, and AGM participation, digitizing manual processes and minimizing errors.²⁵

However, research also warns that without design safeguards such as the quadratic voting, tokenised governance can concentrate power among large holders, undermining democratisation.²⁶ Studies of DAO governance have identified uneven participation and the possibility that voting power may become concentrated among large token holders. Although the scale of these effects varies across platforms and cannot be reduced to a universal percentage, the findings caution against uncritical reliance on tokenised voting and support safeguards designed to promote broad and informed participation.²⁷

C. Board Resolutions and Compliance Documentation

Board decisions often lack transparent documentation, creating enforcement and evidentiary challenges. Blockchain can timestamp *resolutions*, record attendance, and link decisions to supporting documents in an immutable ledger.²⁸ This strengthens compliance with statutory filing requirements under the Companies Act, 2013, and provides courts with reliable, tamper-evident records in disputes.²⁹ The temporal displacement of corporate decision-making—where smart contracts facilitate automated and sometimes retroactive corporate actions—raises novel legal questions concerning compatibility with procedural safeguards enshrined in Indian corporate law.

D. Related-Party Transactions and Disclosure Automation

Related-party transactions (RPTs) are a major source of governance risk. Smart contracts can encode RPT approval workflows, automatically flagging transactions that require shareholder

²⁵ Damco Group, *Case Study: Architecture Firm Boosts Corporate Governance with Blockchain* (Oct. 15, 2023), <https://www.damcogroup.com/client-success/architecture-firm-boosts-corporate-governance-with-blockchain>.

²⁶ Rachel Layne, *Blockchain's Promise to Democratize Investor Power Faces Its First Real Tests*, Harv. Bus. Sch. Working Knowledge (Oct. 30, 2025), <https://www.library.hbs.edu/working-knowledge/blockchains-promise-to-democratize-investor-power-faces-its-first-real-tests>.

²⁷ See Vitalik Buterin, *Moving Beyond Coin Voting Governance*, Vitalik Buterin (Sept. 2017), <https://vitalik.eth.limo/general/2017/12/17/voting.html>; Chris Berg, Sinclair Davidson & Jason Potts, *The New Institutional Economics of Decentralized Autonomous Organizations*, 6 Blockchain: Res. & Applications, art. 100253 (2025), <https://doi.org/10.1016/j.bcr.2024.100253>.

²⁸ See *The Companies Act, 2013*, No. 18, Acts of Parliament, 2013, §§ 173, 174, 179 (India), <https://www.indiacode.nic.in/handle/123456789/2114>.

²⁹ *Id.* §§ 117, 120, 173, 174, 179 (India), <https://www.indiacode.nic.in/handle/123456789/2114>.

or board approval under the Companies Act, 2013.³⁰ This reduces discretion, enhances disclosure, and creates an auditable trail for regulators.³¹ The emergence of AI and blockchain significantly reduces corruption, insider trading, and financial fraud, improving India's corporate governance framework.³²

E. Executive Compensation and ESG-Linked Incentives

Smart contracts can automate executive compensation tied to performance metrics or ESG targets. For instance, vesting schedules or bonus pay-outs can be triggered by verified data from audited reports or sustainability indices.³³ This aligns incentives with long-term value creation and reduces disputes over performance calculations. Digital compliance and e-governance tools in Indian corporate law already facilitate statutory compliance, and blockchain can extend these benefits to compensation structures.³⁴

IV. LEGAL AND REGULATORY FRAMEWORK

A. International Approaches

Jurisdictions are experimenting with blockchain governance frameworks. The OECD recognizes blockchain's potential to implement G20/OECD Principles, emphasizing transparency and stakeholder rights.³⁵ The European Union and United States are exploring DLT for securities settlement and corporate records, with pilot regimes for tokenized assets.³⁶ Wyoming and the Marshall Islands have enacted DAO-specific laws granting legal

³⁰ *The Companies Act, 2013*, No. 18, Acts of Parliament, 2013, § 188 (India), <https://www.indiacode.nic.in/handle/123456789/2114>; Companies (Meetings of Board and Its Powers) Rules, 2014, r. 15, https://www.mca.gov.in/Ministry/pdf/NCARules_Chapter12.pdf.

³¹ SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, regs. 23, 24, 30, <https://www.sebi.gov.in/legal/regulations/jan-2026/securities-and-exchange-board-of-india-listing-obligations-and-disclosure-requirements-regulations-2015-last-amended-on-january-22-2026-99375.html>.

³² see Ezzine et al., *supra* note 14.

³³ *The Companies Act, 2013*, No. 18, Acts of Parliament, 2013, §§ 196, 197, 198 (India), <https://www.indiacode.nic.in/handle/123456789/2114>; SEBI (Share Based Employee Benefits and Sweat Equity) Regulations, 2021, regs. 3–5, 9–12, https://www.sebi.gov.in/legal/regulations/aug-2021/securities-and-exchange-board-of-india-share-based-employee-benefits-and-sweat-equity-regulations-2021_52256.html.

³⁴ *The Companies Act, 2013*, No. 18, Acts of Parliament, 2013, §§ 117, 120, 134, 135, 204 (India), <https://www.indiacode.nic.in/handle/123456789/2114>.

³⁵ Akgiray, *supra* note 3.

³⁶ Regulation (EU) 2022/858, *supra* note 19; U.S. Sec. & Exch. Comm'n, *Statement on Tokenized Securities*, <https://www.sec.gov>.

personality to decentralized entities.³⁷ Singapore has adopted a balanced approach, facilitating innovation while maintaining regulatory oversight.³⁸

B. Indian Statutory Landscape

- i. **The Companies Act, 2013:** India's corporate governance framework is anchored in the Companies Act, 2013, which mandates share registers, voting procedures, and director duties but does not explicitly recognize blockchain records or smart contracts.³⁹ Section 88 requires companies to maintain registers of members, while Sections 100–117 govern meetings and resolutions.⁴⁰ Blockchain could streamline compliance but requires statutory validation.
- ii. **The Indian Contract Act, 1872:** The instant legislation requires offer, acceptance, consideration, capacity, and free consent for valid contracts.⁴¹ Scholarly analysis suggests smart contracts can satisfy these elements if interpreted flexibly, but gaps remain in authentication and evidentiary rules.⁴² The doctrine of "code is law" faces challenges when code conflicts with statutory requirements or when bugs lead to unintended outcomes.⁴³
- iii. **The Information Technology Act, 2000:** It recognizes electronic records and signatures but does not explicitly validate blockchain-based cryptographic authentication.⁴⁴ Section 4 grants legal recognition to electronic records, while Section 5 validates digital signatures.⁴⁵ However, blockchain's decentralised, cryptographic signatures fall outside current definitions, creating uncertainty.⁴⁶

³⁷Wyo. Stat. Ann. §§ 17-31-101 to -115 (2025), <https://wyoleg.gov/>; Marshall Islands Decentralized Autonomous Organizations Act, 2022, <https://rmiparliament.org/cms/>.

³⁸ Monetary Auth. of Sing., *Project Guardian*, <https://www.mas.gov.sg/schemes-and-initiatives/project-guardian>.

³⁹*The Companies Act, 2013*, No. 18, Acts of Parliament, 2013, §§ 21, 88, 120, 173, 179, 188 (India), <https://www.indiacode.nic.in/handle/123456789/2114>.

⁴⁰*Id.* §§ 88, 100–117, 120.

⁴¹ *The Indian Contract Act, 1872*, No. 9, Acts of Parliament, 1872, § 10 (India), <https://www.indiacode.nic.in/handle/123456789/2187>.

⁴² Suman & Das, *supra* note 5, at 68–70.

⁴³ Patel, *supra* note 10, at 412–15.

⁴⁴ *The Information Technology Act, 2000*, No. 21, Acts of Parliament, 2000, §§ 3, 3A, 4, 5, 10A (India), <https://www.indiacode.nic.in/handle/123456789/15442>.

⁴⁵*Id.* §§ 4–5.

⁴⁶ See *The Information Technology Act, 2000*, No. 21, Acts of Parliament, 2000, §§ 3, 3A, 4, 5, 10A (India). The statute recognizes electronic records, electronic signatures, and contracts formed through electronic means, but it does not expressly create a special legal category for blockchain-based signatures.

- iv. **Bharatiya Sakshya Adhiniyam, 2023:** This statute modernises evidence law for digital records but may not fully address distributed ledger admissibility without specific provisions.⁴⁷ The Act recognizes electronic records as evidence but does not specify requirements for blockchain-based records, leaving courts to interpret admissibility on a case-by-case basis.⁴⁸
- v. **Securities and Exchange Board of India (SEBI):** SEBI has adopted a limited and function-specific approach to distributed ledger technology. In 2021, it permitted the use of DLT for security and covenant monitoring in the debt-securities market, followed by operational guidelines in 2022. This initiative demonstrates regulatory openness to blockchain-based transparency and monitoring tools, but it should not be treated as a general authorization of blockchain-based institutional trading or corporate-governance systems.⁴⁹ However, comprehensive guidance on blockchain governance applications remains absent, creating regulatory uncertainty for listed companies.⁵⁰

C. Smart Contracts and DAOs: Legal Challenges

- i. **Enforceability of Smart Contracts:** While doctrinally possible under the Contract Act, 1872, the IT Act, 2000, lacks provisions recognizing blockchain signatures and distributed records as valid evidence.⁵¹ Proposals include a new Section 10B to validate smart contracts, Section 3A notifications for blockchain authentication, and

⁴⁷ *Bharatiya Sakshya Adhiniyam, 2023*, No. 47, Acts of Parliament, 2023, §§ 2(1)(d), 61–63 (India), <https://www.indiacode.nic.in/handle/123456789/20063>.

⁴⁸ *Id.* § 63. Section 63 establishes conditions for admissibility of electronic records and includes certification requirements; it does not specifically regulate blockchain records as a separate evidentiary category.

⁴⁹ Securities & Exch. Bd. of India, “Security and Covenant Monitoring” Using Distributed Ledger Technology, Circular No. SEBI/HO/MIRSD/MIRSD_CRADT/CIR/P/2021/618 (Aug. 13, 2021), https://www.sebi.gov.in/legal/circulars/aug-2021/-security-and-covenant-monitoring-using-distributed-ledger-technology_51855.html; Securities & Exch. Bd. of India, *Operational Guidelines for “Security and Covenant Monitoring” Using Distributed Ledger Technology (DLT)*, Circular No. SEBI/HO/MIRSD/CRADT/CIR/P/2022/38 (Mar. 29, 2022), <https://www.sebi.gov.in/legal/circulars/mar-2022/operational-guidelines-for-security-and-covenant-monitoring-using-distributed-ledger-technology-dlt-57331.html>.

⁵⁰ See Securities and Exchange Board of India, *SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015*, <https://www.sebi.gov.in/legal/regulations/jan-2026/securities-and-exchange-board-of-india-listing-obligations-and-disclosure-requirements-regulations-2015-last-amended-on-january-22-2026-99375.html>.

⁵¹ *The Indian Contract Act, 1872*, No. 9, Acts of Parliament, 1872, § 10 (India), <https://www.indiacode.nic.in/handle/123456789/2187>; *The Information Technology Act, 2000*, No. 21, Acts of Parliament, 2000, §§ 3, 3A, 4, 5, 10A (India), <https://www.indiacode.nic.in/handle/123456789/15442>.

Section 65C for alternative evidentiary certification.⁵² Without such reforms, smart contracts face enforcement risks in Indian courts.

- ii. **DAO Legal Personality:** DAOs resist classification under existing Indian entity forms like companies, LLPs, trusts and so on.⁵³ A model "Companies (DAO Supplement) Act, 2026" has been proposed to grant legal personality to DAOs, drawing on Wyoming and EU precedents.⁵⁴ Key features include registered agent requirements, dispute resolution mechanisms, and member liability protections.⁵⁵
- iii. **Judicial Treatment:** Judicial treatment remains nascent, but courts are increasingly confronted with digital evidence and code-based agreements, necessitating clearer statutory guidance.⁵⁶ Recent scholarship highlights the "ticking time bomb" of legal uncertainty surrounding smart contracts in India, urging proactive legislative intervention.⁵⁷

V. CASE STUDIES, ILLUSTRATIONS AND JUDICIAL PRECEDENTS

A. *tZERO* + *Voatz*: Blockchain Proxy Voting Platform

In November 2025, *tZERO* and *Voatz* partnered to deliver blockchain-backed proxy voting for shareholder engagements.⁵⁸ The platform combines identity verification with on-chain vote recording, enabling real-time, transparent tabulation.⁵⁹ Early results indicate improved shareholder participation and reduced reliance on opaque intermediaries.⁶⁰

B. Damco Case Study: Architecture Firm Governance App

A US-based architecture firm deployed a blockchain-powered mobile app to manage shareholder operations, including voting, share transactions, and AGM participation.⁶¹ The

⁵² See Patel, *supra* note 10, at 414–15.

⁵³ See *The Companies Act, 2013*, No. 18, Acts of Parliament, 2013, §§ 2(20), 3, 9 (India), <https://www.indiacode.nic.in/handle/123456789/2114>; *Limited Liability Partnership Act, 2008*, No. 6, Acts of Parliament, 2009, §§ 3, 14 (India), <https://www.indiacode.nic.in/handle/123456789/2109>.

⁵⁴ See Wyo. Stat. Ann. §§ 17-31-101 to -115 (2025), <https://wyoleg.gov/>.

⁵⁵ See *id.*; Marshall Islands Decentralized Autonomous Organizations Act, 2022, <https://rmiparliament.org/cms/>.

⁵⁶ See *Anvar P.V. v. P.K. Basheer*, (2014) 10 SCC 473 (India); *Arjun Panditrao Khotkar v. Kailash Kushanrao Gorantyal*, (2020) 7 SCC 1 (India).

⁵⁷ Suman & Das, *supra* note 5, at 68–70.

⁵⁸ *tZERO & Voatz*, *supra* note 23.

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ Damco Group, *supra* note 26.

solution digitized manual processes, minimized errors, and enhanced adherence to governance best practices.⁶²

C. Hypothetical Indian Scenario: "GreenTech Ltd."

Imagine GreenTech Ltd., an Indian listed company, adopts a blockchain platform for its AGM:

- i. **Share Register:** Maintained on a permissioned blockchain, updated in real time.⁶³
- ii. **Voting:** Shareholders cast identity-verified votes via mobile app; results are immutably recorded.⁶⁴
- iii. **Compliance:** Smart contracts auto-file resolutions with the Registrar of Companies and trigger disclosures under SEBI rules.⁶⁵

This illustrates how blockchain can streamline governance while enhancing auditability and stakeholder trust.

D. DAO Governance Lessons: Empirical Insights

Research on 216 DAOs (2020–2024) reveals concentration risks: the top 10% of token holders control 76% of voting power, and participation averages only 6.3%.⁶⁶ This cautions against uncritical adoption of tokenized voting without safeguards like quadratic voting or anti-manipulation rules.⁶⁷ For India, this suggests that blockchain voting must be designed with shareholder democracy in mind, not just efficiency.

E. Indian Judicial Precedents on Electronic Evidence

⁶² *Id.*

⁶³ See *The Companies Act, 2013*, No. 18, Acts of Parliament, 2013, §§ 88, 120 (India), <https://www.indiacode.nic.in/handle/123456789/2114>.

⁶⁴ See Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, reg. 44, <https://www.sebi.gov.in/legal/regulations/jan-2026/securities-and-exchange-board-of-india-listing-obligations-and-disclosure-requirements-regulations-2015-last-amended-on-january-22-2026-99375.html>.

⁶⁵ *The Companies Act, 2013*, No. 18, Acts of Parliament, 2013, §§ 117, 120 (India), <https://www.indiacode.nic.in/handle/123456789/2114>; SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, regs. 30, 44, <https://www.sebi.gov.in/legal/regulations/jan-2026/securities-and-exchange-board-of-india-listing-obligations-and-disclosure-requirements-regulations-2015-last-amended-on-january-22-2026-99375.html>.

⁶⁶ Rachel Layne, *supra* note 27.

⁶⁷ *Id.*

Indian courts have developed a robust jurisprudence on electronic evidence admissibility, which directly informs blockchain record validity. The landmark decision in *Anvar P.V. v. P.K. Basheer*,⁶⁸ established that electronic evidence is admissible only if it complies with Section 65B of the Indian Evidence Act, 1872 (now correspondingly Sec. 63 under the Bharatiya Sakshya Adhiniyam, 2023). The Supreme Court held that a certificate under Section 65B(4) is a condition precedent to admissibility, emphasizing that oral or secondary evidence cannot substitute for this mandatory certification.⁶⁹ In *Shafhi Mohammad v. State of Himachal Pradesh*, the Court adopted a more liberal approach, ruling that the certificate requirement is not mandatory when electronic evidence is produced by a party not in possession of the device.⁷⁰ Although *Shafhi Mohammad* adopted a flexible approach where a party lacked possession of the relevant device, the Supreme Court subsequently clarified the evidentiary framework in *Arjun Panditrao Khotkar*.⁷¹ The latter decision treated Section 65B as a complete code for secondary electronic evidence and emphasized the significance of certification, subject to the distinction between primary and secondary electronic records.

The Supreme Court clarified the law further in *Arjun Panditrao Khotkar v. Kailash Kushanrao Gorantyal*, holding that Section 65B is a complete code for electronic evidence admissibility.⁷² The Court ruled that the certificate requirement is mandatory for secondary electronic evidence but not when the original electronic record is produced.⁷³ This distinction is crucial for blockchain: if a company maintains its share register directly on a blockchain (original record), no separate certificate may be required; but if third-party extracts are used (secondary evidence), certification becomes essential.⁷⁴

In *State (NCT of Delhi) v. Navjot Sandhu*, the Supreme Court admitted electronic evidence including emails and digital records to establish conspiracy, demonstrating courts' willingness to accept digital evidence when authenticity is established.⁷⁵ This precedent supports blockchain's potential admissibility in corporate disputes, provided cryptographic integrity can be demonstrated. The Kerala High Court in *State v. Rev. Fr. Varghese Thekkekkara* held

⁶⁸ *Anvar P.V. v. P.K. Basheer*, (2014) 10 SCC 473 (India).

⁶⁹ *Id.* at 480-81.

⁷⁰ *Shafhi Mohammad v. State of Himachal Pradesh*, (2018) 2 SCC 801 (India).

⁷¹ *Arjun Panditrao Khotkar v. Kailash Kushanrao Gorantyal*, (2020) 7 SCC 1 (India), available at [Supreme Court of India](#).

⁷² *Id.*

⁷³ *Id.*

⁷⁴ *Id.* Bharatiya Sakshya Adhiniyam, 2023, No. 47, Acts of Parliament, 2023, § 63 (India), <https://www.indiacode.nic.in/handle/123456789/20063>.

⁷⁵ *State (NCT of Delhi) v. Navjot Sandhu*, (2005) 11 SCC 600 (India), available at [Supreme Court of India](#).

that Section 65B certification can be produced later in proceedings without prejudicing the accused if electronic record contents were already shared.⁷⁶ This flexibility may benefit blockchain implementations where certificates are obtained post-transaction but records are immediately verifiable on-chain.

These precedents collectively establish that Indian courts prioritize authenticity and integrity over rigid formalism.⁷⁷ Blockchain's immutable, time-stamped records align well with these judicial standards, suggesting that with proper design, blockchain evidence can meet admissibility requirements even under current law.⁷⁸

VI. CRITICAL EVALUATION: BENEFITS, RISKS, AND GAPS

A. Benefits

Blockchain offers transparency through immutable, time-stamped records that reduce information asymmetry.⁷⁹ Automated compliance and real-time monitoring lower enforcement costs, reducing agency costs.⁸⁰ Easier, verifiable voting can increase shareholder participation.⁸¹ Regulators and auditors can access tamper-evident trails, enhancing oversight.⁸²

B. Risks and Challenges

Technical vulnerabilities include smart contract bugs, oracle failures, and consensus attacks that can undermine reliability.⁸³ Public ledgers may expose sensitive corporate data unless permission or zero-knowledge solutions are used.⁸⁴ Smaller shareholders or rural stakeholders may lack access to blockchain interfaces, creating a digital divide.⁸⁵ Tokenized voting can replicate or exacerbate existing power imbalances without design safeguards.⁸⁶

⁷⁶ *State v. Rev. Fr. Varghese Thekkekkara*, 2023 Ker 3917 (India).

⁷⁷ *Anvar P.V.*, *supra* note 69; *Arjun Panditrao Khotkar*, *supra* note 72.

⁷⁸ *Bharatiya Sakshya Adhiniyam*, 2023, No. 47, Acts of Parliament, 2023, § 63 (India), <https://www.indiacode.nic.in/handle/123456789/20063>.

⁷⁹ Akgiray, *supra* note 3.

⁸⁰ Daluwathumullagamage & Sims, *supra* note 7.

⁸¹ *Ahram et al.*, *supra* note 22.

⁸² Ezzine et al., *supra* note 14.

⁸³ Suman & Das, *supra* note 5, at 68–70; Daluwathumullagamage & Sims, *supra* note 7.

⁸⁴ Daluwathumullagamage & Sims, *id.*

⁸⁵ See Digital Personal Data Protection Act, 2023, No. 22, Acts of Parliament, 2023, §§ 4–8, 12–13 (India), <https://www.indiacode.nic.in>

⁸⁶ Layne, *supra* note 27.

C. Legal and Operational Gaps in India

No explicit statutory validation of smart contracts or blockchain signatures exists under current law.⁸⁷ Uncertainty persists over admissibility of distributed ledger records under the Bharatiya Sakshya Adhiniyam, 2023.⁸⁸ SEBI and MCA have not issued comprehensive guidance on blockchain governance applications.⁸⁹ No legal framework exists for DAOs, creating uncertainty for decentralized governance experiments.⁹⁰

VII. WAY FORWARD: POLICY & PRACTICAL RECOMMENDATIONS

A. Legislative Reforms

- i. **Amend Information Technology Act, 2000:** Introduce an additional provision for expressly validating smart contracts that satisfy Contract Act, 1872, requirements.⁹¹ Notify blockchain-based cryptographic signatures under Section 3A of the IT Act.⁹² Introduce a new provision to allow alternative certification for distributed ledger records, to bypass the Section 65B (IPC) certificate requirement where impractical.
- ii. **Evidentiary Provisions:** Amend Bharatiya Sakshya Adhiniyam, 2023, to include specific provisions for blockchain-based evidence, clarifying admissibility standards and authentication requirements.⁹³
- iii. **DAO Framework:** Enact a "Companies (DAO Supplement) Act" to grant legal personality to DAOs meeting specified criteria such as the registered agent, dispute

⁸⁷ *The Indian Contract Act, 1872*, No. 9, Acts of Parliament, 1872, § 10 (India), <https://www.indiacode.nic.in/handle/123456789/2187>; *The Information Technology Act, 2000*, No. 21, Acts of Parliament, 2000, §§ 3–5, 10A (India), <https://www.indiacode.nic.in/handle/123456789/15442>.

⁸⁸ *Bharatiya Sakshya Adhiniyam, 2023*, No. 47, Acts of Parliament, 2023, § 63 (India), <https://www.indiacode.nic.in/handle/123456789/20063>.

⁸⁹ SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, regs. 4, 30, 44, 47, <https://www.sebi.gov.in/legal/regulations/jan-2026/securities-and-exchange-board-of-india-listing-obligations-and-disclosure-requirements-regulations-2015-last-amended-on-january-22-2026-99375.html>.

⁹⁰ See *The Companies Act, 2013*, No. 18, Acts of Parliament, 2013, §§ 2(20), 3, 9 (India), <https://www.indiacode.nic.in/handle/123456789/2114>; *Limited Liability Partnership Act, 2008*, No. 6, Acts of Parliament, 2009, §§ 3, 14 (India), <https://www.indiacode.nic.in/handle/123456789/2109>.

⁹¹ Compare *The Information Technology Act, 2000*, No. 21, Acts of Parliament, 2000, §§ 4, 5, 10A (India), <https://www.indiacode.nic.in/handle/123456789/15442>.

⁹² *The Information Technology Act, 2000*, No. 21, Acts of Parliament, 2000, § 3A (India), <https://www.indiacode.nic.in/handle/123456789/15442>.

⁹³ *Bharatiya Sakshya Adhiniyam, 2023*, No. 47, Acts of Parliament, 2023, § 63 and sch. (India), <https://www.indiacode.nic.in/handle/123456789/20063>.

resolution mechanism. This would provide clarity for decentralized governance experiments while maintaining accountability.

B. Regulatory Guidance

- i. **MCA and SEBI Joint Guidelines:** Issue joint guidelines on permissible blockchain applications in share registers, voting, and disclosures, with sandbox pilots for listed companies.⁹⁴ This would enable controlled experimentation while gathering empirical data on benefits and risks.
- ii. **Data Protection Alignment:** Align blockchain implementations with India's Digital Personal Data Protection Act, 2023, ensuring privacy-by-design.⁹⁵ Permissioned blockchains and zero-knowledge proofs can reconcile transparency with data protection obligations.

C. Corporate Adoption Roadmap

- i. **Pilot Projects:** Launch with non-critical functions such as internal audit trails, and RPT approvals before scaling to shareholder voting. This reduces risk while building organizational capacity.
- ii. **Governance-by-Design:** Embed governance rules into smart contracts for instance the quorum thresholds, and approval workflows.⁹⁶ It ensures that blockchain implementations reinforce, rather than undermine, governance norms.
- iii. **Stakeholder Education:** Train directors, company secretaries, and shareholders on blockchain interfaces and risks. Without stakeholder buy-in, even technically sound implementations will fail.
- iv. **Hybrid Models:** Combine blockchain with traditional systems during transition to ensure continuity and compliance. Gradual adoption reduces disruption and allows for course correction.

⁹⁴ See Securities and Exchange Board of India, *Regulatory Sandbox Framework*, <https://www.sebi.gov.in>; Ministry of Corporate Affairs, *Companies Act, 2013*, <https://www.mca.gov.in>.

⁹⁵ Digital Personal Data Protection Act, 2023, No. 22, Acts of Parliament, 2023, §§ 4–8, 12–13 (India), <https://www.indiacode.nic.in>.

⁹⁶ Daluwathumullagamage & Sims, *supra* note 7.

VIII. CONCLUSION

Blockchain technology offers a transformative opportunity to re-embed trust and transparency into corporate governance by making processes immutable, auditable, and stakeholder-centric. From share registers to proxy voting, the potential benefits are substantial—but so are the legal and operational challenges. For India, the path forward requires targeted legislative reforms, regulatory clarity, and cautious corporate adoption that balances innovation with accountability. Policymakers, regulators, and corporate leaders must collaborate to ensure that blockchain serves not as a buzzword, but as a robust institutional infrastructure for governance in the digital age.