



REGULATING ALGORITHMIC GOVERNANCE IN CORPORATE DECISION-MAKING: EMERGING LEGAL AND REGULATORY CHALLENGES

By *Pankhudi Singh*

From *North Eastern Hill University*

Abstract:

The increasing integration of algorithmic and artificial intelligence-based systems into corporate decision-making processes has fundamentally transformed the manner in which corporations operate, govern, and allocate responsibility. From recruitment and credit assessment to risk management and strategic planning, algorithmic governance now plays a decisive role in shaping corporate outcomes. While these systems promise efficiency, objectivity, and scalability, they also raise complex legal concerns relating to accountability, transparency, bias, and liability. This article critically examines the emerging legal and regulatory challenges posed by algorithmic governance within corporate structures, with particular reference to the Indian legal framework.

The article analyses how traditional doctrines of corporate responsibility, mens rea, and fiduciary duties struggle to accommodate automated decision-making systems that function with limited human intervention. It explores the inadequacy of existing corporate and technology laws in addressing harms caused by opaque algorithms, especially in cases involving discrimination, regulatory non-compliance, and financial misconduct. By examining statutory frameworks such as the Companies Act, 2013, the Digital Personal Data Protection Act, 2023, and relevant judicial approaches to corporate accountability, the paper highlights the regulatory gaps in attributing liability for algorithm-driven decisions.

Further, the article draws comparative insights from international regulatory developments, including the European Union's approach to AI governance, to evaluate potential pathways for reform in India. It argues for the need to recalibrate corporate governance norms to ensure transparency, human oversight, and accountability in algorithmic decision-making processes. The paper concludes by proposing a regulatory framework that balances innovation with responsibility, advocating for clearer standards of corporate liability, enhanced disclosure obligations, and ethical governance mechanisms. Through this analysis, the article seeks to contribute to the evolving discourse on corporate regulation in the age of algorithmic governance.

Key Word

Algorithmic Governance; Corporate Decision-Making; Corporate Responsibility; Artificial Intelligence Regulation; Corporate Accountability; Digital Governance; Technology Law; Regulatory Frameworks

Introduction:

The rapid advancement of algorithmic and artificial intelligence-driven technologies has significantly altered the landscape of corporate decision-making. Corporations increasingly rely on algorithmic systems to perform functions traditionally exercised by human discretion, including recruitment and performance evaluation, credit scoring, risk assessment, compliance monitoring, pricing strategies, and strategic planning. This shift towards algorithmic governance reflects a broader transformation in corporate operations aimed at efficiency, cost reduction, and data-driven objectivity. However, the growing delegation of decision-making authority to automated systems raises complex legal and regulatory questions that existing frameworks of corporate law are ill-equipped to address.

Algorithmic governance, as a mode of decision-making, challenges foundational principles of corporate responsibility and accountability. Traditional corporate law is premised on human



agency—directors, officers, and employees acting as the “directing mind and will” of the corporation. When decisions are generated or substantially influenced by opaque algorithms, often developed by third-party vendors and trained on vast datasets, attributing responsibility for unlawful or harmful outcomes becomes increasingly difficult. Issues such as algorithmic bias, lack of transparency, explainability deficits, and unintended discriminatory effects expose corporations to legal risks while simultaneously creating regulatory blind spots.

In the Indian context, this challenge is particularly acute. India’s corporate and regulatory framework has evolved to address misconduct arising from human action or omission, but it offers limited guidance on liability for algorithm-driven decisions. Statutes such as the Companies Act, 2013 emphasise fiduciary duties, due diligence, and managerial responsibility, yet they do not explicitly account for automated governance structures. Similarly, technology-focused legislation, including the Digital Personal Data Protection Act, 2023, prioritises data protection and consent but does not comprehensively regulate algorithmic accountability within corporate governance. As a result, corporate reliance on algorithmic systems risks creating accountability gaps where harm occurs without clear legal attribution.

The absence of a coherent regulatory approach raises pressing concerns about corporate compliance, consumer protection, employment discrimination, and financial integrity. Automated decision-making systems may replicate or amplify existing biases, produce outcomes that are difficult to audit, and obscure decision-making chains, thereby undermining transparency and fairness. These concerns are not merely theoretical; globally, corporations have faced legal and reputational consequences arising from algorithmic failures in hiring, lending, and market behaviour. Despite this, Indian jurisprudence has yet to fully engage with the implications of algorithmic governance for corporate responsibility.

Against this backdrop, this article examines the emerging legal and regulatory challenges posed by

algorithmic governance in corporate decision-making. It analyses the tension between innovation and accountability, focusing on the limitations of traditional doctrines of corporate liability when applied to automated systems. The paper further explores whether existing statutory and judicial mechanisms are capable of addressing algorithm-induced harm or whether a recalibration of corporate governance norms is necessary.

By drawing comparative insights from international regulatory developments, particularly the European Union’s evolving approach to artificial intelligence governance, the article seeks to identify potential pathways for reform in the Indian legal system. It argues that effective regulation of algorithmic governance must move beyond data protection and incorporate principles of transparency, human oversight, and accountability into corporate law. Ultimately, the article aims to contribute to the evolving discourse on corporate responsibility in the digital age by proposing a framework that ensures innovation does not come at the cost of legal accountability and ethical governance.

Conceptual Framework: Understanding Algorithmic Governance in Corporate Decision-Making

Algorithmic governance refers to the use of automated, data-driven systems to guide, influence, or determine decision-making processes that were traditionally exercised through human discretion. In the corporate context, algorithmic governance encompasses the deployment of artificial intelligence (AI), machine learning models, and predictive analytics to manage internal operations and external interactions, including recruitment, employee evaluation, credit assessment, pricing mechanisms,



compliance monitoring, and risk management.¹ These systems operate by analysing large volumes of data to generate outputs that directly shape corporate conduct, often with minimal or no real-time human intervention.

Unlike conventional decision-making tools, algorithmic systems possess a degree of autonomy and opacity that distinguishes them from earlier forms of corporate technology. Many algorithmic models, particularly those based on machine learning, function as “black boxes,” where the rationale behind a specific output cannot be easily traced or explained, even by their developers.² This opacity raises significant concerns for corporate governance, which traditionally relies on principles of transparency, accountability, and traceability of decisions to identifiable human actors. When algorithmic outputs form the basis of corporate actions, the question of who bears responsibility for erroneous or unlawful outcomes becomes increasingly complex.

From a corporate law perspective, governance structures are premised on hierarchical accountability, with directors and senior management entrusted with fiduciary duties of care, skill, and diligence.³ Algorithmic governance disrupts this model by diffusing decision-making authority across technological systems, software developers, data providers, and corporate users. As a result, corporate responsibility becomes fragmented, making it difficult to attribute liability under existing legal doctrines that require proof of intent, negligence, or breach of duty by natural persons.⁴ This diffusion of responsibility is particularly problematic where algorithmic decisions

lead to discriminatory practices, regulatory violations, or financial harm.

Moreover, the increasing reliance on third-party algorithmic tools further complicates corporate accountability. Corporations often procure AI systems from external vendors, integrating them into internal decision-making processes without full control over their design, training data, or operational logic.⁵ While such outsourcing does not absolve corporations of legal responsibility, existing regulatory frameworks provide limited guidance on the standard of due diligence required when deploying algorithmic systems. This creates uncertainty regarding the extent to which corporate actors can be held accountable for harms arising from technological tools that they neither fully understand nor directly control.

Algorithmic governance also raises normative concerns regarding fairness and equality in corporate decision-making. Empirical studies have demonstrated that algorithmic systems may replicate or exacerbate existing social biases embedded within training data, leading to discriminatory outcomes in employment, credit allocation, and consumer profiling.⁶ In the absence of mandatory transparency and audit mechanisms, such biases often remain undetected, undermining substantive equality and eroding trust in corporate governance processes.

In this context, algorithmic governance cannot be viewed merely as a technological advancement but must be understood as a structural shift with profound legal implications. The integration of automated decision-making systems necessitates a re-evaluation of corporate responsibility frameworks to ensure that

¹ Karen Yeung, ‘Algorithmic Regulation: A Critical Interrogation’ (2018) 12 Regulation & Governance 505.

² Frank Pasquale, *The Black Box Society: The Secret Algorithms That Control Money and Information* (Harvard University Press 2015).

³ Companies Act 2013, ss 166(2), 166(3).

⁴ *Iridium India Telecom Ltd v Motorola Inc* (2011) 1 SCC 74.

⁵ Andrew D Selbst and others, ‘Fairness and Abstraction in Sociotechnical Systems’ (2019) 81 Proceedings of the ACM on Human-Computer Interaction 1.

⁶ Solon Barocas and Andrew D Selbst, ‘Big Data’s Disparate Impact’ (2016) 104 California Law Review 671.



accountability is not diluted by technological complexity. Without such recalibration, algorithmic governance risks creating regulatory vacuums where harm occurs without effective legal remedy, thereby weakening the foundational principles of corporate law.

Algorithmic Governance and the Indian Corporate Legal Framework

The Indian corporate regulatory framework has been developed around the assumption that corporate decision-making is fundamentally human-driven. Statutory obligations, fiduciary duties, and liability mechanisms under corporate law are designed to regulate the conduct of directors, key managerial personnel, and officers who exercise control over corporate affairs.⁷ The emergence of algorithmic governance challenges this foundational premise by introducing automated systems as influential decision-makers within corporate structures, without corresponding legal recognition or regulation.

Under the Companies Act, 2013, directors are bound by duties of care, skill, and diligence, and are required to act in good faith to promote the objects of the company while safeguarding stakeholder interests.⁸ These duties presuppose the existence of human judgment and oversight in corporate decision-making. However, when corporations rely on algorithmic systems to perform functions such as employee screening, financial risk assessment, or compliance monitoring, the extent to which directors can meaningfully exercise oversight becomes questionable. The law remains silent on whether reliance on automated systems satisfies the standard of due diligence expected from corporate management or whether such reliance may itself constitute a breach of fiduciary duty.

⁷ Umakanth Varottil, *Corporate Law* (4th edn, Oxford University Press 2022) 213–215.

⁸ Companies Act 2013, s 166.

⁹ *Standard Chartered Bank v Directorate of Enforcement* (2005) 4 SCC 530; *Iridium India Telecom Ltd v Motorola Inc* (2011) 1 SCC 74.

The problem of accountability becomes more pronounced when algorithmic decisions result in unlawful or harmful outcomes. Indian courts have recognised the principle of corporate criminal liability, allowing corporations to be prosecuted for offences involving mens rea through the attribution of intent from the “directing mind and will” of the company.⁹ However, algorithmic governance complicates this doctrine, as automated systems do not possess intent in the conventional legal sense. When decisions are generated through machine learning models trained on historical data, attributing criminal intent or negligence to specific individuals within the corporate hierarchy becomes increasingly difficult. This creates enforcement gaps, particularly in cases involving discrimination, fraud, or regulatory non-compliance driven by algorithmic outputs.

Recent legislative developments in technology law further illustrate the limitations of India’s regulatory approach. The Digital Personal Data Protection Act, 2023 represents a significant step towards regulating data processing and safeguarding individual privacy.¹⁰ While the Act introduces obligations relating to consent, purpose limitation, and data security, its focus remains largely confined to data protection rather than algorithmic accountability. It does not impose specific duties on corporations to ensure transparency, explainability, or auditability of algorithmic decision-making systems, even where such systems materially affect individuals’ rights and interests.

Moreover, sector-specific regulators such as the Securities and Exchange Board of India (SEBI) and the Reserve Bank of India (RBI) have issued limited guidelines addressing the use of technology and automation in regulated entities.¹¹ These measures

¹⁰ Digital Personal Data Protection Act 2023, ss 4–9.

¹¹ Securities and Exchange Board of India, ‘Cyber Security and Cyber Resilience Framework for Stock Brokers’ (SEBI Circular, 2023); Reserve Bank of India, ‘Guidelines on Digital Lending’ (2022).



primarily emphasise risk management and cybersecurity, without directly engaging with questions of corporate responsibility for algorithm-driven decisions. As a result, regulatory oversight remains fragmented, with no unified framework addressing the governance of algorithmic systems across corporate sectors.

Judicial engagement with algorithmic governance in India has thus far been minimal. Courts have traditionally focused on human conduct and organisational failures, rather than technological decision-making processes. This judicial restraint reflects a broader hesitation to adapt existing legal doctrines to emerging technologies. In the absence of clear statutory guidance, courts may struggle to adjudicate disputes involving algorithmic harm, particularly where causation and responsibility are obscured by technical complexity.

Consequently, the Indian corporate legal framework appears ill-equipped to address the realities of algorithmic governance. While existing laws impose broad duties on corporate actors, they fail to account for the structural and operational challenges posed by automated decision-making systems. Without explicit regulatory standards governing algorithmic transparency, human oversight, and accountability, corporations may exploit these gaps to externalise responsibility, undermining the objectives of corporate regulation and stakeholder protection.

Attribution of Liability and the Mens Rea Problem in Algorithmic Decision-Making

One of the most significant legal challenges posed by algorithmic governance lies in the attribution of liability, particularly in the context of corporate criminal responsibility. Traditional doctrines of corporate liability are premised on the attribution of

human intent, negligence, or knowledge to the corporation through identifiable individuals occupying positions of control.¹² However, algorithmic decision-making disrupts this model by introducing non-human actors that influence or determine corporate conduct without possessing legal personality or cognitive intent.

Indian jurisprudence has long grappled with the problem of attributing mens rea to corporations. The Supreme Court, in *Standard Chartered Bank v Directorate of Enforcement*, affirmed that corporations can be held criminally liable for offences involving mens rea, notwithstanding the impossibility of imposing custodial sentences.¹³ This principle was further developed in *Iridium India Telecom Ltd v Motorola Inc*, where the Court adopted the “directing mind and will” doctrine to attribute criminal intent of senior managerial personnel to the corporation.¹⁴ These judgments reflect judicial willingness to hold corporations accountable; however, they are firmly rooted in the assumption that wrongful intent originates from human actors.

Algorithmic governance complicates this assumption. When corporate decisions are generated or materially influenced by automated systems, the chain of intent becomes obscured. Machine learning algorithms operate by identifying patterns in data rather than executing pre-programmed instructions with conscious awareness. As a result, harmful outcomes—such as discriminatory hiring practices or unlawful credit denial—may occur without any individual corporate actor possessing direct knowledge or intent.¹⁵ This raises a fundamental question: can corporations be held criminally or civilly liable for outcomes produced by systems that function autonomously within parameters approved, but not actively controlled, by human decision-makers?

¹² *HL Bolton (Engineering) Co Ltd v TJ Graham & Sons Ltd* [1957] 1 QB 159.

¹³ *Standard Chartered Bank v Directorate of Enforcement* (2005) 4 SCC 530.

¹⁴ *Iridium India Telecom Ltd v Motorola Inc* (2011) 1 SCC 74.

¹⁵ Solon Barocas, Sophie Hood and Malte Ziewitz, ‘Governing Algorithms: A Provocation Piece’ (2013) Social Science Research Network.



The problem is further exacerbated by the complexity and opacity of algorithmic systems. Courts and regulators may find it difficult to establish causation between corporate conduct and algorithmic harm, particularly where decision-making processes are non-transparent or technically unintelligible.¹⁶ In such cases, senior management may plausibly deny awareness or foreseeability, thereby escaping liability under existing legal standards that require proof of knowledge, negligence, or recklessness.

Indian courts have historically adopted a cautious approach when extending criminal liability to directors and officers. In *Sunil Bharti Mittal v Central Bureau of Investigation*, the Supreme Court held that directors cannot be held vicariously liable solely by virtue of their position and that specific allegations demonstrating active involvement are necessary.¹⁷ While this safeguard protects individuals from arbitrary prosecution, its application in cases involving algorithmic governance risks creating accountability vacuums. Corporate leadership may rely on algorithmic systems as decision-making intermediaries, thereby distancing themselves from responsibility for unlawful outcomes.

Moreover, algorithmic governance challenges the notion of foreseeability, a key element in establishing negligence and breach of duty. Given the probabilistic and adaptive nature of machine learning systems, predicting specific harmful outcomes may be difficult even for technical experts.¹⁸ This unpredictability undermines traditional standards of due diligence and raises questions about whether corporations should be subject to stricter liability regimes when deploying high-risk algorithmic systems.

In the absence of doctrinal adaptation, existing liability frameworks risk becoming ineffective in regulating algorithm-driven corporate conduct. Without recognising algorithmic decision-making as a legally relevant source of corporate action, the law may fail to deter misconduct and provide remedies for harm. This necessitates a rethinking of attribution principles, potentially through the introduction of presumptive liability, enhanced disclosure obligations, or mandatory human oversight requirements for algorithmic systems used in corporate governance.

Comparative Regulatory Approaches to Algorithmic Governance: Lessons for India

Given the limitations of existing corporate liability frameworks, several jurisdictions have begun to adopt regulatory approaches specifically aimed at governing algorithmic and artificial intelligence-based systems. Among these, the European Union has emerged as a global frontrunner in addressing the legal risks associated with algorithmic decision-making. A comparative analysis of these developments provides valuable insights into how corporate responsibility may be recalibrated to address the challenges posed by algorithmic governance.

The European Union's proposed Artificial Intelligence Act (EU AI Act) represents the first comprehensive attempt to regulate artificial intelligence systems based on their potential risk to fundamental rights and public interests.¹⁹ The regulatory framework adopts a risk-based classification, categorising AI systems into unacceptable risk, high risk, limited risk, and minimal risk. Corporate use of AI systems in areas such as recruitment, creditworthiness assessment, and

¹⁶ Frank Pasquale, *The Black Box Society: The Secret Algorithms That Control Money and Information* (Harvard University Press 2015).

¹⁷ *Sunil Bharti Mittal v Central Bureau of Investigation* (2015) 4 SCC 609.

¹⁸ Brent Mittelstadt and others, 'The Ethics of Algorithms: Mapping the Debate' (2016) 3 *Big Data & Society* 1.

¹⁹ European Commission, *Proposal for a Regulation Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) COM (2021) 206 final*.



employee monitoring is classified as “high-risk,” thereby subjecting corporations to stringent compliance obligations.²⁰ These obligations include risk assessment, transparency, human oversight, and post-deployment monitoring, reflecting an explicit recognition of the governance challenges posed by algorithmic decision-making.

A key feature of the EU approach is its emphasis on ex ante accountability. Rather than relying solely on post-hoc liability after harm has occurred, the EU AI Act imposes proactive duties on corporations deploying algorithmic systems.²¹ Corporations are required to ensure that AI systems are trained on representative data, are explainable to regulators, and are subject to meaningful human oversight. This shifts the regulatory focus from attributing intent after misconduct to preventing harm through structural governance mechanisms. Such an approach addresses the inherent difficulties in proving mens rea or negligence in algorithm-driven decisions, a problem that remains unresolved in Indian corporate law.

In addition to the EU AI Act, the General Data Protection Regulation (GDPR) provides indirect safeguards against algorithmic harm. Article 22 of the GDPR restricts solely automated decision-making that produces legal or similarly significant effects on individuals, granting individuals the right to human intervention and explanation.²² Although not framed as corporate governance legislation, these provisions significantly influence how corporations design and deploy algorithmic systems. They reinforce the principle that corporate reliance on automation does not absolve entities of responsibility toward affected stakeholders.

In contrast, the Indian regulatory approach remains fragmented and reactive. While the Digital Personal

Data Protection Act, 2023 introduces data protection obligations, it does not impose substantive requirements regarding algorithmic transparency or accountability.²³ Unlike the EU framework, Indian law does not classify algorithmic systems based on risk, nor does it mandate impact assessments or human oversight for high-risk corporate uses of AI. This regulatory gap allows corporations to deploy automated decision-making systems without adequate safeguards, increasing the risk of unaccountable harm. Other jurisdictions have also begun experimenting with algorithmic accountability mechanisms. In the United States, while no comprehensive federal AI law exists, sector-specific regulations and enforcement actions by agencies such as the Federal Trade Commission have emphasised algorithmic fairness and corporate accountability for deceptive or discriminatory AI practices.²⁴ Similarly, the United Kingdom has adopted a principles-based approach, focusing on transparency, accountability, and contestability in AI governance, while resisting prescriptive regulation.²⁵ These models illustrate alternative pathways for balancing innovation with responsibility, though their effectiveness remains contingent on enforcement capacity.

The comparative analysis reveals that effective regulation of algorithmic governance requires a shift from traditional fault-based liability models to governance-oriented frameworks that integrate technological realities into corporate law. India’s current reliance on general corporate duties and post-facto enforcement is ill-suited to address the scale and opacity of algorithmic decision-making. Incorporating elements such as risk-based classification, mandatory impact assessments, and enforceable human oversight obligations would strengthen corporate accountability without stifling innovation.

²⁰ *ibid*, arts 6–7 and Annex III.

²¹ *ibid*, arts 9–15.

²² Regulation (EU) 2016/679 (General Data Protection Regulation), art 22.

²³ Digital Personal Data Protection Act 2023.

²⁴ Federal Trade Commission, ‘Aiming for Truth, Fairness, and Equity in Your Company’s Use of AI’ (FTC Business Blog, 2021).

²⁵ UK Department for Science, Innovation and Technology, A Pro-Innovation Approach to AI Regulation (2023).



Accordingly, India can draw meaningful lessons from international regulatory developments by adopting a hybrid approach that combines corporate governance principles with technology-specific safeguards. Such an approach would ensure that corporations remain accountable for algorithmic decisions while preserving flexibility for technological growth. Without comparative learning and regulatory adaptation, Indian corporate law risks lagging behind global standards, thereby weakening stakeholder protection and regulatory effectiveness in an increasingly automated corporate environment.

Regulatory Gaps and Practical Challenges in the Indian Context

Despite the increasing adoption of algorithmic systems by Indian corporations, the domestic legal and regulatory framework remains largely unprepared to address the governance challenges posed by automated decision-making. Existing laws operate in silos—corporate law, data protection, and sectoral regulation—without a unified approach to algorithmic accountability. This fragmented regulatory structure creates significant gaps that undermine effective corporate responsibility in the age of algorithmic governance.

A primary regulatory gap lies in the absence of statutory recognition of algorithmic decision-making as a distinct governance function. The Companies Act, 2013 continues to conceptualise corporate governance through human agency, focusing on the conduct and duties of directors and managerial personnel.²⁶ While directors are obligated to exercise due diligence and act in the best interests of the company, the Act does not specify the standard of care applicable when corporate decisions are delegated to automated systems. Consequently, it remains unclear whether reliance on algorithmic tools constitutes reasonable

business judgment or whether failure to scrutinise such systems amounts to a breach of fiduciary duty.

Another significant challenge is the lack of mandatory transparency and explainability requirements. Algorithmic systems deployed by corporations often operate as proprietary technologies, protected by trade secrets and intellectual property claims.²⁷ In the absence of legal obligations to disclose decision-making logic or audit algorithmic outcomes, regulators and affected stakeholders face substantial barriers in identifying the source of harm. This opacity weakens enforcement mechanisms and limits access to effective remedies, particularly in cases involving employment discrimination, consumer exclusion, or unfair market practices.

The Digital Personal Data Protection Act, 2023, while progressive in its emphasis on consent and data security, does not sufficiently address algorithmic accountability.²⁸ The Act does not impose obligations to conduct algorithmic impact assessments, nor does it require corporations to ensure fairness or non-discrimination in automated decision-making processes. As a result, compliance with data protection standards may coexist with substantively unjust or discriminatory algorithmic outcomes, revealing a disconnect between privacy protection and broader corporate responsibility.

Practical enforcement challenges further exacerbate these regulatory gaps. Indian regulatory authorities often lack the technical expertise and institutional capacity required to audit complex algorithmic systems.²⁹ Without specialised knowledge or access to algorithmic models and datasets, regulators may be unable to establish causation or responsibility in cases of algorithm-driven harm. This asymmetry of information favours corporations, enabling them to externalise risks while maintaining plausible deniability regarding the functioning of automated systems.

²⁶ Companies Act 2013, ss 166, 134.

²⁷ Frank Pasquale, *The Black Box Society: The Secret Algorithms That Control Money and Information* (Harvard University Press 2015).

²⁸ Digital Personal Data Protection Act 2023.

²⁹ OECD, *Accountability for AI Systems* (OECD Publishing 2023).



Judicial limitations also play a role in constraining accountability. Courts are traditionally reliant on adversarial evidence and expert testimony, both of which may be insufficient to unravel the technical intricacies of algorithmic decision-making.³⁰ In the absence of clear legislative standards, judicial intervention risks being inconsistent or overly deferential to corporate explanations. This may discourage litigation and weaken the deterrent effect of legal sanctions against algorithmic misconduct.

Additionally, the widespread outsourcing of algorithmic tools to third-party vendors complicates liability attribution. Corporations often deploy externally developed AI systems without full control over their design or training data. While contractual arrangements may allocate responsibility between corporations and vendors, such private ordering cannot replace public law accountability.³¹ Indian law currently provides limited guidance on how liability should be apportioned in cases involving third-party algorithmic systems, increasing uncertainty for regulators and affected individuals alike.

Taken together, these regulatory and practical challenges reveal a structural misalignment between India's corporate governance framework and the realities of algorithmic decision-making. The absence of explicit legal standards governing algorithmic governance risks creating accountability vacuums, where corporate decisions significantly affect rights and interests without corresponding legal oversight. Addressing these gaps requires not only legislative reform but also institutional capacity-building and a reconceptualization of corporate responsibility in technologically mediated environments.

³⁰ Cary Coglianese and David Lehr, 'Regulating by Robot: Administrative Decision Making in the Machine-Learning Era' (2017) 105 *Georgetown Law Journal* 1147.

³¹ Woodrow Hartzog, 'The Case Against Idealising Control' (2018) 4 *European Data Protection Law Review* 423.

Reform Proposals and the Way Forward

Addressing the challenges posed by algorithmic governance in corporate decision-making requires a shift from reactive liability models to proactive governance-oriented regulation. Given the limitations of existing corporate and technology laws in India, a recalibration of legal frameworks is necessary to ensure that innovation does not erode accountability, transparency, or stakeholder protection. This section proposes a multi-pronged reform approach that integrates corporate governance principles with technology-specific safeguards.

First, there is a pressing need for statutory recognition of algorithmic decision-making within corporate governance frameworks. The Companies Act, 2013 should be amended to explicitly acknowledge the use of automated and algorithmic systems in corporate operations. Such recognition would enable the law to impose clear duties on directors and key managerial personnel to exercise oversight over algorithmic tools deployed by the corporation. Incorporating algorithmic governance within directors' fiduciary obligations would clarify that reliance on automated systems does not dilute the standard of care, skill, and diligence expected from corporate leadership.³²

Second, India should adopt a risk-based regulatory approach to algorithmic governance, drawing inspiration from the European Union's Artificial Intelligence Act. High-risk algorithmic systems—such as those used in employment decisions, credit assessments, consumer profiling, and compliance monitoring—should be subject to heightened regulatory scrutiny.³³ Corporations deploying such systems should be required to conduct algorithmic impact assessments to evaluate risks related to

³² Companies Act 2013, s 166; Umakanth Varottil, *Corporate Law* (4th edn, Oxford University Press 2022) 230–232.

³³ European Commission, Proposal for a Regulation Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) COM (2021) 206 final.



discrimination, bias, and regulatory non-compliance before deployment. This preventive approach would reduce reliance on post-hoc liability, which is often ineffective in addressing algorithm-driven harm.

Third, mandatory transparency and explainability obligations should be introduced for corporate use of algorithmic systems. While concerns regarding trade secrets and intellectual property are legitimate, they cannot override the need for accountability where algorithmic decisions have significant legal or social consequences.³⁴ Corporations should be required to maintain internal documentation explaining the purpose, logic, and limitations of algorithmic systems, accessible to regulators and adjudicatory bodies when required. Such measures would strengthen enforcement capacity and facilitate judicial review in disputes involving algorithmic harm.

Fourth, the law should mandate meaningful human oversight over algorithmic decision-making processes. Automated systems should function as decision-support tools rather than autonomous decision-makers in high-impact corporate functions.³⁵ Clear guidelines must delineate the circumstances under which human intervention is required and assign responsibility for reviewing and overriding algorithmic outputs. This would help preserve human judgment within corporate governance while retaining the efficiency benefits of automation.

Fifth, regulatory reform must be accompanied by institutional capacity-building. Regulatory authorities such as SEBI, RBI, and the Ministry of Corporate Affairs should be equipped with technical expertise to audit and evaluate algorithmic systems.³⁶ Establishing specialised technical units or advisory bodies within regulatory agencies would enhance oversight and reduce information asymmetries between corporations and regulators.

Finally, India should consider developing a coherent national framework for algorithmic governance, integrating corporate law, data protection, and sector-specific regulation. Fragmented regulatory responses risk creating compliance loopholes and uncertainty. A unified framework would provide clarity to corporations while ensuring consistent standards of accountability across sectors.

Taken together, these reforms offer a balanced pathway for regulating algorithmic governance in corporate decision-making. By embedding accountability, transparency, and human oversight into legal frameworks, India can foster responsible innovation while safeguarding corporate integrity and stakeholder interests.

Conclusion

The increasing reliance on algorithmic systems in corporate decision-making marks a significant transformation in the structure and functioning of modern corporations. Algorithmic governance promises efficiency, consistency, and data-driven precision; however, it simultaneously exposes deep legal and regulatory vulnerabilities within existing frameworks of corporate responsibility. As this article has demonstrated, traditional doctrines of corporate governance and liability—rooted in assumptions of human agency, intent, and oversight—are ill-equipped to respond to the complexities introduced by automated decision-making systems.

In the Indian context, the challenges posed by algorithmic governance are particularly acute. Corporate law continues to conceptualise accountability through human actors, while technology regulation remains largely focused on data protection rather than decision-making accountability. This disconnect has created regulatory blind spots

³⁴ Frank Pasquale, *The Black Box Society: The Secret Algorithms That Control Money and Information* (Harvard University Press 2015).

³⁵ Brent Mittelstadt and others, 'The Ethics of Algorithms: Mapping the Debate' (2016) 3 *Big Data & Society* 1.

³⁶ OECD, *Accountability for AI Systems* (OECD Publishing 2023).



where algorithmic decisions materially affect stakeholders without clear mechanisms for transparency, attribution of liability, or effective redress. The absence of statutory recognition of algorithmic governance, coupled with limited judicial engagement, risks enabling corporations to externalise responsibility behind technological opacity.

The difficulty of attributing mens rea or negligence in algorithm-driven decisions underscores the inadequacy of fault-based liability models in regulating automated corporate conduct. As seen, doctrines such as the “directing mind and will” struggle to accommodate decision-making processes that are probabilistic, adaptive, and often outsourced to third-party vendors. Without doctrinal adaptation, corporate leadership may distance itself from responsibility by relying on algorithmic intermediaries, thereby weakening the deterrent and corrective functions of corporate law.

Comparative regulatory developments, particularly within the European Union, offer valuable lessons for India. The EU’s risk-based and ex ante approach to regulating artificial intelligence reflects a shift away from post-hoc punishment toward preventive governance. By imposing obligations relating to transparency, human oversight, and accountability, such frameworks recognise that algorithmic systems must be governed as integral components of corporate decision-making rather than neutral technological tools. These developments highlight the importance of embedding technological realities into corporate governance structures rather than attempting to retrofit liability after harm has occurred.

For India, the way forward lies in adopting a balanced and context-sensitive regulatory approach. Legal reform must move beyond fragmented sectoral regulation and develop a coherent framework that integrates corporate law, technology regulation, and sector-specific oversight. Statutory recognition of algorithmic decision-making, coupled with risk-based compliance obligations and enhanced fiduciary duties, would provide much-needed clarity to corporations

and regulators alike. Importantly, such reform should not be aimed at stifling innovation but at ensuring that technological advancement remains aligned with principles of accountability, fairness, and transparency.

Institutional capacity-building is equally critical. Regulators and adjudicatory bodies must be equipped with the technical expertise necessary to evaluate algorithmic systems and enforce compliance effectively. Without addressing informational asymmetries between corporations and regulators, even well-designed legal frameworks may fail in practice. Strengthening regulatory competence will be essential to ensuring that algorithmic governance does not erode stakeholder trust or corporate integrity.

Ultimately, algorithmic governance represents not merely a technological shift but a structural reconfiguration of corporate power and responsibility. If left unregulated, it risks creating accountability vacuums that undermine the foundational objectives of corporate law. By recalibrating legal frameworks to recognise and govern algorithmic decision-making, India has the opportunity to shape a model of corporate regulation that is both innovation-friendly and normatively robust. Ensuring that corporations remain accountable in the age of algorithms is not only a legal necessity but a prerequisite for sustainable and ethical corporate governance in the digital economy.
