A PRECURSORY LEGAL INVESTIGATION OF ARTIFICIAL INTELLIGENCE'S ADAPTABILITY IN CORPORATE DECISION-MAKING

Abstract

Artificial Intelligence (AI) has emerged as a transformative technology in various aspects of society, including corporate governance. Corporate governance refers to the mechanisms and processes through which corporations are directed, controlled, and regulated. AI has gained significant traction in corporate decision-making processes in recent years, offering businesses unparalleled efficiency and adaptability. This study delves into the multifaceted implications of AI's integration into corporate decision-making. It explores the legal challenges related to liability, bias and discrimination, intellectual property that arise when AI systems play a pivotal role in shaping corporate strategies. Additionally, it highlights the evolving regulatory landscape, emphasizing the importance of transparency, ethics, and sector-specific regulations in harnessing AI's potential while ensuring legal compliance. This study underscores the need for a comprehensive legal framework to effectively navigate the intricate intersection of AI and corporate governance. AI has penetrated our everyday experiences in an assortment of scenarios. Albeit AI's presence in our daily lives is evident, the implications of embedding AI in the corporate world are unpredictable, particularly in this time frame when the importance of effective corporate management is being accentuated surpassing ever. As a result, in the middle of the precarious circumstances in which Indian enterprises find themselves, the deployment of AI in the boardroom solicits careful consideration. This also enables a dramatic rethinking of current corporate practices in order to prepare them for any difficult future issues. Thus, adopting a doctrinal and analytical approach, this study investigates the range of situations in which human directors may be empowered or inclined to rely on AI with respect to Indian corporate law, as well as the repercussions on corporate governance.

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I. INTRODUCTION

Although the COVID-19 pandemic began as a public health catastrophe, it soon evolved into a financial and economic disaster of epic proportions by the year 2021, making it the first worldwide pandemic of its kind.[131]

The effects of this pandemic are pervasive, affecting not just the ways in which individuals and organisations go about their everyday routines, but also the ways in which entire economies are impacted.

It is difficult enough for businesses to stay viable without having to worry about meeting the requirements of the plethora of laws that now apply to them. The pandemic has created an unstable market, and as a result, the board of directors ("BODs") of a corporation has a greater burden of responsibility as they must make a number of difficult decisions.

The Board of Directors (BOD) has had to make some tough calls recently in order to keep the company afloat and producing money despite a number of obstacles.

In light of the looming uncertainty about the frequency and magnitude of the COVID crisis, decisions regarding the issuance of dividend payments to shareholders, which would normally entail no serious introspection and only consideration of historical practise and the corporation's profits, now require the weighing and balancing of many variables.[132]

Since organisations may be experiencing financial strain, board decisions regarding investment strategy have taken on increased importance.[133]

As a result, the Board of Directors must now devote a greater proportion of its meeting time to deliberating and voting on matters of great importance. Because of fragmented policies,[134] growing economic uncertainty[135], and mounting pressure from all parties involved, BODs must take into account a broader and more complete range of inputs and experiences before reaching a decision. Boards find it challenging to "make good decisions in the absence of intelligent systems" due to the increased complexity and inherent uncertainty introduced by

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[131] OECD, The Impact of the Coronavirus (COVID-19) Crisis on Development Finance, OECD Policy Responses to Coronavirus (24/June/2020), available at: (https://www.oecd.org/coronavirus/policy-responses/the-impact-of-the-coronavirus-covid-19-crisis-on-development-finance-9de00b3b/), last Accessed: (12/April/2023).

[132] Suranjali Tandon, *Covid-19 and Dividends in India: To Distribute or Not to?,* BloombergQuint (20/April/2020), available at: (https://www.bqprime.com/coronavirus-outbreak/covid-19-and-dividends-in-india-to-distribute-or-not-to), last Accessed: (22/April/2023).

[133] Rongeet Poddar, *The Prospect of AI in the 'Virtual' Corporate Boardroom,* (12/May/2020), available at: (https://indiacorplaw.in/2020/05/the-prospect-of-ai-in-the-virtual-corporate-boardroom.html), Last Accessed: (22/April/2023).

[134] Lynn S. Paine, *Covid-19 is Rewriting the Rules of Corporate Governance*, Harvard Business Review (6/October/2021), available at: (https://hbr.org/2020/10/covid-19-is-rewriting-the-rules-of-corporate-governance), Last Accessed: (22/April/2023).

[135] *Need to Prepare for Greater Economic Uncertainty Due to COVID-19 Second Wave: NITI Aayog VC*, Business Today (18/April/ 2021), available at: (https://www.businesstoday.in/latest/economy-politics/story/need-to-prepare-for-greater-economic-uncertainty-due-to-covid-19-second-wave-niti-aayog-vc-293752-2021-04-18).

these myriad factors.[136]

In the current era, artificial intelligence ("AI") has changed the fundamental tenets of human conversation and decision-making. Artificial intelligence (AI) is becoming increasingly pervasive in all aspects of human life, from forecasting the weather to mapping human genomes. While we can't deny AI's pervasiveness in our daily lives, we can't be sure what will happen if businesses start using it, especially at a time when effective corporate governance is more important than ever.

The first AI model will be on the BODs of a company by 2025, according to 45% of respondents in a 2015 survey by the World Economic Forum's Global Agenda Council on the Future of Software and Society, which sought to estimate the time span during which significant technological advances would manifest in everyday life.[137]

Moreover, while the appointment of an AI to a board of directors is certainly novel, it is not the first time the practice has been put into practice. Back in 2014, before the market was burdened with these pandemic-induced challenges, Deep Knowledge Ventures ("DPV"), a venture capital company, added a software program called Validating Investment Tool for Advancing Life Sciences ("Vital") to its BODs.[138]

Consequently, in the middle of the precarious scenario in which Indian enterprises find themselves, the adoption of AI in the boardroom requires careful evaluation. This also provides an opportunity for a fundamental revaluation of standard corporate procedure in anticipation of future complexities. This study takes a doctrinal approach to the question of whether or not human directors should be allowed to rely on AI in the context of Indian corporation law and then evaluates the implications of that finding for corporate governance.

II. ARTIFICIAL INTELLIGENCE: A RESURGENCE CONCERNING THE CONTEMPORARY WORKFORCE

To proclaim that the field of artificial intelligence (AI) has blossomed tremendously since its infancy would not be an exaggeration. AI constitutes one of the most groundbreaking innovations of our day, empowered to make commercial judgments that were previously limited to human judgment. As was previously noted, AI is empowered to produce speculation and judgments due to its capacity to analyze enormous amounts of information. AI, for instance, helps with a variety of applications, including workplace development, illicit activities foretelling, agricultural yield expansion, and disease diagnostics. In addition, the industry is growing quickly due to the widespread usage of applications. The Indian artificial intelligence industry is expected to develop at a compound annual growth rate (CAGR) of 33.28% between 2023 and 2028, surpassing US$ 3,935.5 million, according to IMARC.[139]

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[136] Barry Libert et al., *AI in the Boardroom: The Next Realm of Corporate Governance*, MITSloan Management Review 4 (2017).

[137] *Report on Deep Shift – Technology Tipping Points and Societal Impact* , World Economic Forum's Global Agenda Council on the Future of Software and Society, 21 (2015).

[138] Aishwariya Baburaj, *AI v. Institute Decision Making: How Far Can it Transform Corporate Governance?*, Volume 8, The GNLU Law Review, 235(2022).

[139] *"India Artificial Intelligence Market to Reach US$ 3,935.5 Million by 2028, Propelled by Expanding Product Adoption Across Various Industries",* India Artificial Intelligence Market Research and Forecast Report 2023-2028, 27/march/2023, available at: (https://www.imarcgroup.com/artificial-intelligence-market-india).

AI is being put to use extensively by corporate bodies like the board of directors to facilitate with the making of decisions on company tactics, hiring, purchasing, sales, marketing, and additionally the authorization of films. Algorithmic trading is becoming more and more popular, wherein an algorithm chooses which financial items to purchase on the organization's account. In a similar vein, encouragement of merger and acquisition due diligence and exploration constitutes one of the most often used uses of organisational intelligence nowadays. Both procedures are necessary steps leading up to the acquirer's final board vote, and they require a carefully collaborated effort from professionals including investment bankers, accountants, lawyers, and company staff. The potential existence that the board will be competent to arrive at a realistic cost and a suitably customised contract framework is higher when AI is used to support the aforementioned procedures.[140]

Contingent upon the utilitarian function that AI contributes to the board's decision-making process, AI will undoubtedly help to reduce disagreements between agencies, notably those that occur among directors, shareholders and other stakeholders when AI advises, supports, or assists directors in making decisions. As AI is unlikely to be equipped to perpetrate fraudulent activity, profit itself, or deteriorate the public interest, the conventional dilemma of agency might vanish or change into a concern involving the AI's programmer or designer. That is if an AI application necessitates the attribute of a director and acts autonomously.

To recruit someone to head the new data-driven enterprises section, the Finnish IT company Tieto appointed AI application Alicia T as a board member in 2016. This made Tieto the first corporation in the Nordic region to do so[141]. Alicia T. "*is going to encourage the managerial team to evolve into genuinely data-driven and will aid the personnel in discovering novel approaches to capitalize on the substantial possibilities of the data-driven world*," according to the authorized website's explanation. In 2018, the California-based software supplier Sales Force started inviting an AI machine named Einstein to attend weekly staff meetings so that it could offer feedback on bids that were being discussed. These are some instances of how AI has been entangled in management and corporate governance to carry out assistant, advisory, and delegated responsibilities.[142]

III. THE REPERCUSSIONS OF ARTIFICIAL INTELLIGENCE IN THE LAW:

Under the jurisdiction of corporate law, businesses have been given a number of unique advantages. First, the company has its own identity apart from that of its managers, employees, and shareholders (its "legal personality")[143]; however, while a corporation is considered a "person" under the law, it is, in fact, a fictional creation that does not exist in the real world. This means that it requires human intervention in order to work, which brings us to our second point: companies are run by boards of directors (BODs) chosen by

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[140] Gerard Hertig, "*Use of AI by Financial Players The Emerging Evidence*", European Corporate Governance Institute Working Paper Series in Law (2022), available at: (https://www.ecgi.global/sites/default/files/working_papers/documents/hertigfinal_0.pdf).

[141] Jingchen Zhao, "*Artificial Intelligence and Corporate Decisions: Fantasy, Reality or Destiny*", Volume 71 Issue 4, Catholic University Law Review, 673 (664-696), (2022).

[142] Martin Petrin, "*Corporate Management in the Age of AI*", 4/March/2019. Columbia Business Law Review, Forthcoming, UCL Working Paper Series, Faculty of Laws University College London Law, available at: (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3346722).

[143] Salomon v. A. Salomon and Co. Ltd., 1897 AC 22: 1896 UKHL 1 (UK).

shareholders.[144] Due to the BOD's primary power over the company's affairs[145] and the BOD's responsibility for the management of the day-to-day operations of the company[146], the decisions made by the BOD are typically weighty and difficult. Therefore, it makes sense to deploy AI in this capacity to aid in making such difficult choices.

Therefore, from the outset, it is essential to comprehend the various points where AI can collide with the existing Indian corporate legislation. For this reason, it is important to quickly review the relevant legal framework.

IV. LEGAL QUALIFICATIONS

BODs are referred to as the "collective body of the directors of the company" in the Companies Act 2013 ("Companies Act" or "the Act"). This definition may be found in section 2(10).A director "means a director appointed to the Board of a company," according to Section 2(34) of the Act, which defines the term "director."[147]

Now, these criteria, despite the fact that they indicate who a director is, do not describe the role of a director in a specific manner. In the framework of Section 149 of the Act, only a natural person can be nominated to the position of director in a company.[148] The reason for this is that it is frequently challenging to attribute liability to a particular person in the event of an artificial person. Obtaining a Director Identification Number (often known as a "DIN") that was issued by the Central Government of India is another one of the prerequisites for being appointed as a director.[149] In addition to this, an individual must not be unable to serve as a director for any reason (such as having an unstable mental state, being bankrupt, having a criminal record, etc.).[150]

In this situation, even if the Companies Act does not directly define any requirements for the appointment of a director, the fact that the Act expressly says that only an individual may be nominated as a director prevents the entrance of an AI director into the boardroom.

On the other hand, the purpose of using AI in the boardroom is to make more reasoned decisions that are comparable to but superior to those made by a human mind (while still preserving the mental component that is envisioned). Although artificial intelligence, in contrast to humans, is unable to engage in fraudulent activity, this fact does not prevent other human directors from relying on it in order to shield themselves from legal responsibility. In addition, despite the fact that the prohibitions outlined in the Act are obviously intended for human directors, the inability of an AI director to get a DIN would be an additional barrier to the AI's eligibility.

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[144] Section 149, Companies Act, 2013.

[145] *Report of the Expert Committee on Company Law*, Ministry of corporate affairs, Government Of India, 1 (2020).

[146] *Ibid.*

[147] Section 2(34), Companies Act, 2013.

[148] Ibid, section 149.

[149] *Report on Company Law,* Dr J.J. Irani Committee, (2005).

[150] Supra Note 14, Section 164.

V. DUTIES AND POWER

1. Duties

Section 166 of the Companies Act lays out the responsibilities of the director.[151]

The first of these responsibilities is following the company's bylaws (sometimes called its "articles of association" or "AOA").[152] An AI director shall ensure compliance with the AOA by processing algorithmic data sets that reflect the requirements and considerations outlined in the AOA before taking any action. The human mind tends to gloss over ambiguity and inconsistency, but this will greatly reduce both.

In addition, you have an obligation to "act in good faith"[153] in order to achieve the business's objectives. A company director's duty under Section 166(2) of the Act is to act in the best interests of the company and all stakeholders at all times.

Accordingly, Section 166(4) of the Act states that directors are not allowed to make decisions or become involved in matters in which they have a direct or indirect interest that conflicts with or may conflict with the interest of the company[154], and Section 166(5) states that directors are not allowed to acquire or attempt to acquire any undue gain or advantage for himself or his relatives.

Bringing AI into the boardroom is motivated by a desire to improve decision-making. The decisions made by AI directors would be based on codes and algorithms, so they can be programmed to adhere not just to the company's objectives but also to the law. Furthermore, it is quite improbable that an AI director would breach their fiduciary duties.[155] Artificial intelligence (AI) will be less likely to steal or misuse company resources for personal gain since it cannot be influenced by variables like money or power, while human minds are easily duped into making decisions and are as fleeting as a drop of water on a lily pod. At the same time, it's important to recognise that emotional intelligence and intuitive thinking are often more important than logical reasoning when it comes to making decisions that will affect the company's employees, members, and other stakeholders.

In addition, directors must "exercise independent judgment" and perform their "duties with due and reasonable care, skill, and diligence" in accordance with Section 166(3) of the Act. An AI director's algorithmic decisions are only as good as the information it is given. In the end, it all comes down to the decisions made by a single individual, and it's no secret that this individual is the brains behind the operation. Therefore, it will lack the ability to make decisions on its own. Furthermore, while the AI director may be able to exercise their duties with "due and reasonable care" by thoroughly reviewing all relevant factors and arriving at a decision, this can be used by other directors as an excuse to shirk accountability and avoid responsibility.

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[151] Ibid, section 166.
[152] Ibid, section 166(1)
[153] Ibid, section 166(3).
[154] Ibid, section 166(4).
[155] Frank H. Easterbrook & Daniel R. Fischel, *The Economic Structure of Corporate Law*,90 (Harvard University Press, 1991).

2. Power

Section 179 of the Companies Act lays out the authorities of the BODs.[156]The BODs have the authority to make "calls on shareholders in respect of money unpaid on their shares," among other things.[157] In accordance with the terms and conditions set forth in the AOA and the legal requirements, an AI can accurately decide whether it would be suitable to collect overdue share dues at a certain moment. Accelerating the approval process of financial statements and board reports[158] is possible with the use of AI's capacity to review for factual accuracy in seconds.

Furthermore, investment decisions, as well as those requiring the approval of amalgamations, mergers, reconstructions and takeovers, are exceedingly complex because they entail a great deal of money and risk. In addition, there are a number of other aspects that should be taken into consideration while making a decision. Errors that could be missed by humans during a data survey might be brought to light with the help of AI. DPV's BODs hired Vital to analyze data from similar companies to predict which investments would be lucrative.[159] Two big investment choices for the corporation benefited from this. In addition, the internet has become a treasure trove of information, making it possible to easily access investment and other decisions made by companies (in the same industry). By including "web-scraping"[160] into the AI algorithm, this data may be retrieved to fuel commercial decisions.[161]

VI. WHETHER DIRECTORS' PREROGATIVE AND OBLIGATION CAN BE HANDED OVER TO AI

It's crucial to figure out if the directors possess sufficient authority to assign AI the knack for influencing judgments when it has been confirmed that AI is capable of doing so. The subject of whether directors can assign decision-making authority to AI isn't explicitly addressed by the Act or any case law. Directors nevertheless possess the authority to assign specific responsibilities under the Act. Recognizing that the problem of a director's authority to delegate was not addressed in many situations, it is possible to utilize the lessons learned in prior instances to the current situation. It was ruled upon in *Bhagwati Prasad v. Shiroman Sugar Mills Ltd.[162]* that a company's articles of association enable a director the right to bestow supremacy. Acknowledging this, the Exemplary Articles of Association under the Act empower the directors the competence for delegation. As per Article 71(i) of the Act, the Board can assign any of its authority to committees reminiscent of the appropriate member or members of its governing body as it considers suitable, notwithstanding the requirements of the Act.[163]

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[156] Section 179, Companies Act, 2013.
[157] Ibid, section 179(3)(a).
[158] Ibid, section 179(3)(b).
[159] Supra Note 8, at 239.
[160] Jennie Murack, *Introduction to Web Scraping with Python,* (21/September/2018) Available at: (https://libraries.mit.edu/news/introduction-scraping/25843/), Last Accessed: (22/April/2022).
[161] Kimberley Mok, *MIT's New AI Data Extraction System Teaches Itself by Surfing the Web*, (11/January/ 2017), available at: (https://thenewstack.io/), Last Accessed: (22/April/2022).
[162] (1949) All. 195.
[163] Article 71, Articles of Association of a Company Limited by Shares, Table F, Schedule 1, Companies Act, 2013.

If the enterprise's articles of organization have such a clause, it gives directors ample authority to entrust tasks. Still, it's unclear if they are able to attribute it specifically to AI. Nonetheless, the intent of these clauses is to permit the directors the discretion to allocate specific responsibilities with a view to lighten the workload and maintain organization. Because of this, businesses that want to use AI in boardrooms and label its important jobs need to include a clause about it in their articles of association to prevent problems down the road. There wouldn't be the slightest uncertainty if this authority to assign to AI was mentioned explicitly.

VII. DOCTRINE OF BUSINESS JUDGMENT RULE

AI is still evolving and developing, even though several nations have only just begun to limit its usage. The imperative for a strong legislative framework for overseeing the development and advancement of AI was highlighted by the European Parliament in 2017.[164] The business judgment rule, a fundamental fiduciary rule that shields the board of directors versus baseless legal claims about how it does business, is an advance forward for the US legal system. In the event that a decision was made with full knowledge, that there existed no contradiction of interest, and that the directors behaved honestly, they will not be held accountable. The Supreme Court of India held in the case of Miheer Mafatlal[165] that courts ought to abstain from tampering if the act at issue was "*just, fair, and reasonable from the point of prudent men of business taking a commercial decision beneficial to the class represented by them.*"[166] This demonstrates that Indian courts have embraced this tenet. In fact, the Supreme Court's ruling was a positive step in the direction of the implementation of the business judgment rule. It follows that choices made by the board of directors using AI tools for restricted data collecting purposes to bolster their conclusions should likewise fall under the purview of this "business judgment rule.

VIII. JUSTIFICATIONS FOR IMPLEMENTING ARTIFICIAL GOVERNANCE INTELLIGENCE:

There are several reasons why artificial intelligence (AI) is being used in corporate governance:

- **Efficient Decision-Making:** AI can process and analyze large volumes of data quickly and accurately. This enables corporate boards and executives to make more informed and data-driven decisions, leading to better governance practices.
- **Risk Management:** AI can identify patterns and anomalies in data, helping companies assess and mitigate risks more effectively. It can analyze market trends, monitor compliance, detect fraud, and provide early warnings about potential risks, allowing boards to take proactive measures.
- **Compliance and Regulatory Requirements:** Companies operate in complex regulatory environments. AI can help automate compliance monitoring by analyzing

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[164] Ambuj Sonal and Tanay Jha, *"India: The Fiduciary Duty Dilemma: Exploring The Legality Of AI-Assisted Decision Making By Directors",* 13/June/2023, available at: (https://www.mondaq.com/india/corporate-governance/1329206/the-fiduciary-duty-dilemma-exploring-the-legality-of-ai-assisted-decision-making-by-directors), Last Accessed: (21/September/2023).

[165] Miheer H. Mafatlal v. Mafatlal Industries Ltd., JT 1996 (8) 205.

[166] Ibid

vast amounts of data, identifying compliance gaps, and flagging potential violations. This improves adherence to regulations and reduces the risk of non-compliance.

- **Enhanced Board Effectiveness:** AI tools can provide board members with real-time access to relevant information, including financial reports, market data, and industry trends. This enables board members to stay informed and make more informed decisions during board meetings.

- **Stakeholder Engagement:** AI-powered systems can facilitate better communication and engagement with stakeholders. Chatbots and virtual assistants can provide instant responses to inquiries, address concerns, and gather feedback from shareholders and other stakeholders.

- **Predictive Analytics:** AI algorithms can analyze historical data to identify trends and predict future outcomes. This helps boards and executives anticipate market changes, customer preferences, and industry disruptions, enabling them to make strategic decisions to stay ahead of the competition.

- **Cybersecurity:** AI can strengthen corporate governance by enhancing cybersecurity measures. It can identify potential security threats, detect unauthorized access, and respond to attacks in real-time. AI can also support the development of robust security protocols and help protect sensitive corporate data.

- **Efficiency and Cost Savings:** By automating repetitive and time-consuming tasks, AI can increase operational efficiency and reduce costs. This allows corporate governance teams to focus on strategic initiatives and higher-value activities.

- However, it's important to note that while AI offers numerous benefits, it also raises ethical and transparency concerns. It is crucial for organizations to implement AI in a responsible and accountable manner, ensuring fairness, privacy, and human oversight in decision-making processes.

IX. A SHIFT IN THE LEGAL PARADIGM OF CORPORATE GOVERNANCE AS A RESULT OF THE ADVENT OF AI:

The advent of AI has brought about a significant shift in the legal paradigm of corporate governance. AI technologies have introduced new complexities and challenges that require the legal framework to adapt and evolve. One of the key areas affected is the regulatory landscape. Traditional laws and regulations may not fully encompass the unique ethical, accountability, and liability issues raised by AI in corporate governance. As a result, there is a growing recognition of the need for updated regulations and legal frameworks that specifically address AI technologies and their implications in corporate governance.

Liability and accountability are also central concerns in the legal paradigm shift. With AI systems making autonomous decisions, determining who should be held liable for AI-generated actions or decisions becomes a complex matter. Companies need to carefully navigate this landscape and establish mechanisms to assign legal responsibility in case of errors, biases, or unethical behavior arising from AI systems. Additionally, intellectual property rights take on a new dimension in the context of AI. AI technologies generate valuable intellectual property, and companies must consider ownership, licensing, and protection of AI-related assets, including algorithms, datasets, and models.

Data privacy and security have become critical issues in corporate governance due to the increased reliance on AI. AI systems require substantial amounts of data, which may include sensitive personal or corporate information. Compliance with data privacy regulations, such as the GDPR, becomes imperative. Companies must ensure that AI systems adhere to privacy and security requirements, and they should establish robust policies and procedures to safeguard stakeholders' data.

Ethical considerations have also gained prominence. AI systems can introduce biases, perpetuate inequalities, or make decisions with ethical implications. Therefore, corporate governance frameworks need to incorporate ethical guidelines and mechanisms for monitoring and addressing these issues. Algorithmic transparency, fairness, and accountability are crucial aspects that require attention.

Furthermore, the legal paradigm shift includes considerations of board oversight and expertise. With AI being increasingly integrated into corporate governance, boards of directors need to have a deeper understanding of AI technologies and their implications. Boards should possess the necessary expertise to effectively oversee AI initiatives, assess risks, and make informed decisions regarding AI adoption and governance.

Lastly, cybersecurity and data breaches have become even more significant concerns with the use of AI. AI systems can be vulnerable to cyberattacks, and the consequences of a breach can be substantial. Organizations must prioritize robust cybersecurity measures to protect AI systems from malicious activities and unauthorized access. Legal considerations related to cybersecurity, incident response, and disclosure obligations become crucial in the context of AI-driven corporate governance.

As a result of these factors, policymakers, legal experts, and industry professionals are actively working to develop guidelines, standards, and regulations that address the legal and ethical implications of AI in corporate governance. The legal paradigm is continuously evolving to keep pace with AI advancements, ensuring that the legal framework remains relevant and capable of effectively governing AI technologies in corporate settings.

X. LEGAL AND MORAL CONUNDRUMS

Bias in AI refers to the unfair and often unintended discrimination against certain groups or individuals within AI systems. It is vital to understand that bias in AI is not a result of the technology itself having personal prejudices but rather arises from the data used to train these systems. AI systems learn from historical data; if that data contains biases, the AI will replicate them. Bias can manifest in different ways, including racial, gender, age, and socioeconomic biases.

One form of bias that has received significant attention is algorithmic bias, where AI models make unfair decisions, leading to unequal outcomes for different groups. For example, an AI-driven recruitment system that favours male candidates over equally qualified female candidates would exhibit gender bias.

Disparate impact, also known as adverse impact, occurs when a seemingly neutral policy or practice disproportionately affects a particular group based on a protected characteristic, such as race, gender, or age. Discrimination, in the context of AI, takes place when an AI system unfairly treats individuals or groups due to their characteristics, such as race or gender. Discrimination can be a consequence of disparate impact.

For instance, if an AI-driven loan approval system systematically denies loans to people of a certain race, even though they have similar creditworthiness to individuals of another race, it's a clear case of discrimination. It's crucial to differentiate between disparate impact and discrimination, as the former is often used as evidence to prove the latter in legal cases.

1. Case Studies of AI Bias in Corporate Decision-Making

To understand the real-world implications of AI bias in corporate decision-making, we can examine several high-profile case studies. These cases highlight the severity of the issue and its potential consequences.

One prominent example is Amazon's AI recruitment tool, which was developed to aid in the hiring process. The system was trained on historical hiring data, predominantly from male candidates. As a result, the AI exhibited a strong bias towards male applicants, penalizing resumes that included women's terms such as "women's chess club captain." This case illustrates how biased training data can lead to discriminatory outcomes, as the AI inadvertently favoured male applicants, perpetuating gender bias.[167] In the backdrop of felony convictions, a 2016 ProPublica report documented that the employing of the COMPAS algorithm (Correctional Offender Management Profiling for Alternative Sanctions) was partisan in opposition to Black people, with the investigation wrapping up that *"Black defendants were twice as probable as white defendants to be erroneous as an elevated danger of incarceration for and white recidivists were mistakenly classified as a low risk 63.2% more often than black defendants."[168]*

Another instance is the use of AI in predictive policing. Some law enforcement agencies have deployed AI systems to allocate resources and identify potential crime hotspots. However, these systems have shown a tendency to target minority communities disproportionately, as they are often trained on historical crime data that reflects existing biases in law enforcement practices.

2. Regulatory Response to Bias and Discrimination

The rise of AI bias has prompted governments and regulatory bodies to take action. They have recognized the urgent need to address bias and discrimination in AI systems. Several legal and regulatory frameworks have been established to hold corporations accountable for biased AI systems.

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[167] Jeffrey Dastin, **"***Amazon Scraps Secret AI Recruiting Tool That Showed Bias against Women***"**, 2, 1st Edition, 2022.
[168] Raj Pathak, *"The Ethical Implications of AI-Powered Criminal Justice: Can Algorithms be Biased?"*, 6/April/2023. Available at: (https://www.linkedin.com/pulse/ethical-implications-ai-powered-criminal-justice-can-biased-pathak/), Last Accessed: (21/September/2023).

In the United States, for example, the Equal Credit Opportunity Act (ECOA) and the Fair Housing Act (FHA) prohibit discrimination in lending and housing based on factors like race, colour, religion, sex, and national origin. The Consumer Financial Protection Bureau (CFPB) has released guidelines that emphasize the importance of fairness in AI-driven lending decisions.

In an earlier effort to "shield the American citizenry in the dawn of artificial intelligence," the White House Office of Science and Technology Policy published a whitepaper in 2022 that was meant to serve as a guide for the development, application, and implementation of machine learning frameworks. The maintenance of confidentiality and resistance to bigotry are paramount.[169] Congress entrusted the Federal Trade Commission with conquering this market in August 2022 with the intention of developing new rules to counteract propaganda stemming from elections, terrorism, xenophobia, sexual misconduct of children, deepfakes, and online frauds. The FTC solicited the general populace for feedback on economic spying in an effort to halt the deployment of AI to gather, examine, and capitalise on the personal data of customers. The FTC claims that AI-powered espionage results in prejudice, intolerance, and inaccuracy.[170]

Legislatively speaking, Congress implemented a pair of regulations that President Biden agreed upon into law: the National Defence Authorization Act, which steers the defence and intelligence organisations to incorporate AI systems and hypothetical, and the Artificial Intelligence Training for the Acquisition Workforce Act, which addresses federal agency bidding of AI, both passed in December 2022.[171]

The Algorithmic Accountability Bill of 2022, which, if eventually, it becomes law, permits the FTC to independently validate negative assessments by AI in an assortment of sectors, including employment, finance, healthcare, and legal services, is a significant upgrade to the regulations that have been put forward to tackle bias. On top of that, a number of initiatives to counteract bigotry were initiated in California, New Jersey, Colorado, and New York City.[172]

Europe has demonstrated an unwavering dedication to protecting the confidentiality of data with the General Data Protection Regulation (GDPR). Elements of the GDPR mandate fairness and openness in computerised decision-making processes. Additionally, it affords people the liberty to contest automatic judgements that have tremendous effects on them.

De Plus, groups that support intelligent automation and openness comprise the *AI Now Institute and the Algorithmic Justice League*. They seek to uphold integrity and impartiality while exposing biased autonomous systems.

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[169] Luca CM Melchionna, "*Bias And Fairness In Artificial Intelligence*", New York State Bar Association, 29/June/2023, available at: (https://nysba.org/bias-and-fairness-in-artificial-intelligence/), Last Accessed: (21/September/2023).
[170] Ibid
[171] Ibid
[172] Hadrein Pouget and Matt O'Shaughnessy, "*Reconciling The US Approach To AI*", Carnegie Endowment For International Peace, 3/May/2023, available at: (https://carnegieendowment.org/2023/05/03/reconciling-u.s.-approach-to-ai-pub-89674), Last Accessed: (21/September/2023).

XI. AI AND IPR

Even though generative AI is a relatively young technology, its application is significantly impacted by current legal frameworks. Courts are currently deciding exactly how the existing laws might be implemented. The queries concerning illicit literature in training data, entitlements of use and contravention, the proprietorship of AI-generated functioning, and how far individuals ought to be willing to alert these instruments with obvious allusions to their fellow creators' licenced and patented works by identifying lacking their consent are all raised by these developments.[173]

A lawsuit is currently being filed over these accusations. Three creators established a class action lawsuit in *Andersen v. Stability AI et al[174].*, a case that was filed in late 2022. The artists' claim was that the generative AI platforms were employing their initial creations devoid of obtaining permission to instruct their AI for their artistic styles, enabling individuals to create functions that might not be adequately transformative from their existing, protected works, and thus might be considered unauthorised works of infringement. Massive violation fines may be imposed if a court determines that the AI's contributions are unapproved and illegitimate. Similar lawsuits from 2023 allege that businesses used data lakes containing thousands, if not millions, of unregistered works to hone AI algorithms.[175]

Authors, artists, and performers frequently argue that AI training data ought to conform to the "three C's" of consent, credit, and compensation. This argument was reinforced lately in copyright hearings held in the United States. Every C has unique administrative challenges that contradict the majority of advantageous analysing text and data exemptions that several nations have accepted.[176] There is diversity and evolution in country strategies to the intellectual property related to training data. Numerous litigations are being handled in the United States to ascertain the degree to which the copyright exclusion for legitimate use is applicable. A 2019 European Union (EU) Directive on copyright in the digital single market allowed copyright holders to forbid the dissemination of their artwork for profit-making activities while allowing deviations for text and data mining, including a required exemption for investigation and archaeological organisations. A broad exemption for business usage was put forward by the United Kingdom in 2022, but it was later shelved previously this year.[177]

Singapore amended its copyright legislation in 2021 adding a concession for statistical data analysis, which applies to text and data mining, predictive analytics, and algorithms for learning. Contracts are unable to circumvent Singapore's exception, which necessitates legitimate ownership of the data. China has made declarations implying that it is going to refrain from training data "content infringing intellectual property rights."[178]

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[173] Gil Apple, et al., "*Generative AI Has An Intellectual Problems*", Harvard Business Law Review, 7/April/2023, available at: (https://hbr.org/2023/04/generative-ai-has-an-intellectual-property-problem), Last Accessed: (21/September/2023).
[174] Ibid, 3:23-cv-00201, (N.D. Cal.)
[175] Supra Note 7.
[176] James Love, "*We Need Smart Intellectual Properties Laws For Artificial Intelligence*", 7/August/2023, Available at: (https://www.scientificamerican.com/article/we-need-smart-intellectual-property-laws-for-artificial-intelligence/), Last Accessed: (21/September/2023).
[177] Ibid.
[178] Ibid.

Regarding the legal standing and safeguards afforded to material created by artificial intelligence, Indian courts have said nothing. Since the artificially generated content was created by infringing upon an already copyrighted work, there are a number of obstacles to overcome before granting any ownership or authorship rights to it. In particular, granting protection to artificially generated content would violate the copyrights of the parties who already hold authorship rights over the content. Second, AI lacks the locus standing to file a lawsuit against somebody and is unable to be punished in its own name because it is a non-juristic person. Therefore, lawmakers would be obligated to make a decision regarding artificial intelligence's legal position before it determines whether it should award copyright to content created by AI. Ergo, Finally, because artificial intelligence exists forever, the 60-year rule that governs the intellectual property rights of artistic or literary works and grants assurance only for 60 years after the demise of the original writer will not apply to it, negating the whole point of prolonging copyright defences.

XII. WAY FORWARD

1. Humanizing Artificial Intelligence

Granting Legal Individuality to Robots In the event an AI commits a crime, it must be treated as a legal person in order to establish its civil and criminal accountability. An entity must be given rights and responsibilities in order to be considered a "legal person."[179] A Juristic person must have the following essentials:

- *One that can lawfully have rights and responsibilities.*
- *Unable to think critically. Third,*
- *These organisations rely on regular people to carry out their duties.*

Corporations[180], deities[181], and the environment[182] have all been granted the status of Juristic Persons in India in numerous landmark judgements. The Board of Directors and the Managing Boards/Trusts are responsible for exercising the powers granted to the Corporations and the Idols, respectively. Corporations and other users of AI can serve as its trustees or agents for the same reasons. The data-driven AI that provides assistance meets all the requirements of a legal person, except for the deep learning form in which the AI may learn and make judgments autonomously. It is not capable of independent thought and is subject to the will of its creators and users. Therefore, the data-driven AI that provides assistance should be recognised as a legal person. The Kingdom of Saudi Arabia, which just became the first country to grant citizenship to a robot named Sophia, can be used as an example. She would have the same civil and legal protections as any other citizen.

2. Dual-Level Structure

All types of businesses can benefit from this recommendation. Corporations may adopt a two-tier board structure, with AI serving in the management layer. All judgement calls in this tier's protocol are handled automatically by the AI. It will be necessary to elevate these

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[179] Shiromani Gurdwara Parbandhak Committee v. Som Nath Dass and Others, (2000) 4 SCC 146.
[180] Tata Engineering & Locomotive Company Ltd., v. State of Bihar, (1964) 6 SCR 885.
[181] Yogendra Nath Naskar v. Commissioner of Income Tax, (1969) 1 SCC 555
[182] Mohd. Salim v. State of Uttarakhand, 2017 (2) RCR (CIVIL) 636.

decisions to the level of supervision and final approval. Decisions made at the Management level will be transmitted to the Supervisory and Approval levels for review and final approval. After careful consideration by the human-navigated higher tier, these choices will be implemented. In the event of criminal responsibility, this approach will also be flexible. This is due to men's rea being a necessary component of any illegal activity. Men's rea cannot be determined for a machine. The two-tiered board structure allows for the identification of men's rea under the corporate veil doctrine.

3. Imposing Criminal Liability

The three cornerstones of criminal responsibility are:
- Actus Reus
- Mens Rea Third,
- Strict liability offences (where no proof of men's rea is needed).

Criminal Liability Models for Artificial Intelligence in an Indian Context by Gabriel Hallevy[183]:

There are three proposals for making artificial intelligence legally culpable. Applying this to the serious offence of murder: The Perpetrator-via-Other Principle The creators of this model commit crimes using AI. It has no awareness of the results of its actions and hence behaves only as a mindless agent. Because the person giving the AI instructions has committed a crime with the intent to cause death (the "Actus Reus"), they should be criminally liable for Murder under Section 300, of the Indian Penal Code ("IPC").[184] Natural-Probable-Consequence In this scenario, artificial intelligence (AI) commits a crime after being accidentally triggered during its normal operation. The Actus reus would be drawn even though the ingredient of men's rea is missing. According to Section 299 of the Indian Penal Code, those responsible for creating or employing AI who accidentally cause death through illegal conduct may be found guilty of Culpable Homicide. Imputed Responsibility This is in reference to the difficulty of showing mens rea in AI, as opposed to Actus Reus. It has been argued that AI can only be held criminally liable in cases of strict responsibility, where proving mens rea is unnecessary. For instance, the same criminal penalty that applies to people in the event of an accident caused by a self-driven car's excessive speed should also apply to AI.

4. Officers' and Directors' Liability Insurance Coverage[185]

Pursuant to the Companies Act of 2013, a directors' and officers' liability insurance policy is not required. The Act of 2013 nevertheless enables the director to acquire security to reimburse any of them towards any liability with regard to any carelessness, default, misbehavior, duty violation, or infringement of trust that they could potentially be accused of. The directors will consequently have the ability to defend themselves against any liabilities

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[183] Prof. Gabriel Hallvey, *The Basic Models of Criminal Liability of AI Systems and Outer Circles*,(11/June/ 2019). Available at SSRN: https://ssrn.com/abstract=3402527 or http://dx.doi.org/10.2139/ssrn.3402527, Last Accessed: (22/April/2023).
[184] Ibid At, 29.
[185] Dinesh Kumar, et al., *"Legal Analysis of Artificial Intelligence in Corporate Board Rooms"*, Volume 12 Issue 7, Turkish Journal of Computer and Mathematics Education, 1516 (1514-1521) (2021).

resulting from AI thanks to this insurance. As a result, the author recommends that an insurance contract be established and required for businesses planning to use artificial intelligence.

5. Authorised National Agency[186]:

In India, there ought to be an established national organization that specifies what tasks AI can accomplish and what it cannot. truthfully, the word AI needs to be defined under Indian legislation.

XIII. CONCLUSION AND RECOMMENDATIONS

Artificial intelligence (AI) has the potential to affect nearly every facet of human life, making it the single most important technological revolution of our time. Businesses, therefore, need to be ready for this unprecedented upheaval. Unpreparedness may have severe consequences for the smooth operation of this technological revolution, which will be influenced in part by the framework of company law. Although the corporation law framework may have some effect on this technological transformation, legislative unreadiness will have a far greater one. At the top of the corporate food chain, where the toughest business choices are made, the usage of artificial intelligence is becoming increasingly commonplace. Many industries have already benefited from AI's innovative capabilities. One study found that while human pathologists make mistakes at a rate of 3.5%, AIs make mistakes at a rate of 7.5%. However, by combining AI and human evaluations, the mistake rate dropped from 15% to 5%, an improvement of 85%.

The author concludes that the incorporation of augmented or autonomous intelligence into BODs is not permitted under Indian corporate law after evaluating the legal ramifications of AI in the Indian corporate sphere and listing the many techniques for implementing AI. This is due to the fact that (among other things) only humans can be selected by the board of directors.

This rule was to prevent situations in which an artificial person (like a corporation) is given legal personhood status to avoid responsibility. It's undeniable that AI, with its capacity for in-depth study and its always-improving technology, can improve the choices made by the BODs One such example is the word "vital." Keep in mind, however, that artificial intelligence is not yet at the point where it can accurately mimic human thought processes. Artificial intelligence (AI) is only as good as the information it is fed. This information, along with any other, similar information it may acquire (through web scraping), is used to train the model. Self-training is possible, but it happens in light of the outcomes it has already produced. Therefore, unlike humans, artificial intelligence does not evolve based on genuine intellect. Simply said, it's a reflection of the range of outcomes that could have resulted from the training data.

Therefore, AI can only assess threats, make decisions, and take actions based on the data set it has been taught. This calls for human intervention in rare cases, and it's possible this is why AI hasn't been given a place at the global table of decision-makers just yet. VITAL, sometimes cited as the first AI director, is not really a board member either.

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[186] Ibid at, 1512.

Because of this, "assisted intelligence" can be implemented in India's executive suite. By combining the speed with which AI can analyze data that exceeds human capabilities with the versatility of human learning, a happy medium is reached between quantitative and qualitative analysis. Since the incorporation of AI does not include the transfer of authority or the allocation of board seats, it is also legal under current regulations. As such, it serves as a consultative approach, with the ultimate decision being made by the board of directors.

Implementing AI raises a number of questions about how it will affect the three pillars of good corporate governance: accountability, transparency, and fairness. AI has the potential to positively impact these pillars by bolstering the role of the independent director, increasing transparency, and decreasing information asymmetry.

This article has thus far highlighted the following issues: privacy concerns due to vast volumes of data involved; opacity inherent within AI; difficulty to appropriately assess subjective values; directors' escape of liability (by invoking blanket reliance); and the inability to accurately predict future events. A reform of the Indian legislative structure and the creation of effective mechanisms as protections are necessary, even though subjective valuation can be minimised by the combined use of AI and the human intellect.

Simply put, Indian policy must calibrate and fix these possible concerns for the use of AI in the boardroom to be favourably successful. First, the absence of data privacy standards can reduce the director's culpability, even as cybersecurity initiatives can ease privacy concerns. The only way to fix this is to enact a strict data protection law. Second, because of the potential for abuse, regulatory bodies should create extensive rules for the moral use of AI. Third, directors should be evaluated on whether or not they were justified in using AI in the manner in which they did with minimal insight into AI's decision-making patterns to prevent accountability from being undermined.

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