

The Board Monitoring Function: Artificial Intelligence in the Era of Heightened Accountability

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Abstract

The use of AI introduces entirely new considerations for corporate governance as well as novel dimensions to existing issues. In this paper, we consider how AI affects the core responsibilities of the board as a monitoring organ in large public companies. The paper outlines the changing power dynamics of the corporation and its governance as well as the so-called institutional failures (constraints in time, in information, and in board composition) that have been thought to act as an impediment to the board's effective operation as a monitor in a human-centric governance framework. The paper then explores the different types of AI Systems that are being deployed in a corporate setting to either augment or automate decisions and how these may help to address institutional failures by providing for efficiencies. However, the paper then notes that some of these efficiencies may act contrary to established legal accountability mechanisms, using the Australian legal framework as an example. The paper concludes that while the board may use AI to help address institutional failures, individual directors remain responsible for the ultimate decisions made by the board. To ensure that directors comply with their legal obligations, we need to implement 'human-in-the-loop' approach to corporate governance that ensure that the right people are involved in overseeing decisions that involve AI ('right-human-in-the-loop') as well as guidance on how board decisions should be made when they involve AI ('human-in-the-loop-right').

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I. Introduction

For over a century, corporate law and corporate governance models have tended to assume and to reinforce the idea that the business of the corporation is to be managed directly by, or increasingly under the direction of, a board of directors.¹ This seemingly simple proposition has, however, been subject to ongoing critique as commentators debate the role of the board relative to other corporate actors – different classes of shareholders, corporate executives, employees, creditors, and other ‘stakeholders’ – as well as the specific responsibilities of the board. Two ideas have gained particular prominence: that the board of directors may in some circumstances act itself *as the managerial organ* of the company,² or that the board may act rather as the body within the corporation that *monitors the management* of the company.³ Conventional wisdom has tended to suggest that boards of large, complex and public modern companies now function mostly as organs that monitor the management of their companies by corporate executives.⁴

This has raised a number of corporate law and corporate governance challenges regarding how corporations and their key decision-makers engage in decision-making: how they undertake actions internal to the corporation and, relatedly, how they ensure compliance with regulatory, and/or broader ethical, obligations (together, referred to in this article as the board’s key monitoring functions).⁵ The importance attributed to the board’s operation as a monitor of key corporate decisions is reflected in the ratcheting up of obligations imposed on directors either through the law (legislative and judicial), through corporate governance codes, or through efforts to promote market-based mechanisms. Ensuring the accountability of core decision-makers

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¹ See, e.g., DEL. CODE ANN. tit. 8, § 141(a) (1991) (‘...the business and affairs of the corporation shall be managed by or under the direction of a board of directors.’); Section 198A(1) *Corporations Act 2001* (Cth) (Aust.) (The business of a company is to be managed by or under the direction of the directors); Section 157A(1) *Companies Act 1967* (Singapore) (The business of a company is to be managed by, or under the direction or supervision of, the directors); Article 348(1), *Companies Act 2005* (Japan) (The directors execute the operations of the Stock Company (excluding a Company with a Board of Directors; hereinafter the same applies in this Article), unless otherwise provided in the articles of incorporation); Article 393(1), *Commercial Act 1962* (RoK) (A resolution of the board of directors shall be required for the management of affairs of a company such as disposal or transfer of major assets, borrowing of large scale assets, appointment or dismissal of managers, and establishment, transfer or abolition of branch offices).

² Edward B. Rock, ‘America’s Shifting Fascination with Comparative Corporate Governance’ (1996) 74(2) *Washington University Law Review* 367; Ronald J. Gilson & Jeffrey N. Gordon, ‘Board 3.0: An Introduction’ (2019) 74 *BUS. LAW.* 351 https://scholarship.law.columbia.edu/faculty_scholarship/2294.

³ This view became increasingly prominent during the 1960s and the 1970s. Melvin A. Eisenberg, *The Structure of the Corporation: A Legal Analysis* (1976) 141-48.

⁴ Rock (n 2) 367.

⁵ The classification of board powers and functions varies. In considering the disclosure of climate-related risks, the Task Force on Climate-Related Financial Disclosures sets out the governance or oversight of climate-related risks; strategy to address risks and take advantage of opportunities; identifying, describing and managing climate-related risks; and dealing with metrics and targets relating to the climate. 19-23. Task Force on Climate-Related Financial Disclosures, *Recommendations of the Task Force on Climate-Related Financial Disclosures* (Final Report, June 2017).

within the corporation has, therefore, preoccupied much time of corporate governance reformers over the past several decades.

Many of these reforms have been made on the understanding that for a board to adequately carry out its monitoring function it must, at a minimum, be well-resourced, well-informed, and composed of individuals with appropriate skills and knowledge. Not only are such reforms aimed at ensuring, from a practical perspective, that the board can adequately carry out its monitoring function, but they also attempt to promote accountability in boardroom decision-making. In spite of these reforms (and a key motivator of these reforms) a number of ‘institutional failures’ continue to hinder the monitoring performance of the board.⁶ Constraints in time, in the provision of adequate information, and in the composition of the board,⁷ mean that boards often struggle to effectively carry out their monitoring function. This has contributed to corporate compliance-based and ethical failures.

In Australia, the *Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry* (‘Royal Commission’) highlighted some of these challenges in its appraisal of wide-spread and persistent failures, mismanagement, and breaches of the law in the financial sector.

Unsurprisingly, the Royal Commission confirmed that boards need the ‘right’ information to discharge their functions and to question management ‘...on important issues including issues about breaches of law and standards of conduct, and issues that may give rise to poor outcomes for customers.’⁸ This statement affirms the significance placed on the board as a ‘check’ on matters of compliance and consumer outcomes. Although the Royal Commission was able to identify and clearly articulate the challenge – having the right information to the board to discharge this vital function – it was less willing (or, perhaps, able) to provide insight into what the ‘right’ information was and how exactly corporate boards could and should discharge their core functions. Instead, this was left to the boards and management teams of Australia’s leading financial institutions to address the matter.⁹ Recent commentary has questioned whether this reluctance to establish clear guidance has contributed to ongoing misconduct in the sector.¹⁰

The fourth edition of Australia’s *ASX Corporate Governance Principles and Recommendations* (**ASX Principles**) seeks to provide slightly more insight into the types of information that the board requires to effectively operate as a monitor in complex corporate entities, noting that the senior executive team must provide the board with ‘accurate, timely and clear information on the entity’s operations to enable the board to perform its responsibilities.’¹¹ The recommendations go on to note that this information should not be limited to financial performance, but also to compliance with legal and regulatory requirements and conduct that may be ‘materially inconsistent with the values or code of conduct of the entity.’¹²

⁶ Rock (n 2) 367.

⁷ *ibid.*

⁸ Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry (Final Report, 4 February 2019) (**Royal Commission**) 400.

⁹ *ibid.*

¹⁰ See, e.g., Jeannie Marie Paterson, ‘Multiple Warnings and Huge Fines are not Stopping Super Funds, Insurers and Banks Overcharging Customers’ *The Conversation* (26 February 2025) <https://theconversation.com/multiple-warnings-and-huge-fines-are-not-stopping-super-funds-insurers-and-banks-overcharging-customers-250658> (discussing ongoing breaches of the law and poor ethical conduct in the financial sector despite the repeated imposition of penalties).

¹¹ ASX Corporate Governance Principles and Recommendations, 4th edition (2019) Commentary to Recommendation 1.1, 6.

¹² *ibid.*

Getting the right information to the board, at the right time, and in a clear manner is, therefore, considered central to helping overcome institutional failures and promoting corporate accountability. The significance of the board's role in ensuring that corporations comply with legal and regulatory requirements as well as with any relevant code of conduct, has taken on added salience as jurisdictions impose more stringent legal obligations on directors in areas such as climate change.¹³ This places even greater pressure on boards to have the right information, to find the time to conduct their monitoring function, and to ensure adequate board composition to address the increasingly complex corporate regulatory environment.

Historically, attempts to address institutional failures and to promote corporate accountability have been human-centric.¹⁴ Advances in technology have added an extra layer to the corporate puzzle. To address such a literature gap, this article focuses on the potential implications of Artificial Intelligence ('AI') on the ability of boards (primarily of large, complex public companies) to effectively carry out their monitoring functions. AI has the capacity to augment or, in some cases, to automate, processes, including corporate decision-making.¹⁵ This article will critically analyse how such automation or augmentation of decision-making has the potential to, in some respects, assist in addressing 'institutional failures' or to exacerbate those failures.

The use of AI in the corporate setting introduces wider governance considerations as well as novel aspects to existing corporate governance considerations. AI has the capacity to increase efficiencies (addressing constraints on time), to promote more effective information co-ordination (addressing information-based constraints) and to enhance the skills and knowledge of corporate board (addressing board composition constraints). However, at the same time, AI raises a number of challenges that may undermine existing attempts to instill in directors a sense of responsibility and accountability for the exercise of their powers. AI can produce massive amounts of complex data from a variety of jurisdictions that would make it difficult for even the most expert group of directors with all the time in the world to review, understand, and question. The operation of AI Systems as a 'black box' and the propensity for people to unquestioningly adopt automated decisions threaten to set us back when it comes to corporate accountability. Attempts to hide behind AI Systems may make it more difficult to effectively attribute liability to individuals.

¹³ The extent to which climate change is relevant to the duty of care and diligence has been set out in a series of influential opinions beginning in 2016. Noel Hutley and Sebastian Hartford-Davis, 'Climate Change and Directors' Duties' (Memorandum of Opinion, The Centre for Policy Development and the Future Business Council, 7 October 2016); Noel Hutley and Sebastian Hartford-Davis, 'Climate Change and Directors' Duties' (Supplementary Memorandum of Opinion, The Centre for Policy Development, 26 March 2019); Noel Hutley and Sebastian Hartford-Davis, 'Climate Change and Directors' Duties' (Further Supplementary Memorandum of Opinion, The Centre for Policy Development, 23 April 2021); Sebastian Hartford-Davis and Zoe Bush, 'Australian Company Directors Exposed to Nature-Related Risk: New Legal Opinion' (Pollination, in Collaboration with the Commonwealth Climate and Law Initiative, 24 October 2023).

¹⁴ Alissa Kole, 'A New Governance Paradigm is Necessary for AI-Powered Boards' (Harvard Law School Forum on Corporate Governance, 21 April 2024) <https://corpgov.law.harvard.edu/2024/04/21/a-new-governance-paradigm-is-necessary-for-ai-powered-boards/> (noting that in some jurisdictions, such as Australia and the USA, the law only contemplates natural persons operating as directors, while in other jurisdictions '...legal representatives who are not natural persons are effectively allowed on boards.'). Sergio Alberto Gramitto Ricci, 'Artificial Agents in Corporate Boardrooms' (2020) 105 *Cornell Law Review* 869, 871 (noting that while currently it is inconceivable that corporations would operate without humans, AI forces us to wonder whether they could soon be replaced by intelligent machines).

¹⁵ Hanisch, M., Goldsby, C., Fabian, N., & Oehmichen, J. (2023). Digital Governance: A Conceptual Framework and Research Agenda (2023) 162(113777) *Journal of Business Research* (highlighting a number of benefits associated with digital governance).

While a number of proposals have been considered to counter such negative effects, we propose that corporate law and corporate governance frameworks explicitly feature ‘human-in-the-loop’ considerations that ensure adequate responsibility and accountability as AI feature more prominently in a corporate context.¹⁶ A review of corporate law and governance should focus on *which humans* should be assigned to monitor automated or augmented decision-making processes and *whether any particular skill or experience should be required* (what we refer to as putting the ‘right-human-in-the-loop’). Further, we must consider what accountability measures to implement to ensure that the humans responsible for monitoring AI-facilitated decisions do so effectively (what we refer to as putting the ‘human-in-the-loop-right’). Appropriate audit requirements to ensure transparency, as well as mechanisms to retain a sense of responsibility and accountability in the board’s monitoring function is important in a context where the benefits of AI Systems in helping to overcome institutional constraints produce a sense of complacency.

These questions gain ever-greater significance as AI innovation evolves. The use of AI may already be moving beyond systems that merely provide information to human directors. For instance, so-called ‘AI directors’ have been added to boards or even, in one case, appointed CEO.¹⁷ Prominent examples of extreme attempts at automation in the boardroom include a Hong Kong venture capital firm, Deep Knowledge Ventures, assigning the algorithm, ‘Vital’, as the sixth AI member of its board of directors.¹⁸ International Holding Company, a large, Abu Dhabi-based investment company also appointed to its board ‘Aiden Insight’ as a non-voting observer, to improve board decision-making.¹⁹ It is important that corporate law and corporate governance scholarship respond to these developments to ensure that the board can effectively execute its monitoring function while promoting accountability in the decision-making process. Further, given the close relationship between AI’s development and use of AI in the corporate setting, it is important for broader governance settings that corporate law and governance respond to AI innovations in the boardroom.

The article proceeds as follows. Part II sets out the traditional role of the human-centric board of directors. This part emphasizes the shift in the board from ‘hands-on’ management to ‘monitoring organ’ in the modern large, complex, public corporation. Part II also identifies a number of challenges that reformers have sought to address in how the board carries out its monitoring functions. Part III explores the emergence of AI, emphasizing three mutually reinforcing developments: large language models, generative AI and agentic AI. Each of these AI innovations presents a range of new opportunities, but also challenges. Part III also identifies existing governance approaches at the international level and in key jurisdictions on how to govern the use of AI. Part IV critically analyses the potential benefits and challenges of AI in the boardroom. We focus on how existing legal frameworks may operate or not operate when AI

¹⁶ See e.g., Ge Wang, Humans in the Loop: The Design of Interactive AI Systems, Stanford University Human-Centered Artificial Intelligence, <https://hai.stanford.edu/news/humans-loop-design-interactive-ai-systems>; Buckley, Zetzsche, Arner, Tang, ‘Artificial Intelligence in Finance: Putting the Human in the Loop’ (2021) 43(1) *Sydney Law Review* 42 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3831758>.

¹⁷ Polish drink maker, Dictador, appointed the world’s first ever AI CEO, Mika, an AI Robot, who also sits on the board as a director. See also, Adam Lucente, ‘UAE’s Largest Company IHC Appoints AI Bot to Board’ AL-Monitor (27 February 2024) <https://www.al-monitor.com/originals/2024/02/uaes-largest-company-ihc-appoints-ai-bot-board#:~:text=The%20Abu%20Dhabi%20based%20investment,in%20support%20of%20the%20company>.

¹⁸ Kole (n 14). The Managing Partner of the company has stated that the company would not make positive investment decisions without first getting approval from Vital because the algorithm saved the company from bankruptcy in the highly volatile biotech sector. See also, Nicky Burrridge, ‘Artificial Intelligence Gets a Seat in the Boardroom’ Nikkei Asia (10 May 2017) <https://asia.nikkei.com/Business/Artificial-intelligence-gets-a-seat-in-the-boardroom>.

¹⁹ Kole (n 14). For the announcement, see <https://www.mediaoffice.abudhabi/en/economy/artificial-intelligence-board-observer-appointed-by-international-holding-board-of-directors/>.

Systems are either used in the boardroom or used in the corporation to undertake core functions. Part V concludes by setting out key reform directions corporate law and corporate governance should consider for the use of AI in the boardroom. The approach adapts a refined human-in-the-loop concept to address the specific institutional failures and accountability challenges of the corporate boardroom.

II. The Role of the Board of Directors: A Human-Centric Approach

*The typical business unit of the 19th century was owned by individuals or small groups; was managed by them or their appointees; and was, in the main, limited in size by the personal wealth of the individuals in control. These units have been supplanted in ever greater measure by great aggregations in which tens and even hundreds of thousands of workers and property worth hundreds of millions of dollars, belonging to tens or even hundreds of thousands of individuals, are combined through the corporate mechanism into a single producing organization under unified control and management.*²⁰

A. Shifting 'Power of Balance' within the Corporation

Debates regarding the modern foundations of corporate law and governance are often traced back to Berle and Means' description of the early twentieth century.²¹ In their analysis, Berle and Means characterize the public corporation as comprising a division between increasingly powerless owners (shareholders) and managers (the board of directors).²² The role of corporate law as they envisaged it was, in essence, to address the potential 'agency' problem that this division caused, an issue which has been central to legal analysis in the field ever since.²³ Berle later noted that shareholders had lost so much power that they had little potential to influence the corporation.²⁴

As corporate influence in society has grown throughout the twentieth and into the twenty-first centuries,²⁵ greater attention has been given to the diverse range of people who exercise power

²⁰ Adolf A. Berle Jr. & Gardiner Means, *The Modern Corporation and Private Property* (Routledge, 2017) 4, (Harcourt, Brace & World, Inc., 1932). While it is sometimes claimed that this work was a radical departure from previous scholarship in the field, Wells has argued that the work of Berle and Means signified instead a culmination of decades of analysis which sought to understand the governance problems of the then modern corporation and the impacts of governance problems on society. Harwell Wells, 'The Birth of Corporate Governance' (2010) 33(4) *Seattle University Law Review* 1247, 1248.

²¹ Berle & Means (n 20). The Berle & Means analysis offers a convenient starting point for the exploration of the modern corporation and its regulation. However, the nature of the corporation and its regulation have long been contested (and continue to be so). See, generally, David Millon, 'Theories of the Corporation' (1990) *Duke Law Review* 201.

²² Berle & Means (n 20).

²³ Ibid 8-10; R.H. Coase, 'The Nature of the Firm' (1937) 4(16) *Economica* 386-405. The significance of agency in the corporate context has recently come under scrutiny. See, e.g., Jennifer G Hill, 'Hidden Fallacies in the Agency Theory of the Corporation' in Alexandra Andhov, Claire A Hill and Saule T. Omarova (eds.) *Hidden Fallacies in Corporate Law and Financial Regulation: Reframing the Mainstream Narratives* (Bloomsbury Publishing, 2025) 39-64.

²⁴ Adolf A Berle, *Economic Power and the Free Society* (Fund for the Republic 1957), noted in *Blasius Industries Inc v Atlas Corp* 564 A 2d 651, 659 fn 1 (quoting Franklin Balotti, Jesse A Finkelstein and Gregory P Williams, Meetings of Shareholders (1987) 2).

²⁵ By the 1950s, commentators were claiming that the corporation formed perhaps the central societal institution. Speaking in 1957, William T. Gossett, Vice-President and General Counsel of the Ford Motor Company, described the modern stock corporation as '...a social and economic institution that touches every aspect of our lives; in many ways it is an institutionalized expression of our way of life. During the past 50 years, industry in corporate form has moved from the periphery to the very center of our social and economic existence. Indeed, it is not inaccurate to say that we live in a corporate society.' William T Gossett, *Corporate Citizenship* (Washington & Lee University, 1957), 157.

through the corporate apparatus.²⁶ A continuing focus has, however, been the effort to more clearly articulate the functions and duties of the board of directors and to ensure that the board is held properly to account. A series of corporate scandals during the 1980s involving the negative effects on employees and broader society through hostile takeovers, mismanagement and abuse of power by prominent directors, in particular, seemed to provide the impetus for review of the corporation and its governance in an effort to more closely align corporate conduct with evolving societal expectations.²⁷ In Australia, this included a Senate review regarding the shift in balance of power between ownership and control of the corporation so that management had control over vast amounts of assets.²⁸ The review noted that the growing power of management over vast assets raised concerns regarding accountability, as it was felt that, at least in some cases, corporate executives could build financial empires on the back of reckless, unscrupulous or dishonest conduct without regard to law and unaffected by damage to their reputation.²⁹ The resulting reforms purported to strengthen accountability through the introduction of corporate governance codes and principles that outlined ‘best practice’ while the courts and Parliament ratcheted up legal duties.³⁰ These reforms took place as market-based mechanisms contributed, in many jurisdictions, to shifts in centralized power away from the exclusive domain of the board to powerful investor groups.³¹

Attempts to impose more stringent legal obligations on directors initially focused on the imposition of objective standard of care and diligence. In Australia, for instance, the NSW Court of Appeal noted, in *Daniels v Anderson*, that a very low standard of care and diligence had been

²⁶ For instance, from the 1980s onwards, there has been considerable critique of the role and influence of institutional investors in the exercise of corporate power. See, e.g., Ronald J. Gilson and Jeffrey N. Gordon, ‘The Agency Costs of Agency Capitalism: Activist Investors and the Revaluation of Governance Rights,’ (2013) 113 *Columbia Law Review* 863, 865; Lucian Bebchuk and Scott Hirst, ‘The Spectre of the Giant Three’ (ECGI Working Paper Series in Finance, Working Paper N° 608/2019, July 2019) 19; John C. Coates, ‘The Future of Corporate Governance Part I: The Problem of Twelve’ (Harvard Public Law Working Paper No. 19-07, 20 September 2018) 2. The 2021 edition of the Berle & Means book includes an introduction by Murray L. Weidenbaum and Mark Jensen arguing that in the years since its first publication, events have illustrated the Berle & Means ‘...may have gone overboard in stating that the power and control has shifted away from the common stockholders.’ Berle & Means [n 20] xi. They cite the work of Harold Demsetz, ‘The Structure of Ownership and the Theory of the Firm’ (1983) 26(2) *The Journal of Law & Economics* 375, 390.

²⁷ See, Report of the Committee on the Financial Aspects of Corporate Governance, 1992. See also, Henry Bosch, *Corporate Practices and Conduct* (Information Australia, 1991) (outlining proposed governance reforms in Australia); Millon (n 21) 203-04.

²⁸ Senate Standing Committee on Legal and Constitutional Affairs, ‘Company Directors’ Duties’ (November 1989) 7. The report was produced in response to a referral from the Senate: Journals of the Senate, No 79, 26 May 1988 763-4.

²⁹ Henry Bosch, ‘The Changing Face of Corporate Governance’ (2002) 25(2) *UNSW Law Journal*, 270 (noting that before the stock market crash of 1987 the ‘term “corporate governance” was rarely used in Australia and few people gave much thought to the concepts now covered by it).

³⁰ See, e.g., The UK’s Cadbury Report:

We believe that our approach, based on compliance with a voluntary code coupled with disclosure, will prove more effective than a statutory code...We recognise, however, that if companies do not back our recommendations, it is probable that legislation and external regulation will be sought to deal with some of the underlying problems which the report identifies. Statutory measures would impose a minimum standard and there would be a greater risk of boards complying with the letter, rather than with the spirit, of their requirements.

Report of the Committee on the Financial Aspects of Corporate Governance (1992) 1.10.

³¹ See, e.g., Steve Kourabas, ‘The Role of Technological Innovation in the Evolution of Corporate Engagement’ in Rosemary Teele Langford (ed.) *Corporate Law and Governance in the 21st Century: Essays in Honour of Professor Ian Ramsay* (The Federation Press, 2023) (and citations therein).

the norm in corporations law because of the view that 'However ridiculous and absurd the conduct of the directors it was the company's misfortune that such unwise directors were chosen.'³² It is unsurprising given the widespread corporate failures of the 1980s that had serious societal effects that, the court held that directors would, from that point on be held to a higher, objective common law standard with the following basic parameters:

There is no doubt reason for establishing a board which enjoys the varied wisdom of persons drawn from different commercial backgrounds. Even so a director, whatever his or her background, has a duty greater than that of simply representing a particular field of experience. That duty involves becoming familiar with the business of the company and how it is run and ensuring that the Board has available means to audit the management of the company so that it can satisfy itself that the company is being properly run.

In our opinion the responsibilities of directors require that they take reasonable steps to place themselves in a position to guide and monitor the management of the company...³³

While this matter was being heard in the courts, the Australian legislature enacted what would eventually become the statutory duty of care and diligence set out in s. 180 of the *Corporations Act 2001* (Cth). As with many other jurisdictions, Australia's statutory expression of this duty requires that directors and other officers exercise their powers and discharge their duties with care and diligence expected of a reasonable person if they occupied a similar position in a similar corporation.³⁴ A more unique feature of the combined common law, equitable, and statutory regime, is that in Australia, the statutory regime is monitored by the Australian Securities and Investments Commission, which has the authority to initiate legal claims against directors for breach of statutory duties, thus superimposing a 'public' element to the accountability regime on top of the private nature of the regime.³⁵

Accountability under this more stringent objective standard has most commonly been applied to the obligation for a director to monitor the financial statements of the corporation. In a series of cases, including *ASIC v Healey & Ors*, Australian courts found that while directors are permitted to rely on others for financial advice (typically specified experts or employees), and to delegate certain tasks relating to finances, they must 'understand basic accounting conventions and [exercise] proper diligence in reading the financial statements.'³⁶ More recently, the stringency of the duty of care and diligence in Australia has been extended beyond strictly financial matters to include areas such as climate change.³⁷ Further, Australia, along with a number of other jurisdictions, has implemented a more nuanced accountability framework for corporate managers in certain high-risk sectors, reflecting ongoing concerns with mismanagement. The Financial Accountability Regime, therefore, sets out, in detail, specific responsibilities within the financial

³² *Daniels v Anderson* (1995) 37 NSWLR 438 at 495.

³³ *Daniels v Anderson* (1995) 37 NSWLR 438 at 500-01.

³⁴ Section 174 of the UK's Companies Act of 2006 similarly requires that a director exercise reasonable care, skill and diligence. Section 180 (2) of the Company Law of the People's Republic of China also requires that directors, owe a duty of diligence to the company. In performing their duties, they must exercise the level of reasonable care ordinarily expected of a manager and act in the best interests of the company.

³⁵ See, e.g., Michelle Welsh, 'Realising the Public Potential of Corporate Law: Twenty Years of Civil Penalty Enforcement in Australia' (2014) 42(1) *Federal Law Review* 1-22.

³⁶ See, e.g., *ASIC v Healey & Ors* [2011] FCA 717 [pinpoint].

³⁷ The *Treasury Laws Amendment (Financial Market Infrastructure and Other Measures) Act 2024* (Cth) requires certain organisations to make climate-related financial disclosures in their annual reports beginning from 1 January 2025. See *Corporations Act 2001* (Cth), Chapter 2M.

sector and imposes obligations on financial institutions to monitor this accountability framework.³⁸

At the same time, efforts were made to promote good ‘corporate governance’ through the establishment of largely voluntary so-called best practice standards.³⁹ In 1992, the UK Report of the Committee on the Financial Aspects of Corporate Governance (the ‘Cadbury Report’) set out one of the earliest attempts to define best practice standards in corporate governance in response to widespread ‘concern about standards of financial reporting and accountability, heightened by [prominent scandals involving] BCCI, Maxwell and the controversy over directors’ pay, which has kept corporate governance in the public eye.’⁴⁰ The Cadbury Report noted that public companies should be headed by an ‘effective’ board, which would lead and control the business.⁴¹ To achieve this goal, the Cadbury Report suggested that boards require a combination of executive directors, with intimate knowledge of the company, as well as non-executive directors who brought with them a broader view of the company’s activities.⁴² While all directors would remain collectively responsible for board decisions, non-executive directors would be particularly responsible for reviewing the performance of the board and corporate executives as well as helping to resolve any conflicts between the goals of those executives and the corporation.⁴³

B. Constraints and the Board Monitoring Function

The events described in Section A, above, illustrate the gradual recognition and acknowledgment that the role of the board has had to evolve to address a more complex social and economic environment. Eisenberg, writing about the USA during the 1970s, noted that boards of large public companies no longer directly managed nor even made policy for the corporation – this task was instead vested in corporate executives.⁴⁴ In carrying out their monitoring function, Eisenberg argued that the board was beset by a number of institutional failures, or constraints.

First, while corporate activities had become more complex and diverse, boards continued to act almost entirely through board meetings. Corporate boards continue to have very limited time to ‘manage’ the corporation or provide policy leadership.⁴⁵ As Eisenberg argued, 5 to 10 days a year

³⁸ See footnote 141.

³⁹ In Australia, the attempt to draft non-binding governance rules in Australia was partly a response to concerns regarding the imposition of legislation that would reflect a more stringent corporate accountability regime in Australia. See, Henry Bosch, ‘“Corporate Practices and Conduct”: Setting Standards for Corporate Governance in Australia’ (1993) 1(4) *Corporate Governance: An International Review*, 196.

⁴⁰ Report of the Committee on the Financial Aspects of Corporate Governance, 1992 (Preface). More recently, evidence suggests that the Cadbury Report was not the first to set out best practice corporate governance standards. The Irish Association of Investment Managers published a ‘statement of best practice’ regarding corporation governance which included guidance on separation between the role of the chair and the CEO, the need for boards to be composed of a majority of independent directors; the need for auditors to be independent; the need for independent non-executives to set board salaries; and the requirement for companies to provide shareholders with disclosure on all aspects of corporate governance. Stephen M. Davis and Daniel Malan, ‘The Origins of Modern Corporate Governance: New Findings’ (Harvard Law School Forum on Corporate Governance, 17 July 2024) <https://corpgov.law.harvard.edu/2024/07/17/the-origins-of-modern-corporate-governance-new-findings/#:~:text=But%20the%20truth%20is%20that,Adrian%20Cadbury%20released%20Britain's%20equivalent>.

⁴¹ Report of the Committee on the Financial Aspects of Corporate Governance, 1992, 4.1 (**Cadbury Report**).

⁴² Ibid.

⁴³ Cadbury Report, 4.5-4.6. In Australia, the Working Group on Corporate Practices and Conduct (chaired by Henry Bosch), *Corporate Practices and Conduct* (1991) sought to achieve a similar aim.

⁴⁴ Eisenberg (n 3) 140.

⁴⁵ Ibid 141-43.

is not enough to operate a large publicly listed company. These time-based challenges have been exacerbated by an increase in board responsibilities, partly contributed to through greater regulatory requirements, shareholder engagement expectations, the growth of cybersecurity threats and the development of disruptive technologies, climate change, and company culture matters.⁴⁶ ‘Overboarding’ - explaining the situation where directors serve on multiple corporate boards – has exacerbated the challenges associated with providing the dedicated attention required to effectively monitor the corporation.⁴⁷ For example, in 2022 Twitter board member, Egon Durban, came under scrutiny for sitting on seven public company boards.⁴⁸ This raised concerns about his ability to effectively carry out his functions as a member of Twitter’s board. This phenomenon has raised concerns given that board members can spend between 226 to 292 hours per year on board functions.⁴⁹

The UK Corporate Governance Code of 2024 attempts to address constraints in time by requiring that non-executive directors provide ‘sufficient’ time to meet their board responsibilities.⁵⁰ Further, one of their key tasks is to challenge, offer strategic guidance and specialist advice, and hold management to account.⁵¹ The board is also advised to take into account the demands of the job when appointing new directors, and advising potential appointees of the time commitments involved.⁵² Further, full-time executives are advised not to

⁴⁶ Kosmas Papadopoulos, ‘Director Overboarding: Global Trends, Definitions, and Impact’ (Harvard Law School Forum on Corporate Governance, 5 August 2019) <https://corpgov.law.harvard.edu/2019/08/05/director-overboarding-global-trends-definitions-and-impact/>. The OECD’s Principles on Corporate Governance further highlight the complexity of the modern board function:

Together with guiding corporate strategy, the Board is chiefly responsible for monitoring managerial performance and achieving an adequate return for shareholders, while preventing conflicts of interest and balancing competing demands on the corporation. In order for boards to effectively fulfil their responsibilities, they must be able to exercise objective and independent judgement. Another important board responsibility is to oversee the risk management system and mechanisms designed to ensure that the corporation obeys applicable laws, including relating to tax, competition, labour, human rights, environmental, equal opportunity, digital security, data privacy and personal data protection, and health and safety.

G20/OECD Principles of Corporate Governance, 35. The principles also outline key monitoring functions of the board, including providing high level guidance on strategy; reviewing and assessing risk management policies and procedures; monitoring key executives; overseeing the process of disclosure and communications; exercising independent judgment; and having access to relevant, timely and accurate information. G20/OECD Principles of Corporate Governance, 35-43.

⁴⁷ Rehana Cassim, ‘Directors Need Limits to how many Boards they sit on. Stretching their time too Thinly is Risky’ *The Conversation* (25 January 2023) <https://theconversation.com/directors-need-limits-to-how-many-boards-they-sit-on-stretching-their-time-too-thinly-is-risky-197226>

⁴⁸ Patricia Lenkov, ‘Board Directors Who Do Too Much: Overcommitted And Under Available’ *Forbes* (10 June 2022) <https://www.forbes.com/sites/patricialenkov/2022/06/10/board-directors-who-do-too-much-overcommitted-and-under-available/>.

⁴⁹ Karen Kane, ‘Are Board Directors Going Overboard?’ *Briefings* (Issue 31) https://www.kornferry.com/content/dam/kornferry/docs/article-migration/Briefings31_OTH_OnTheBoard_14-15.pdf. Some, however, have highlighted the positives of directors serving on multiple boards, such as exposure to varying board dynamics, applying lessons from one board to others, or spotting trends. Scott Baldwin, ‘How Many Boards Is Too Many?’ *DirectorPrep.com* (8 August 2024) <https://savvy.directorprep.com/blog/how-many-boards-is-too-many>.

⁵⁰ UK Corporate Governance Code (2024), Principle H.

⁵¹ *Ibid.*

⁵² *Ibid.*, Provision 15.

take on more than one non-executive director role in a FTSE 100 company or another significant position.⁵³

Eisenberg identifies the provision of information required for the board to properly carry out its monitoring function as a second constraint.⁵⁴ This constraint arises as a result of the boards' reliance on executives for the provision of information. Corporate boards rarely have their own staff to obtain information directly and independently.⁵⁵ Given their lack of resources, directors often do not know what information they need to ask for in order to carry out their monitoring functions effectively and consistent with their legal obligations.⁵⁶ When directors are presented with information, it is not clear that they are always in the best position to understand it.

The OECD Principles of Corporate Governance highlight that the obligation imposed on board members to act on a 'fully informed' basis, is a part of their legal duty of care.⁵⁷ Some guidance is provided on what it means to be 'fully informed': 'Good practice takes acting on a fully informed basis to mean that board members should be satisfied that key corporate information and compliance systems are fundamentally sound and underpin the key monitoring role of the board advocated by the OECD Principles.'⁵⁸ This has obvious implications for internal engagement, with corporate executives playing a key role in ensuring that the board is 'fully informed' given the often limited resources available to the board to act independently.

Eisenberg's third constraint relates to the subordination of the board of directors to the corporate executive through composition, selection, and tenure processes. Here, Eisenberg notes that the board, whether consisting of executive or non-executive directors, relies on the good graces of corporate executives.⁵⁹ Depending on the jurisdiction, this constraint may be extended out to the board's reliance on important shareholders or other key stakeholders that the board is accountable to.

While laws and governance codes present a number of legal duties and set out industry 'best practices' there continue to be challenges associated with addressing Eisenberg's institutional failures. Gordon and Gilson argue, for instance, that it is not easy to scale the current board model to address modern business reality.⁶⁰ You cannot keep on adding board members without reducing the board's ability to function effectively and adding committees may help leverage time and technical expertise but also creates silos.⁶¹ Further, requiring directors to engage more deeply with their monitoring functions would require more time and, as a result, higher director compensation.⁶²

Gordon and Gilson suggest that market-based factors - majoritarian institutional ownership and the creation of new financial intermediaries, such as activist hedge funds - are the cause of many

⁵³ Ibid.

⁵⁴ Eisenberg n 3 143-44.

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵⁷ G20/OECD (n 46) 34.

⁵⁸ Ibid. 34.

⁵⁹ Eisenberg n 3 144-48.

⁶⁰ Ronald J. Gilson & Jeffrey N. Gordon, 'Board 3.0: An Introduction' (2019) 74 BUS. LAW. 351, 352
https://scholarship.law.columbia.edu/faculty_scholarship/2294

⁶¹ Ibid.

⁶² Ibid.

problems associated with the board's operation as a monitoring organ. The authors paint a picture of an institution on the defense: 'On the present board model, well-meaning directors are nonetheless *thinly informed, under-resourced, and boundedly motivated*'.⁶³ Current efforts at addressing institutional failures still fall short of expectations. The imposition of stricter legal obligations on directors as well as efforts through corporate governance codes suggest a need for '...thickly informed, well-resourced, and highly motivated directors who could credibly monitor managerial strategy and operational skill...'.⁶⁴

III. The Rise of 'Artificial Intelligence' and the Need for Governance

*Just as electricity transformed almost everything 100 years ago, today I actually have a hard time thinking of an industry that I don't think AI will transform in the next several years.*⁶⁵

A. Understanding AI

The use of AI in the boardroom represents potentially one of the most disruptive technologies to the corporation and its governance, including how the board carries out its monitoring mandate. AI offers a number of potential opportunities, but also novel challenges, in overcoming constraints in time, information, and composition. Further, the use of AI in a corporate setting raises new considerations when it comes to legal obligations, best-practice governance guidelines, and market-based incentives.

At the broadest level, AI refers to the development and use of technological systems to either augment or to automate tasks typically performed through human intelligence.⁶⁶ Recent scholarship tends to treat AI as a 'system' and, consequently, seeks to first define exactly what the AI system refers to. The EU AI Act, perhaps the most important early example of comprehensive legislation directed explicitly at holistically governing AI, adopts such an approach. Article 3 of the EU AI Act defines an AI System as 'a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence

⁶³ (Emphasis in original). According to Gilson and Gordon, directors in this position cannot defend management against a credible business counter-vision and institutional investors are, therefore, in a position to resolve through their votes strategic disputes. Ibid. 353.

⁶⁴ Ibid.

⁶⁵ Andrew Ng, cited in, Shana Lynch, 'Andrew Ng: Why AI Is the New Electricity' (Insights by Stanford Business, 11 March 2017) <https://www.gsb.stanford.edu/insights/andrew-ng-why-ai-new-electricity>

⁶⁶ The Economist provides the following definition: 'Artificial Intelligence (AI) can be described as the art of getting computers to do things that seem smart to humans.' The Economist, *LLMs will Transform Medicine, Media and More* (Economist Intelligence Unit N.A. Incorporated, 13 August 2024).

physical or virtual environments.⁶⁷ The key point here is that the AI System is able to: (1) make its own inferences from the inputs it receives; and (2) may, as a result, adapt after deployment.⁶⁸

As is often the case with emerging technologies, the definition of AI remains unsettled and is likely to evolve over time. However, two main categories or subdivisions appear to be emerging and to be contemplated in the definitions of many AI-related governance instruments.⁶⁹ The first, is the concept of *machine learning*, which refers to the use of data and algorithms to enable AI to imitate the way humans learn. In machine learning, humans determine a set of parameters to understand the differences between data inputs, usually requiring more structured data to learn.⁷⁰ Machine learning itself encompasses algorithms such as supervised learning, unsupervised learning, reinforced learning and deep learning.⁷¹ These further sub-categories vary based on different levels of human intervention required in labelling or processing data. The nature and characteristics of the data and performance of the learning algorithms used will determine the effectiveness and efficiency of a machine learning solution.⁷²

The second category is *generative AI* - 'algorithms that generate new outputs based on the data they have been trained on.'⁷³ Generative AI technologies create a variety of data – images, videos, audio, text, and 3D models - by learning patterns from existing data, then using that knowledge to generate new and unique outputs.⁷⁴ The distinction between machine learning and

⁶⁷ Regulation (EU) 2024/1689 of the Parliament and of the Council of 13 June 2024 Laying Down Harmonised Rules on Artificial Intelligence [2024] OJ L 144/1, Article 3. The Act notes that any definition of an AI system 'should be based on key characteristics of AI systems that distinguish it from simpler traditional software systems or programming approaches and should not cover systems that are based on the rules defined solely by natural persons to automatically execute operations.' Paragraph 12. One of these key characteristics is the ability to 'infer' – referring 'to the process of obtaining the outputs, such as predictions, content, recommendations, or decisions, which can influence physical and virtual environments, and to a capability of AI systems to derive models or algorithms, or both, from inputs or data.' Paragraph 12. The OECD's Recommendation of the Council on Artificial Intelligence similarly describes an AI system as 'a machine-based system that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments.' OECD, *Recommendation of the Council on Artificial Intelligence*, OECD/LEGAL/0449 (2024) 7.

⁶⁸ See, Article 3 of the EU AI Act. Academic literature sometimes refers to AI as a broader scientific field as well as engineering practices aimed at creating computational systems that may require human intelligence. See Michael Veale, Kira Matus, and Robert Gorwa, 'AI and Global Governance: Modalities, Rationales, Tensions (2023) 19 *Annual Review of Law and Social Science* 255, 256.

⁶⁹ University of Adelaide, 'What is Artificial Intelligence' https://libguides.adelaide.edu.au/artificial_intel

⁷⁰ 'What is Machine Learning (ML)' (IBM) <https://www.ibm.com/topics/machine-learning>

⁷¹ Financial Stability Board, 'Artificial intelligence and machine learning in financial services - Market developments and financial stability implications' (2017) 3-5. For a detailed explanation of the difference between supervised and unsupervised learning, see, e.g., Aziz Z. Huq, 'A Right to a Human Decision' (2020) 106 *Virginia Law Review* 611, 630-33.

⁷² Iqbal H. Sarker, 'Machine Learning: Algorithms, Real-World Applications and Research Directions' (2021) 2:160, *SN Computer Science*, 2 <https://link.springer.com/article/10.1007/s42979-021-00592-x>. Examples of machine learning applications are broad. They have been used to assist in health care provision, in fighting financial crime and even in determining consumer preferences.

⁷³ World Economic Forum, 'What is generative AI? An AI explains' (Feb 6, 2023), <https://www.weforum.org/agenda/2023/02/generative-ai-explain-algorithms-work/>.

⁷⁴ 'First, What is Generative AI?' (GenerativeAI.net) <https://generativeai.net/>. The EU AI Act explains the link between machine learning, generative AI and the capacity to infer: 'Recital 12 of the EU AI Act explains that machine learning involves learning from data how to achieve certain objectives.

The techniques that enable inference while building an AI system include machine learning approaches that learn from data how to achieve certain objectives, and logic- and knowledge-based approaches that infer

generative AI, in simple terms, is that while machine learning refers to automated or augmented systems that classify data, generative AI refers to systems that facilitate the production of new data from data input into the system. In this way, machine learning and generative AI are linked technologies and are mutually reinforcing.

A next stage of AI that builds on machine learning and generative AI, AI-enabled ‘agents’, contemplates the creation of digital systems that can independently interact with the world.⁷⁵ Building on the natural-language capabilities of generative AI, agentic systems may enable systems to ‘plan their actions, use online tools to complete those tasks, collaborate with other agents and people, and learn to improve their performance’.⁷⁶ Some scholars argue that these AI agents could act as skilled virtual coworkers, working together with humans:

A virtual assistant, for example, could plan and book a complex personalized travel itinerary, handling logistics across multiple travel platforms. Using everyday language, an engineer could describe a new software feature to a programmer agent, which would then code, test, iterate, and deploy the tool it helped create.⁷⁷

Given the incredibly fast nature of AI’s development, AI Systems offer the potential for a great deal of not yet imaginable inventions. However, for the moment, AI Systems focus primarily on generating outcomes based on patterns represented through their training data (i.e. their ability to make inferences and generate outputs is contingent on the quality of data input into the system).⁷⁸ They are not yet as adept at creating outcomes purely depending on logic and reason.⁷⁹ These remain, for now, uniquely human attributes (although, the potential for agentic AI to represent a more significant development in the boardroom may be on the horizon with the appointment of AI directors in a number of companies).⁸⁰

Despite this gap in AI’s capacity and its potential applications in society, the technology has enabled the generation of new content, has been leveraged to augment human-based decision-making, and has helped to automate some processes and decisions.⁸¹ It is fair to say that AI raises the potential to radically change society, in both positive and negative ways. From its use in the provision of healthcare services,⁸² to the automated detection of fraudulent financial

from encoded knowledge or symbolic representation of the task to be solved. The capacity of an AI system to infer transcends basic data processing by enabling learning, reasoning or modelling.

EU AI Act, Recital 12. ChatGPT is perhaps the most famous, and widely adopted, example of generative AI.

⁷⁵ Lareina Yee, Michael Chui, and Roger Roberts (with Stephen Xu), ‘Why Agents are the Next Frontier of Generative AI’ McKinsey & Company (24 July 2024) <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/why-agents-are-the-next-frontier-of-generative-ai>

⁷⁶ Ibid.

⁷⁷ Ibid.

⁷⁸ The Economist (n 66).

⁷⁹ The Economist (n 66).

⁸⁰ See footnotes 17-19 and discussion in accompanying text. Sheehan and Ng provide that in its most advanced form, AI has the potential to operate autonomously with limited human intervention, to be adaptable as it responds to changing environmental context and to be interactive, acting in a physical or digital dimension where people and other systems co-exist. Benedict Sheehy and Yee-Fui Ng, The Challenges of AI Decision-Making in Government and Administrative Law: A Proposal for Regulatory Design’ (2024) 57 *Indiana Law Review* 665, 668.

⁸¹ There are two paths for AI: automation or augmentation. See, e.g., Daron Acemoglu and Simon Johnson, *Choosing AI’s Impact on the Future of Work* (Stanford’s Social Innovation Review, 25 October 2023) <https://ssir.org/articles/entry/ai-impact-on-jobs-and-work>.

⁸² Kang Yoon Lee and Junhewk Kim, Artificial Intelligence Technology Trends and IBM Watson References

transactions,⁸³ and the augmentation or automation of increasingly complex tasks in the workforce,⁸⁴ virtually no area of society has remained unaffected by this ever-evolving technology.⁸⁵ Ben Garfinkel has explored the potential for AI to act, in the coming decades, as a ‘general purpose technology’ – what he refers to as a group of technologies ‘distinguished by their unusually pervasive use, their tendency to spawn complementary innovations, and their large inherent potential for technical improvement’ – and even one of the rarer examples of a ‘revolutionary technology’ that facilitates ‘large and long-lasting changes in economic and social trends.’⁸⁶

While we are uncertain exactly what form AI will take, we can expect that the effects of AI will continue to accelerate and evolve throughout society, including our economic and financial systems. Some commentators predict, for example, that AI could massively increase economic output and add to global GDP.⁸⁷ An OECD report, based on 49 responses from a worldwide survey, found that financial institutions, including banks, insurers, and payments services providers, have developed or are currently developing AI applications.⁸⁸ The use-cases for AI include customer relations, process automation, fraud detection, risk management, Anti-money laundering, portfolio management, cyber security and supervisory technology.⁸⁹ AI has been frequently used to improve customer experience, facilitate back office management, extend credit, provide financial advice, underwrite insurance, and execute trades.⁹⁰

The potential benefits of AI need to be balanced against challenges regarding transparency, trustworthiness, safety, fairness, and ethics. For instance, when considering the role of AI in our financial and economic systems, there are concerns in some quarters that AI will operate as a net loss for labor.⁹¹ A number of prominent failures relating to the adoption of automated or

in the Medical Field (2016) 18(2) *Korean Medical Education Review* 51-57
<https://doi.org/10.17496/KMER.2016.18.2.51>.

⁸³ IBM, What is Machine Learning (ML) <https://www.ibm.com/topics/machine-learning>.

⁸⁴ See, e.g., John Armour, Richard Parnham, and Mari Sakoc, ‘Augmented Lawyering’ (2022) 1 *University of Illinois Law Review* 71-138 (discussing the role of AI in the provision of legal services).

⁸⁵ Andrew Ng, ‘Artificial Intelligence is the New Electricity’ (Presentation at Stanford MSx Future Forum, 25 January 2017) <https://www.youtube.com/watch?v=21EiKfQYZXc> (referred to AI as the ‘new electricity’).

⁸⁶ Ben Garfinkel, ‘The Impact of Artificial Intelligence: A Historical Perspective’ in Justin B. Bullock, Yu-Che Chen, Johannes Himmelreich, Valerie M. Hudson, Anton Korinek, Matthew M. Young, and Baobao Zhang (eds.) *The Oxford Handbook of AI Governance* (OUP, 2022) 86-87. We do, however, see counterarguments. For example, Garfinkel argues that AI has not yet achieved the status of a general-purpose technology, nor that of a revolutionary technology. According to Garfinkel, the only other two revolutionary technologies are those that facilitated the domestication of crops and the invention of the steam engine. 86-87.

⁸⁷ See, e.g., McKinsey Global Institute, Notes from the AI Frontier: Modeling the Impact of AI on the World Economy (Discussion Paper, 4 September 2018) (‘AI has the potential to deliver additional global economic activity of around \$13 trillion by 2030, or about 16 percent higher cumulative GDP compared with today. This amounts to 1.2 percent additional GDP growth per year.’) <https://www.mckinsey.com/featured-insights/artificial-intelligence/notes-from-the-ai-frontier-modeling-the-impact-of-ai-on-the-world-economy>.

⁸⁸ OECD, *Regulatory Approaches to Artificial Intelligence in Finance* (September 2024) 13-14.

⁸⁹ Ibid. 16.

⁹⁰ Ibid. 15.

⁹¹ Former Bank of England Economist, Andy Haldane, has noted, for instance, that AI has the potential to replace a huge number of jobs, leaving many ‘technologically unemployed’. Ryan Browne, ‘Bank of England’s chief economist warns A.I. could threaten ‘large’ amount of jobs’ (CNBC, 20 August 2018) <https://www.cnn.com/2018/08/20/bank-of-england-haldane-ai-could-threaten-large-amount-of-jobs.html>. However, a number of studies have taken a more balanced approach, identifying potential job losses while highlighting net gains in jobs associated with the introduction of AI. See, e.g., Yang Shen & Xiuwu Zhang, ‘The Impact of Artificial Intelligence on Employment: The Role of Virtual Agglomeration’ (2024) 11(122) *Humanities and Social Sciences Communications*; Mauro Cazzaniga, Florence Jaumotte, Longji Li, Giovanni Melina, Augustus J. Panton,

augmented decision-making have contributed to perceptions that AI could facilitate unfair, or even illegal, processes or outcomes. The Australian government has acknowledged the potential for harm that may be used by the deployment of AI throughout society. In particular, algorithmic biases that have harmful societal effects may arise as a result of the use of ‘inaccurate, insufficient, unrepresentative or outdated data or ‘due to the design, configuration of or deployment of the AI system itself.’⁹² The government has sounded particular alarm with the loss of control that may eventuate with the use of agentic AI, which could engage in activities such as sending out emails, providing instructions to equipment or acting as a virtual web-assistant without human input.⁹³ Further, the exponential growth and expansion of AI poses potentially larger, systemic risk challenges that we are yet to understand.⁹⁴

Sheehy and Ng argue that AI introduces obvious potential benefits, such as increased speed, efficiency and quality of decision-making (in turn, increasing cost-effectiveness, accuracy and precision) automation is not an unqualified ‘good’.⁹⁵ However, the authors caution that AI functions as a technical and a legal ‘black box’ which raises a number of concerns.⁹⁶ Reference to a technical black box simply acknowledges the complexity of technology and the non-accessibility of AI processes to the layperson.⁹⁷ These technical challenges are compounded by the operation of AI as a legal black box – it is difficult for decision-makers to provide reasons for their decisions, creating legitimacy, acceptability, and credibility challenges vital to democratic decision-making and the concept of trust that is vital to the success of core societal institutions.⁹⁸

Sheehy and Ng consider these limitations through the example of Australia’s Robodebt debacle. The Robodebt scheme was introduced by the Australian Department of Human Services in 2016 to identify and recover overpaid welfare benefits through an automated system that compared income data from welfare recipients with information held by the Australian Taxation Office.⁹⁹ The scheme was automated to detect discrepancies between welfare payments and income data utilising data-matching algorithms. The automated process led to inaccurate debt calculations of over 450,000 individuals.¹⁰⁰ In the absence of appropriate human oversight, notices were wrongly sent to welfare recipients, demanding repayment of overpayments. A class action against the government led to a settlement worth approximately \$1.8 billion recognising unjust enrichments resulting from the program and damages for economic loss as well as stress, anxiety and stigma.¹⁰¹ The decision to improperly deploy automated systems contributed to the breach of laws and had disastrous outcomes, with some welfare recipients who were affected thought to have committed suicide.¹⁰² The problem of adopting AI without proper process in place was

Carlo Pizzinelli, Emma Rockall, and Marina M. Tavares, *Gen-AI: Artificial Intelligence and the Future of Work* (IMF, SDN/2024/001, January 2024); Henrik Ekelund, Why there will be plenty of jobs in the future — even with artificial intelligence (World Economic Forum, 26 February 2024).

⁹² Australian Government Department of Industry, Science and Resources, *Safe and Responsible AI in Australia: Proposals Paper for Introducing Mandatory Guardrails for AI in High-Risk Settings* (September 2024) 12-15.

⁹³ Ibid, 15.

⁹⁴ Ibid.

⁹⁵ Sheehy and Ng, (n 80) 670-74.

⁹⁶ Ibid, 672.

⁹⁷ Ibid.

⁹⁸ Ibid.

⁹⁹ Royal Commission into the Robodebt Scheme Report (Volume 1, xxiii – xxix, 2023).

¹⁰⁰ Sheehy and Ng, (n 80) 690. (In one case, a welfare recipient’s fortnightly income was correctly recorded as \$3,563.00 while their annual income was recorded as \$23.83. In another case, the debt owed by a welfare recipient was calculated at \$2,700, while in truth, they owed only \$1.48).

¹⁰¹ *Prygodicz v Commonwealth of Australia* [No 2] [2021] FCA 634 (11 June 2021) (Austl.) paras 3-14.

¹⁰² Facts and events summarised from Royal Commission into the Robodebt Scheme Report Volume 1, xxiii – xxix (2023).

highlighted by the Royal Commission into the matter, which noted that no humans with an interest in welfare were consulted in order to understand how the scheme might actually affect people.¹⁰³ Over-reliance on AI, or trust in AI without adequate human oversight, means that errors may go unnoticed, with serious societal consequences.¹⁰⁴

The efficiency benefits of AI need, a major proposed benefit of AI in the boardroom, need to be weighed against the need for accurate information that takes into account a plethora of human factors. As the Robodebt example suggests, over-reliance on AI can pose serious problems in terms of transparency and accountability, both of vital significance in ensuring the effectiveness of the board as a monitor. In the corporate context, the courts and regulators have increasingly placed a premium on the provision of timely and accurate information on the monitoring function of directors. Attempts to address these concerns are mirrored in the evolving AI governance landscape.

B. Nascent Attempts at AI Governance

The serious risks associated with the use of AI suggest the need for an appropriate legal and governance framework to accommodate changing behaviors, norms, and social institutions.¹⁰⁵ Attempts to create an effective AI governance framework need to address descriptive elements – policies, norms, laws and institutions that shape how AI is built and deployed, as well as normative aspects, that promote effective, safe, inclusive, legitimate and adaptive decision-making.¹⁰⁶ An effective AI governance framework should help navigate the transition to a society that is increasingly reliant on AI Systems at least as a supplement to human-centric processes.¹⁰⁷ Importantly, AI governance needs to get buy-in from numerous stakeholders,¹⁰⁸ providing them with a clear set of guidelines and values to take into account when designing, developing, deploying, distributing and applying AI.

A number of important attempts have been made to give effect to these principles. The OECD *Recommendation of the Council on Artificial Intelligence*,¹⁰⁹ is designed, for instance, to help in the development of trustworthy AI and to provide policymakers with recommendations for the

¹⁰³ Ibid. xxiv.

¹⁰⁴ Examples of AI ‘hallucination’ have been widely reported, including in the legal profession, where the use of AI has been found to create fake citations. See, e.g., *Mata v. Avianca, Inc.*, 22-cv-1461 (PKC) (S.D.N.Y. Jun. 22, 2023); Benjamyn Scott, ‘A case of ‘AI hallucination’ in the air’, <https://www.leidenlawblog.nl/articles/a-case-of-ai-hallucination-in-the-air>; *Meta v. Avianca, Inc.* Affidavit of Steven Schwartz, <https://www.courtlistener.com/docket/63107798/32/1/mata-v-avianca-inc/>; Josh Taylor, ‘Melbourne Lawyer Referred to Complaints Body after AI Generated Made-up Case Citations in Family Court’ *The Guardian* (10 October 2024) <https://www.theguardian.com/law/2024/oct/10/melbourne-lawyer-referred-to-complaints-body-after-ai-generated-made-up-case-citations-in-family-court-ntwnfb>; Josh Taylor, ‘Australian Lawyer Caught Using ChatGPT Filed Court Documents Referencing ‘Non-Existent’ Cases’ *The Guardian* (1 February 2025) https://www.theguardian.com/australia-news/2025/feb/01/australian-lawyer-caught-using-chatgpt-filed-court-documents-referencing-non-existent-cases?CMP=share_btn_url.

¹⁰⁵ Allan Dafoe, ‘AI Governance: Overview and Theoretical Lenses’ in Justin B. Bullock, Yu-Che Chen, Johannes Himmelreich, Valerie M. Hudson, Anton Korinek, Matthew M. Young, and Baobao Zhang (eds.) *The Oxford Handbook of AI Governance* (Oxford University Press, 2023) 21.

¹⁰⁶ Ibid.

¹⁰⁷ Ibid.

¹⁰⁸ The United Nations shares the same view and notes that effective AI governance could be delivered through an ecosystem of critical functions, such as consensus building, stakeholder engagement and coordination. United Nations System, ‘United Nation System White Paper on AI Governance: An analysis of the UN system’s institutional models, functions, and existing international normative frameworks applicable to AI governance’ (2024) 5.

¹⁰⁹ OECD (n 67) 4.

design of effective AI policies. The OECD sets out a series of high-level principles to guide the design and implementation of AI systems, such as inclusive growth, sustainable development and well-being; human rights and democratic values (including fairness and privacy); transparency and explainability; robustness, security and safety; and accountability.¹¹⁰ These recommendations have been used as a template for the development of AI governance that seek to address some of the core challenges highlighted in cases such as the Robodebt case.

Australia's Department of Industry, Science, and Resources together with other research institutions proposed the adoption of *The Voluntary AI Safety Standard* ("AI Safety Standard") in August 2024 in pursuit of these goals.¹¹¹ The aim of the AI Safety Standard is to provide practical guidance to all Australian organisations on how to safely and responsibly use and innovate with AI, with reference to ten voluntary 'guardrails' that apply to all organisations throughout the AI supply chain.¹¹² Organisations that seek to adopt AI are encouraged to establish, implement and publish accountability processes; to establish and implement risk management processes; to protect their AI systems, including through the implementation of data governance measures that manage data quality and provenance; to test AI models and systems so as to evaluate performance and monitor the system once it has been deployed; to enable human control or intervention in the system so as to provide for meaningful human oversight; to inform end-users regarding AI-enabled decision-making and content; to establish processes for those impacted by AI to challenge its use or outcomes generated in reliance on AI; to operate in a transparent way with other organisations across the AI supply chain; to keep and maintain records so that third parties can assess compliance; and to engage with stakeholders and to evaluate their needs and circumstances, focusing on safety, diversity, inclusion and fairness. These voluntary principles also align with Australia's proposed 'mandatory' guardrails that would apply to high-risk settings.¹¹³

The OECD recommendations emphasise the importance of an effective governance and risk management framework that ensures meaningful human oversight and accountability that aligns with values identified by the OECD throughout the lifecycle of AI. While Australia seeks to promote similar principles as the OECD, the AI Safety Standard highlights a shift from a voluntary governance framework to a mandatory scheme. This may be attributed in part to the influence of the EU AI Act, under which mandatory requirements will be imposed on high-risk AI systems. The European approach requires that AI adopters have in place a risk management system that would identify and analyse known or reasonably foreseeable risks to health, safety or fundamental rights; ensure effective data governance and management practices are adopted; use of clear and comprehensive technical documentation; allowing for automatic record-keeping of events and logs; ensure transparency to enable users to interpret output; imbed human oversight; and achieve 'appropriate' levels of accuracy, robustness, and cybersecurity.¹¹⁴ It is unclear, however, how these principles will interact with corporate law and corporate governance principles, and, importantly, what effect this might have on the board's monitoring function.

¹¹⁰ Ibid.

¹¹¹ Australian Government Department of Industry, Science and Resources, Antinational Artificial Intelligence Centre, and CSIRO, 'Voluntary AI Safety Standard' (August 2024).

¹¹² Ibid. iv.

¹¹³ Australian Government Department of Industry, Science and Resources (n 92) 35. The proposed mandatory guardrails include, however, a requirement that organisations undertake conformity assessment to ensure compliance with the guardrails, instead of imposing an obligation to consult with stakeholders.

¹¹⁴ These requirements are a summary of those set out in Article 9 of the EU AI Act. (Regulation (Eu) 2024/1689 of the European Parliament and of the Council Of 13 June 2024).

IV. The Board's Monitoring Function and AI

*...the limited liability corporation is the greatest single discovery of modern times, whether you judge it by its social, by its ethical, by its industrial or, in the long-run, – after we understand it and know how to use it, – by its political effects. Even steam and electricity are far less important than the limited liability corporation, and they would be reduced to comparative impotence without it.*¹¹⁵

A. The Uses and the Challenges of AI Systems in the Boardroom

The introduction of AI into the corporate setting, including in the boardroom, brings together two of the most impactful innovations we have ever seen, with outcomes that are yet to be fully realised. As Abram Chayes noted, corporations 'are repositories of power, the biggest centers of nongovernmental power in our society.'¹¹⁶ The widespread deployment of AI in corporations has the potential to radically alter corporate power structures. In the boardroom, AI, in both its advanced and less advanced forms, will change the way that directors carry out their core monitoring functions. It is important to ask what this may mean for the boardroom constraints we have explored in this article as well as for broader goals relating to corporate governance and accountability.

The many potential uses of AI Systems in the boardroom are gradually becoming apparent. In its press release introducing the AI 'board observer' Aiden Insight, Abu Dhabi-based company, International Holding Company, outlined a number of ways in which the 'AI-powered virtual entity' assisted the board.¹¹⁷ As a non-voting board observer, Aiden Insight was able to dissect 'decades of business data, financial reports, and market trends to deliver actionable insights and predictive analyses.'¹¹⁸ The use of an AI System to facilitate boardroom decision-making in this way could help address Eisenberg's three constraints - time, information, and composition. Aiden Insight could, for instance, through its dissection of massive amounts of data, help save the board time, could, it may be assumed, provide the board with prompt and (it is hoped) accurate information, and relatedly, could help address board composition problems by 'skilling-up' the board through its data analysis functions. However, we also need to ask how key actors will be held accountable for the decisions used in reliance on an AI System. For instance, who would be responsible where the board of directors either acted on erroneous or otherwise problematic information or advice received by an AI System and who would be responsible where the corporation acted through an AI System and this caused either financial or non-financial problems for the corporation or for a third party? Further, as AI Systems become more sophisticated, what expectations do we have of directors where an AI System is an integral part of the corporate decision-making process?

Locke and Bird explore the board-enhancing capacity of AI Systems.¹¹⁹ They investigate the use of AI Systems in the boardroom as they progress in sophistication from process automating (i.e.,

¹¹⁵ President of Columbia University, Nicholas Murray Butler, quoted in William Meade Fletcher, *Cyclopedia of the Law of Private Corporations* (Callghan, 1917) vol 1, 43.

¹¹⁶ Abram Chayes, 'The Modern Corporation and the Rule of Law' in Edward S Mason (ed), *The Corporation in Modern Society* (Harvard University Press, 1959) 25

¹¹⁷ International Holding Company, 'IHC's Aiden Insight sets a new benchmark for the integration of artificial intelligence in high-level corporate strategy' (Press Release, 7 May 2024) <https://www.ihcuac.com/media-centre/press-releases/ihcs-aiden-insight-sets-a-new-benchmark-for-the-integration-of-artificial-intelligence-in-high-level-corporate-strategy>.

¹¹⁸ Ibid.

¹¹⁹ Natania Locke and Helen Bird, 'Perspectives on the Current and Imagined Role of Artificial Intelligence and Technology in Corporate Governance Practice and Regulation' (2020) 35 *Australian Journal of Corporate Law*, 8. This

automating routine tasks such as generating board packs and meeting schedules), to the provision of cognitive insights (i.e., analysing data for predictive and descriptive insights to support decision-making of human board members in relation to risk management, internal audit, and legal compliance),¹²⁰ and finally cognitive engagement (i.e., AI Systems interacting with humans in real-time – most notably, through systems such as ‘chatbots’).¹²¹ Their analysis supports the use of AI in the boardroom, emphasising how AI Systems might enhance board portals, risk and auditing systems, and legal compliance.¹²² Consistent with the Aiden Insight set out above, therefore, AI Systems have the capacity to make the board function both more efficiently and more effectively.

Eroğlu and Kaya focus more specifically on how AI Systems can address modern corporation governance challenges relating to board composition.¹²³ They argue that AI might assist to diversify boards by reducing human bias in the appointment process.¹²⁴ According to the authors, this would promote gender diversity on corporate boards and would, as a result, improve decision-making, problem-solving, and company performance.¹²⁵ Commentators who look favourably upon AI in the boardroom, therefore, tend to note that AI may help to address perennial corporate governance deficiencies, such as corporate short-termism, board opportunism, and shareholder-centred decision-making.¹²⁶ Referring more broadly to technology in the corporate governance setting, Enriques and Zetsche point to ‘shareholder identification, shareholder proposals, proxy fights, electronic voting, virtual shareholder meetings, digitalized compliance and risk management, as well as to the impact of these new technologies on the corporate purpose’ as processes that may be upended through the use of technology.¹²⁷ Villarinoa and Bronitt consider the issue from a regulator’s perspective. They suggest that some regulators have already started to systematically deploy Automated Compliance Management Systems (ACMS) within corporations to enforce and to monitor good governance,¹²⁸ offering potential insight into how regulatory oversight may be enhanced through the use of AI Systems. This offers important insight into how corporate accountability, and the operation of corporate boards, may be more efficient and effective through the deployment of AI Systems.

classification is adopted from Thomas H. Davenport and Rajeev Ronanki, ‘Artificial Intelligence for the Real World’ (Harvard Business Review, 2018) <https://hbr.org/2018/01/artificial-intelligence-for-the-real-world>.

¹²⁰ This may be the category in which uses such as Aiden Insight fall.

¹²¹ Locke and Bird (n 119) 8.

¹²² Ibid 9.

¹²³ Muzaffer Eroğlu and Meltem Karatepe Kaya, ‘Impact of Artificial Intelligence on Corporate Board Diversity Policies and Regulations’ (2022) 23(3) *European Business Organization Law Review* 541.

¹²⁴ Ibid, 559-65.

¹²⁵ Ibid. See also, Joseph Lee and Peter Underwood, ‘AI in the Boardroom: Let the Law be in the Driving Seat’ (2021) *International and Comparative Corporate Law Journal* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3874588 (noting that AI can provide unbiased recommendations that reduce human biases and focus on long-term sustainability). For a discussion of gender diversity in the boardroom, see, e.g., Akshaya Kamalnath, ‘Gender Diversity as the Antidote to ‘Groupthink’ on Corporate Boards’ (2017) 22 *Deakin Law Review* 85, 105 (‘gender diverse boards are likely to be better monitors because diversity might help counter the incidence of groupthink and to some extent because of women directors’ current status as outsiders. Overall, by improving board decision-making and monitoring, board diversity can help boards function more effectively.’).

¹²⁶ Eroğlu and Kaya (n 125) 550.

¹²⁷ Luca Enriques and Dirk A. Zetsche, ‘Corporate Technologies and the Tech Nirvana Fallacy’ (2020) 72(1) *Hastings Law Journal* 58, 59 (internal citations omitted).

¹²⁸ José-Miguel Bello y Villarinoa and Simon Bronitt, ‘AI-Driven Corporate Governance: A Regulatory Perspective’ (2024) 33(4) *Griffith Law Review* 355.

More cautious appraisals of AI Systems in the boardroom point to insurmountable accountability challenges. Gramitto Ricci, for instance, sets out a myriad of legal, moral, and operational limitations arising as a result of AI's lack of consciousness¹²⁹ Despite claims regarding less bias through the use of AI Systems, serious risks of discriminatory outcomes resulting from training data inputs and human designers create an accountability gap in the decision-making process that may result in exploitation and social harm.¹³⁰ Möslein, too, points to accountability challenges when AI algorithms dominate boardroom decision-making.¹³¹ He notes that an AI algorithm will not suffer financial loss of insolvency or experience economic incentives like humans would.¹³² It would, therefore, be difficult for an AI System to function according to the same accountability restraints as a human director motivated by a desire to avoid personal liability.¹³³ Möslein argues that the interests and incentives of AI depend, instead, on their coding and machine learning,¹³⁴ providing greater scope for potential *ex ante* approaches to governance as AI Systems could be programmed to, for instance, comply with law.¹³⁵ This, in turn, would place much greater emphasis on oversight of algorithms than the current focus of corporate law on human behaviour.¹³⁶

B. Cognitive Misers and Automation Bias

The central concern of this article is the role that directors play (or should be expected to play) in the use and oversight of such algorithms either in the boardroom or as part of the corporation's core functions. The question is important given the potential for humans to act as 'cognitive misers' and for this to contribute towards 'automation bias'. Our propensity to act as cognitive misers refers to the fact that most people seek the least cognitive effort - we will rely on heuristics or decision rules of thumb rather than systematically analyse each decision they make.¹³⁷ Automation bias follows on from our propensity to act as cognitive misers. Given our preference for short-cuts in decision-making, we tend to favour automated decision-making systems (potentially including AI Systems¹³⁸) as a replacement for more vigilant decision-making and system oversight.¹³⁹ Further, humans respond to automated and computer-based decision-making as decision-making *authorities* and can respond to the commands of such authorities even when it runs contrary to what they believe to be right.¹⁴⁰ Further, the introduction of automated decision-making into an environment may suggest that it is more effective than humans, leading to the potential to blindly follow recommendations even when they receive information that

¹²⁹ Sergio Alberto Gramitto Ricci, 'Artificial Agents in Corporate Boardrooms' (2020) 105(3) *Cornell Law Review* 869, 886 (drawing on analogies from practices of Roman businessmen during the period of the Roman Empire who used 'intelligent enslaved people' in the decision-making process).

¹³⁰ Gramitto Ricci (n 129). See also, Florian Möslein, 'Robots in the Boardroom: Artificial Intelligence and Corporate Law' in Woodrow Barfield and Ugo Pagallo (eds) *Research Handbook on the Law of Artificial Intelligence* (Edward Elgar, 2018).

¹³¹ Möslein (n 130).

¹³² Ibid, 666.

¹³³ Ibid.

¹³⁴ Ibid.

¹³⁵ Ibid, 667.

¹³⁶ Ibid.

¹³⁷ Linda J. Skitka, Kathleen L. Mosier and Mark Burdick, 'Does Automation Bias Decision-Making?' (1999) 51(5) *International Journal of Human-Computer Studies* 991, 992.

¹³⁸ Bryce Hoffman, 'Automation Bias: What It Is And How To Overcome It' *Forbes*, 10 March 2024 <https://www.forbes.com/sites/brycehoffman/2024/03/10/automation-bias-what-it-is-and-how-to-overcome-it/>.

¹³⁹ Skitka, Mosier and Burdick (n 137).

¹⁴⁰ Ibid. 992-3.

suggests they should not do so.¹⁴¹ In their 1999 study, Skitka, Mosier and Burdick describe two potential errors arising from this reliance on automated decision making that may be relevant to the use of, or reliance on, AI Systems in the boardroom:

Errors of omission result when decision-makers do not take an appropriate action, despite nonautomated indications of problems, because they were not informed of an imminent system failure or problem by an automated decision aid. Errors of commission occur when decision makers follow automated information or directives, even in the face of more valid or reliable indicators suggesting that the automated aid is not recommending a proper course of action. Commission errors can be the result of not seeking out confirmatory or disconfirmatory information, or discounting other sources of information in the presence of computer-generated cues.¹⁴²

The authors found that the presence of automated decision aids resulted in decreased vigilance and higher rates of both omission and commission errors relative to when automated aids were not available, even when participants in their study did not feel that the automated system was not very reliable.¹⁴³ Reliance on an AI System, therefore, has the potential to radically alter the way that decisions are made, including in the boardroom. Gillespie and her co-authors, in a survey of 48,000 people across 47 countries between 2024 and 2025, found that although 66% of people intentionally use AI with some regularity, 54% of respondents are wary when it comes to trusting AI.¹⁴⁴

Interestingly, given the findings of Skitka, Mosier and Burdick that people rely on automated decisions even when they do not feel that the automated system is very reliable, Gillespie and her co-authors note that despite a lack of trust in AI Systems, 58% of employees use AI Systems with 31% using it in their work on a weekly or daily basis.¹⁴⁵ Most worryingly for its deployment in the boardroom, the survey found that almost half of employees admitted to using AI Systems in ways that contravene company policy (such as uploading sensitive financial, sales, or customer information into public AI Systems), many rely on AI Systems without evaluating accuracy, make mistakes resulting from the use of AI Systems, and say they hid their use of AI Systems and present work generated by AI Systems as their own.¹⁴⁶ The authors viewed this as a benefit both to the individuals using the AI System as well as the organisation where it was deployed.¹⁴⁷ These perceived benefits clearly overlap with the potential uses of AI Systems in the boardroom and their capacity to address existing institutional failures and it can be assumed that AI Systems will become increasingly prevalent in corporations, including in the boardroom.

C. AI Accountability in the Corporate Context: Addressing Cognitive Misers and Automation Bias

As AI Systems become more integrated into society and our corporations, there is a risk that the omission or commission errors described by Skitka, Mosier and Burdick, start to occur more frequently in the boardroom in the absence of an effective accountability and liability framework. While *ex ante* solutions, such as programming AI Systems to ensure they comply with relevant laws, might help to reduce errors, the more effective and accurate they are thought to become, the more likely it is that directors and other corporate officers either omit to act where an AI System

¹⁴¹ Ibid, 993.

¹⁴² Ibid.

¹⁴³ Ibid, 999.

¹⁴⁴ Gillespie, N., Lockey, S., Ward, T., Macdade, A., & Hassed, G., *Trust, Attitudes and Use of Artificial Intelligence: A Global Study 2025* (The University of Melbourne and KPMG, 2025) 4-5.

¹⁴⁵ Ibid, 5.

¹⁴⁶ Ibid, 6.

¹⁴⁷ Ibid.

does not warn of a risk or provide notice of a potential benefit, or commit an act based on faulty data from an AI System. The risk becomes very real when we consider that four in five people in the study conducted by Gillespie and her co-authors believed that AI Systems ‘improved efficiency and effectiveness, enhanced accessibility to information and services, [provided] greater precision and personalization, improved decision-making and outcomes, [facilitated] greater innovation and creativity, [and] reduced costs and better use of resources.’¹⁴⁸

Both Australia’s corporate governance and legal frameworks attempt to minimise risks in the boardroom. The Commentary to Recommendation 1.1 of the ASX Principles provides, for instance, that the board of directors is responsible for a number of functions such as overseeing management in its implementation of strategic objectives, instilling of the entity’s, approving operating budgets and major capital expenditure, overseeing the integrity of accounting and reporting systems, overseeing processes for making timely and balanced disclosures, satisfying itself that appropriate risk management systems are in place for both financial and non-financial risks, satisfying itself that an appropriate framework exists for relevant information to be reported by management to the board and challenging management whenever required.¹⁴⁹ Recommendation 3.2 provides that a listed entity should have a code of conduct that articulates, among other things, standards of behaviour expected of its directors.¹⁵⁰

While useful in setting out best practice approaches to governance, the ASX Principles alone are unlikely to mitigate the potential for errors or omission or commission in the boardroom when AI Systems are used by the corporation. In Australia, the foundations of accountability are the directors’ duties expressed in common law, in equity and in statute. Directors have a duty of care and diligence as well as fiduciary obligations based on the notion of loyalty. Under the current legislative regime, only individuals who are at least 18 can be appointed directors.¹⁵¹ This means that, for the moment, an AI System cannot be appointed a director of a company in Australia. Instead, we need to consider whether human directors may use or rely on AI Systems and to what extent they will be liable for any negative outcomes arising from that use or reliance. When it comes to fiduciary obligations, it may be, for instance, that a director who relies on information or advice generated through an AI System that results in harm to the company, may be found to not have acted in good faith in the best interests of the company.¹⁵² Where a director intentionally relies on an AI System in a way that may harm the company, then this may be a breach of their duty of good faith. However, even where they act honestly, they may still find themselves in breach if the court adopts an object approach to the duty rather than a subjective approach.¹⁵³

There has been a greater focus on the potential for directors to breach their duty of care and diligence where they either use an AI System in their monitoring functions.¹⁵⁴ The duty imposes a positive obligation on directors to monitor the company’s performance. In *Deputy Commissioner of Taxation v Clark*, Chief Justice Spigelman of the New South Wales Court of Appeal explained

¹⁴⁸ Ibid, 8.

¹⁴⁹ ASX (n 11).

¹⁵⁰ Ibid, 16.

¹⁵¹ *Corporations Act 2001* (Cth), s 201B. See also, See Stephen M Bainbridge, ‘Corporate Directors in the United Kingdom’ (2017) 59 William & Mary Law Review 65, 67 (noting that, in addition to Australia, it is not possible for a non-human to be appointed a director in the US, Canada, and New Zealand).

¹⁵² See, *Corporations Act 2001* (Cth), s 181(a).

¹⁵³ See, *Re Colorado Products Pty Ltd (in prov liq)* [2014] NSWSC 789 (“The case law is divided as to whether a contravention of s 181(1)(a) of the Corporations Act requires that it be established that a director engaged deliberately in conduct which he or she knew was not in the company’s best interests”) para 420.

¹⁵⁴ See footnotes 32-37 and accompanying discussion regarding the duty of care and diligence in Australia.

that ‘the case law indicates that there is a core, irreducible requirement of involvement in the management of the company.’¹⁵⁵ While the exact parameters of this core, irreducible requirement is unclear, some guidance has been offered by the courts. When it comes to finances, for instance, while directors are permitted to rely on others and to delegate certain tasks, they must understand accounting conventions and exercise proper diligence when reading financial statements.¹⁵⁶ More recently, this obligation has extended beyond finances and their disclosure. The introduction of mandatory climate change disclosure obligations,¹⁵⁷ and the imposition in some sectors of more fine-tuned individual executive accountability requirements,¹⁵⁸ potentially add further stringency to the core monitoring functions of directors.

This becomes apparent when we look more closely at climate change and sustainability. Directors of some Australian corporations must now comply with mandatory sustainability reporting and audit requirements set out in Chapter 2M of the *Corporations Act 2001* (Cth). Further, recent analysis has suggested that the duty of care and diligence is very likely to apply to nature-related risks that a corporation faces, whether those are physical risks associated with climate change, transitional risks involved in the fast-moving regulatory landscape that deals with climate change, or legal risks associated with disruptions occurring from litigation and potential penalties for breaches of the law.¹⁵⁹ The risks that a director breach the duty of care and diligence are amplified by the fact that different jurisdictions have imposed different laws regarding climate change and sustainability. So, for instance, in their advice regarding climate change and directors’ duties, Hartford-Smith and Bush note that directors may need to consider disclosures that may be relevant to those likely to invest, or to make disclosures consistent with the legal regimes of foreign jurisdictions, including the European Union’s Corporate Sustainability Reporting Directive.¹⁶⁰

Under such circumstances, it may be tempting for corporations to adopt AI Systems that help the board to address complexity in a manner that reduces demands on time, produces information quickly, and helps to ensure that directors have the skills and knowledge necessary to effectively make decisions and monitor the company. Indeed, it may be that the use of an AI System helps directors to achieve the involvement in management that would meet the requisite standard of care where they may otherwise not be able to. However, directors would likely need to show, as is the case with financial statements, exercise proper diligence in engaging with the matters on which they received information or advice from an AI System.¹⁶¹ Further, there may also be an obligation for a director to exercise proper diligence when using the AI System itself. Given the propensity for people to act as cognitive misers and to suffer from automation bias, this task becomes difficult where AI Systems operate as a ‘black box’.¹⁶²

Some directors may seek the assistance of defences or safe harbours to evade liability where a decision has involved an AI System. The potential for directors to avail themselves of the protections found in ss 180(2), 189, 190, and 198D of the *Corporations Act 2001* (Cth) is subject to

¹⁵⁵ [2003] NSWCA 91, [108]–[109].

¹⁵⁶ See footnote 36 and accompanying discussion.

¹⁵⁷ *Corporations Act 2001* (Cth), Chapter 2M; *Treasury Laws Amendment (Financial Market Infrastructure and Other Measures) Act 2024* (Cth) Schedule 4.

¹⁵⁸ *Financial Accountability Regime Act 2023* (Cth) (‘FAR Act’); *Financial Accountability Regime (Consequential Amendments) Act 2023* (Cth).

¹⁵⁹ Hartford-Davis and Bush (n 13).

¹⁶⁰ *Ibid*, 2.

¹⁶¹ See footnote 36 and accompanying discussion.

¹⁶² See footnotes 96–98 regarding the operation of AI Systems as a black box.

a growing scholarly consideration.¹⁶³ However, it seems that as currently drafted, these provisions are of little assistance. Section 180(2) of the *Corporations Act 2001* (Cth) provides Australia's safe harbour regime. The section provides a safe harbour for those directors who have made a 'business judgment' and in the process have been found to have breached their duty of care.¹⁶⁴ The assistance that this provision provides, however, has been found to apply only where a decision was 'consciously made', meaning that the director 'turned his or her mind to the matter' under consideration and informed themselves of the judgment to the extent that they reasonably believe appropriate.¹⁶⁵ Where a director, in essence, abrogates their decision-making and monitoring functions to an AI System, they will be unlikely to claim that they have satisfied this requirement.¹⁶⁶

Two defences are also available to directors who rely on AI Systems when exercising their powers and functions. In summary, s 189 of the *Corporations Act 2001* (Cth) provides that a director may rely on information or professional or expert advice prepared by certain employees, professional advisors, other directors or committees of directors so long as the reliance was made in good faith and after making independent assessment of the information or advice.¹⁶⁷ There is clearly no scope in this provision, as currently drafted, for a director to claim that they have relied on analysis from an AI System. The director, in such a case, would remain liable for the decision that they made as AI Systems are not a recognised category of person they can rely on. Further, directors need to be mindful that those on whom they rely may be themselves be using an AI System to provide information or advice. Given the growth in use of AI Systems in society, directors should expect that their advisors are using AI Systems. When seeking to rely on these experts, directors must be acting in good faith and must make independent assessment of the information or advice received by the person who provided advice or information obtained through an AI System.

Directors may also delegate authority to exercise their powers. The right to delegate and its parameters are found in ss 190 and 198D of the *Corporations Act 2001* (Cth). Section 198D provides that unless the company's constitution provides otherwise, directors may delegate their powers to committees of directors, directors, employees, or any other person.¹⁶⁸ The exercise of the power by the delegate is effective as if the directors had exercised the power,¹⁶⁹ and the relevant director remains responsible for the exercise of the power as though they had exercised the power.¹⁷⁰ As with reliance, directors cannot delegate their authority to an AI System itself as

¹⁶³ See, e.g., Vivienne Brand, 'Directors Duties and AI Regulation' (2024) 33(4) *Griffith Law Review* (324-54); Justin Fox, James North and Jennifer Dean, 'AI in the Boardroom: A Director's Guide' (2019) 22(5&6) *Internet Law Bulletin (Newsletter)* 83; Mia Mahmudur Rahim and Pritam Dey, 'Directors in Artificial Intelligence-Based Corporate Governance – An Australian Perspective' 2, 8-12 (2022) <<http://dx.doi.org/10.2139/ssrn.4239263>>.

¹⁶⁴ The section provides that a director is taken to have discharged their duty of care and diligence if they make a business judgment in good faith for a proper purpose, they do not have a material personal interest in the subject of the judgment, they inform themselves about the subject to the extent they reasonably believe to be appropriate, and rationally believe that the judgment is in the best interests of the corporation.

¹⁶⁵ *ASIC v Rich* (2009) 236 FLR 1, 151. See analysis at Fox, North and Dean, (n 163) 84.

¹⁶⁶ Of course, this all is contingent on the assistance they have sought from an AI System. Where that assistance is limited to process automation, such as creating board packs and the question is unlikely to arise unless a director relies on erroneous information provided to make a decision without questioning the information.

¹⁶⁷ *Corporations Act 2001* (Cth), s 189. The section imposes some obligation on the director to ensure the reliability and competence of the person they are relying on.

¹⁶⁸ *Corporations Act 2001* (Cth), s 198D(1). It may be thought that reference to a 'person' could include an automated entity, but it is likely, given broader context of the provision, that it would be interpreted to mean a human. See, e.g., Fox, North and Dean (n 163) 84.

¹⁶⁹ *Corporations Act 2001* (Cth), s 198D(3).

¹⁷⁰ *Corporations Act 2001* (Cth), s 190(1).

it does not fall within a recognised category of person.¹⁷¹ The delegation defence is, however, somewhat less restrictive than the reliance regime. Where a director delegates authority to one of the listed people in s 198D, they can evade liability for the decision made by the delegate if the director believed on reasonable grounds that the delegate would act in accordance with the duties imposed on the directors and they believed on reasonable grounds, in good faith, and after making proper inquiries that the delegate was reliable and competent in relation to the power delegated.¹⁷² However, even here, it becomes unclear exactly what it might mean for a director to believe on reasonable grounds that a delegate was reliable and competent in a context of increasing use by employees of AI Systems in a manner that is subject to error. In *ASIC v Adler*, Santow J considered the factors that a court would consider when determining if a director's decision to rely on a delegate was reasonable.¹⁷³ These considerations included whether it was appropriate to delegate the function to a particular person, the extent to which the director may be put on inquiry that it was not reasonable to delegate the power, the relationship between the parties so as to ascertain whether the delegate was trustworthy and the risk involved in the transaction. Directors who delegate their authority to another may need to show a court that they satisfy these factors when they know a delegate may be using an AI System, or where they know that the use of AI Systems is prevalent.

Finally, a director who is in breach of their duties and who does not satisfy the requirements of the defences explored above, may also claim relief from their breach under ss 1317S or 1318 of the *Corporations Act 2001* (Cth). These sections allow a court to provide relief for a director's breach of a civil penalty provision or who are liable in negligence, default, breach of trust or breach of duty.¹⁷⁴ There are three stages in considering the application of these provisions: whether the director acted honestly; whether they ought fairly to be excused for the contravention; and the exercise of discretion by the court.¹⁷⁵

To begin with, an applicant must illustrate that they are honest (rather than the absence of dishonesty).¹⁷⁶ First, the director would need to show the court that they have acted without deceit or conscious impropriety; without intent to gain an improper benefit or advantage; and without carelessness or imprudence that negates the performance of the duty in question.¹⁷⁷ While a director may be able to illustrate that their actions in relying on an AI System did not include an element of deceit or conscious impropriety or that they did not seek to gain an improper benefit or advantage, they may struggle to show that they acted without carelessness or imprudence that negates the performance of the duty in question if they have relied on an AI System without adequately making appropriate inquiries about how a decision was made and on what basis. Second, when considering whether a defendant director be fairly excused for their breach, a court will consider a range of matters, such as the degree that they fell short of meeting

¹⁷¹ Of course, there is a potential to argue that an AI System may at some stage in the future be considered a 'person'. This is unlikely to happen given the current usage of person in the *Corporations Act 2001* (Cth). Although Paragraph (d) of s 198 D allows delegation to 'any other person', the provision should be read in its entirety and interpreted following the same scope prescribed by the other part of the provision. Paragraphs (a)–(c) of that provision allow delegation to a committee of directors, a director and an employee of the company respectively. These allowed delegates are all humans and therefore when considering the scope of the meaning of the wording 'any other person' in Paragraph (d), that 'other person' should still be understood as human to ensure interpretation consistency.

¹⁷² *Corporations Act 2001* (Cth), s 190(2).

¹⁷³ *ASIC v Adler and Ors* [2002] NSWSC 171

¹⁷⁴ The relevant principles are set out in *Australian Securities and Investments Commission v Healey* (No 2) [2011] FCA 1003; (2011) 196 FCR 430 [83]–[92] (per Middleton J).

¹⁷⁵ *Ibid*, [84].

¹⁷⁶ *Ibid*, [87].

¹⁷⁷ *Ibid*, [88].

their statutory duty of care and diligence, the seriousness of the contravention and the potential consequences, impropriety and contrition.¹⁷⁸ Third, a particular risk for any director relying on these provisions for relief is the potential for a court to exercise its discretion and reject a claim as a way to deter others from seeking relief where they have relied on an AI System to satisfy their obligations, or have not adequately overseen the operation of an AI System in the decision-making process.¹⁷⁹

Thus far, our analysis has considered the potential liability of a director for the use of AI Systems in the boardroom. However, what of the instances where directors fail to monitor the use by the corporation of the AI Systems and this produces a negative outcome for the company or for a third party? A series of cases may help to provide an answer on these matters. The courts have increasingly been willing to hold that a director's duty of care and diligence may extend to safeguarding a corporation's interests or may be breached where a director's actions have helped to facilitate a breach of law by the corporation.¹⁸⁰ Where an AI System used by the corporation causes damage to the corporation or where it results in a breach of the law by the corporation, then a director may be in breach of their duty where they did not properly exercise their monitoring obligations and this contributed to the negative use of the AI System. One interesting potential matter of concern for directors is the gradual ratcheting up of a directors' obligation to monitor the climate effects of corporate use of AI Systems.¹⁸¹ The question may arise whether the use of energy intensive AI Systems needs to form part of the mandatory climate disclosures of a corporation, or whether it is a physical, transitional, or legal climate change risk that forms part of the directors' duty of care and diligence.¹⁸²

Recent developments raise further questions about how AI Systems may be treated in the corporate context. In *Productivity Partners*, the High Court of Australia upheld a finding by the Full Federal Court of Australia that the Captain Cook College had engaged in 'systemic unconscionability' contrary to the *Competition and Consumer Act 2010* (Cth) when it removed safeguards intended to protect consumers from its enrollment and withdrawal processes in order to secure additional government funding.¹⁸³ The case related to interpretation of Australia's consumer protection and competition provisions (and did not deal specifically with automated or augmented decision-making), but several judges referred positively to 'systems liability' and 'group agency' approaches to attribution of corporate liability that are relevant to our consideration of AI in the boardroom.¹⁸⁴

¹⁷⁸ Ibid, [89].

¹⁷⁹ See, *Morley v Australian Securities and Investments Commission (No 2)* [2011] NSWCA 110. See also, *Australian Securities and Investments Commission v RI Advice Group Pty Ltd (No 3)* [2022] FCA 84, [63] (where the court refused to even consider the honesty element because in the judge view 'the contraventions...are serious and reflect what I consider to be a cavalier attitude to compliance with regulatory requirements and appropriate policies and processes').

¹⁸⁰ See, e.g., *ASIC v Adler* [2002] NSWSC 171 and *Circle Petroleum (Qld) P/L v Greensland* (1998) 16 ACLC 1577 (in relation to safeguarding a corporation's interests) and *ASIC v Hellicar* [2012] HCA 12 and *Cassimatis v Australian Securities and Investments Commission* [2020] FCAFC 52 (in relation to instances where a director facilitates the corporation's contravention of the law).

¹⁸¹ See Sophia Chen, 'How much energy will AI really consume? The good, the bad and the unknown' *Nature*, 05 March 2025, <https://www.nature.com/articles/d41586-025-00616-z>.

¹⁸² See footnotes 159-60 and accompanying text.

¹⁸³ *Productivity Partners Pty Ltd v Australian Competition and Consumer Commission; Wills v Australian Competition and Consumer Commission* [2024] HCA 27

¹⁸⁴ *Productivity Partners Pty Ltd v Australian Competition and Consumer Commission; Wills v Australian Competition and Consumer Commission* [2024] HCA 27 (analysis beginning at para 236). The High Court cited, among other works, the following academic scholarship for its understanding of system liability and group agency:

These approaches attribute liability either through group decision-making processes that are typical of the boardroom, or directly to the corporation by finding ‘intention’ through the adoption of certain systems.¹⁸⁵ The willingness of Australia’s highest court to attribute liability through the actions of groups within a corporation as well as directly onto the corporate entity through its systems,¹⁸⁶ raises interesting considerations for corporate accountability and the role of the board as a monitor where AI Systems are either relied on to make decisions or where AI Systems form an integral part of the group decision-making process. In his judgment, Justice Edelman, for instance, suggested that “The concept of intention should be applied to a system as though the system, as a construct, were a natural person.”¹⁸⁷ The court found that the Chief Executive Officer of the college was ‘knowingly concerned’ in the unconscionable system of conduct of the corporation, and, as a result, was held liable as an accessory for the breach by the corporation of Australia’s consumer laws.¹⁸⁸ Directors must, therefore, consider the prospect of accessorial liability whether they are knowingly concerned in any breach committed by the corporation through the adoption of an AI System.

Part V: Concluding Remarks – A Proposal for Balanced use of AI in the Boardroom

The preceding analysis illustrates a tension in the introduction of AI Systems into the boardroom. On the one hand, AI Systems offer the opportunity to address current institutional failures by creating efficiencies and expanding skills and knowledge. However, it is this very reliance that, at the same time, threatens to undermine responsible conduct and accountability.

The promise of efficiencies and enhancements will shape our approach to the board’s monitoring function and legal and governance settings. Petrin asks us to imagine a corporate governance world where AI Systems ‘master judgment work and assume the mantle of corporate management.’¹⁸⁹ In such a world, Petrin suggests that the hierarchical, collective decision-making would give way to AI System decision-making that will be coded to replicate the outcomes of diverse and independent inputs of individual directors.¹⁹⁰ Petrin also sees an end to fiduciary obligations as the bedrock of our corporate accountability framework – without any human managers, who will act as fiduciary?¹⁹¹ In its place, consistent with Möslin’s suggestion for a new

Bant, "Systems Intentionality: Theory and Practice", in Bant (ed), *The Culpable Corporate Mind* (2023) 183 (on system liability); Leow, *Corporate Attribution in Private Law* (2022) (on group agency)

¹⁸⁵ See Elise Bant, ‘The game is up for corporate fraudsters’ *Pursuit*, University of Melbourne, 23 August 2024, https://pursuit.unimelb.edu.au/articles/the-game-is-up-for-corporate-fraudsters?in_c=articlelistingblock

¹⁸⁶ *Productivity Partners Pty Ltd v Australian Competition and Consumer Commission*; *Wills v Australian Competition and Consumer Commission* [2024] HCA 27, paras 236-7.

¹⁸⁷ *Productivity Partners Pty Ltd v Australian Competition and Consumer Commission*; *Wills v Australian Competition and Consumer Commission* [2024] HCA 27, para 241. This also raises interesting questions regarding the potential for a system, including an AI System, to be treated as a ‘natural person’. However, this question is beyond the scope of this paper and will need to be taken up in future studies.

¹⁸⁸ *Productivity Partners Pty Ltd v Australian Competition and Consumer Commission*; *Wills v Australian Competition and Consumer Commission* [2024] HCA 27, para 155. Interestingly, the knowledge of the breach by the COO was also attributed to the company. In the competition and consumer conduct field, the case of *ACCC v Harvey Norman Holdings Ltd* [2011] FCA 1407, illustrates a willingness by the courts to take into account when determining a civil penalty under the *Competition and Consumer Act 2010* (Cth) whether a substantial compliance program was in place and whether there was successful implementation of the program (so as to illustrate that any breach was an isolated incident).

¹⁸⁹ See, e.g., Martin Petrin, ‘The Impact of AI and New Technologies on Corporate Governance and Regulation’ (2024) *Singapore Journal of Legal Studies* (online) 6 (although he notes that the direction of AI is uncertain).

¹⁹⁰ *Ibid*, 6-7.

¹⁹¹ *Ibid*, 7.

approach to corporate accountability in an AI Systems world,¹⁹² Petrin suggests that a system with AI entities as defendants could develop.¹⁹³ The view of Justice Edelman of the High Court of Australia, that intention should be applied to a system as though it were a natural person,¹⁹⁴ may bring such a world closer to reality. If our highest court can imagine a world where corporate systems are treated as natural persons, is it too much of a step further to apply that reasoning to an AI System that acts as a manager?

Less radical calls for reform, however, predominate. Some commentators propose, for instance, that corporate law principles inform the regulation of AI Systems.¹⁹⁵ Others have argued for laws that integrate AI governance principles into the corporate governance framework.¹⁹⁶ Particularly prominent have been recommendations to require the appointment of ‘AI experts’ to the board or to require that certain corporations form committees of directors with responsibility for oversight of the use of AI in the corporation.¹⁹⁷ However, this is unlikely to offer a long-term solution when considered in the context of the ever-expanding non-AI related matters that boards must consider. Adding AI expertise to the board may help in addressing liability concerns when it comes to the use of AI Systems, but not necessarily when it relates to the actual decision that is made in reliance on an AI System. At best, an AI expert may be able to explain how the AI System is meant to work, and could take on additional responsibility for the functioning of the AI System similarly to how a Chief Financial Officer may be held to have a higher standard of care and diligence when it comes to the finances of a corporation.¹⁹⁸

Most importantly, we need to ask whether, if AI Systems can, in addition to providing low level administrative support, take over many cognitive functions that belong to the board of directors, this is desirable from a responsibility and accountability perspective. As illustrated in this article, even if AI Systems are able in some circumstances to provide a more ‘powerful, disinterested, and unbiased information-processing capacity’ to human decision-making,¹⁹⁹ the overwhelming need to ensure that those making decisions in one of society’s most significant institutions remain responsible and accountable, mitigates against the use of AI Systems without appropriate human oversight. Simply put, there should always be a person behind an AI System to ensure appropriate responsibility and accountability. Given the potential for technology to fail, Enriques and Zetzsche suggest that human directors will continue to play an important monitoring function even as we introduce ever-more sophisticated technologies into the corporate

¹⁹² See footnotes 130-36 and accompanying text.

¹⁹³ Petrin (n 189) 7-8.

¹⁹⁴ See footnote 137.

¹⁹⁵ See, e.g., Vivienne Brand, ‘Directors Duties and AI Regulation’ (2024) 33(4) *Griffith Law Review* (324-54) (arguing that ‘Directors’ duties attach automatically to AI-related decision-making by boards, as well as to any board activity. Discharge of these duties is likely to require that directors increasingly engage with central issues of AI governance.)

¹⁹⁶ See e.g., Arun Sundararajan, ‘How Corporate Boards Must Approach AI Governance’ (2024) *Journal of Financial Transformation* 1 (Forthcoming)

<https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5016014&dgcid=ejournal_html_email_corporate%3Agoovernance%3Alaw%3Aejournal_abstractlink>.

¹⁹⁷ Ibid. at 18.

¹⁹⁸ *ASIC v Healey & Ors* [2001] FCA 717.

¹⁹⁹ In their analysis, Enriques and Zetzsche put forward the view of some optimistic commentators that technology may offer a solution to long-standing problems that have been at the heart of human-based corporate governance goals: mitigating human self-interestedness and inherent bias. Luca Enriques and Dirk A. Zetzsche, ‘Corporate Technologies and the Tech Nirvana Fallacy’ (2020) 72(1) *Hastings Law Journal* 58, 59-60.

landscape.²⁰⁰ Technology is, however, ever more important in the functioning of corporate boards and our legal and governance settings must take this into account.²⁰¹

Reforms to corporate governance and to corporate law should, therefore, adopt and adapt the human-in-the-loop concept that appears in the technology literature. To begin, there must be a way for decisions of directors that are made using AI Systems to be auditable, explainable, and ultimately, consistent with legal and ethical obligations. The requirement for audit is particularly important, although controversial, given the reluctance of corporations to provide access to algorithms that they use.²⁰² While emphasis is often placed on laws and regulations, Singapore has adopted a different approach, with regulators seeking to meaningfully guide the development of AI auditing through the launch of AI Verify – an AI Governance Testing Framework and Toolkit for companies that wish to demonstrate that they are responsibly deploying AI Systems in an objective and verifiable manner.²⁰³ The software program verifies the performance of an AI System against the developer’s claims and in accordance with accepted ethical principles.²⁰⁴ The tool can be used by businesses to generate testing reports for engineers and for management.²⁰⁵

To be most effective, such measures should be combined with a legal obligation on directors to declare in their reporting, that AI Systems have been used in the boardroom and in the corporation more broadly, and committing to having reviewed and verified the accuracy of information coming out of an AI System. External AI auditors should also be involved to conduct regular and ad hoc audits to ensure compliance with such a legal obligation. This, in turn, would allow for the proper regulatory oversight of AI Systems use in the corporate context, with the relevant regulator and auditor working with corporations and the management team to ensure the appropriate use of AI. This would mean that, consistent with their obligations relating to other significant matters, such as corporate finance and the potential effects on the corporation of climate change, directors would not need to set up and run the AI System themselves, but would need to understand how the AI System operates and makes decisions and exercise due diligence when engaging with information and advice produced through the use of an AI System. An extra level of safeguard will also be provided through proper, *ex post* AI audits. This approach would promote a ‘human-in-the-loop-*right*’ approach to corporate governance where AI Systems are introduced into a corporate context.

Further, the approach would ensure that corporations put the ‘*right*-human-in-the-loop’. The requirement to get sign-off regarding the use of AI Systems would drive corporations to ensure that both AI Systems expertise is used in the boardroom (whether through the appointment of directors with technological expertise or through the reliance on expert advice regarding the operation of particular AI Systems) as well as expertise that relates to the ultimate decisions coming out of the AI System. The allocation of responsibilities as they relate to AI Systems

²⁰⁰ Ibid, 61. The solution that Enriques and Zetzsche provide to their stated challenge is to extend the remit of existing board committees to monitor the use of technology, to establish new committees to undertake this task, or to require mandatory disclosure of decisions that include an element of technology. Ibid, 61 and 92-7.

²⁰¹ Ibid.

²⁰² See, John Davidson, Calls for Algorithm Audits to Keep “Unconscionable” Big Tech in Check’ *Financial Review*, 15 March 2021 <https://www.afr.com/technology/calls-for-algorithm-audits-to-keep-unconscionable-big-tech-in-check-20210312-p57a65>

²⁰³ Nydia Remolina, ‘AI Governance and Algorithmic Auditing in Financial Institutions: Lessons from Singapore’ (Singapore Management University Yong Pung How School of Law, Research Paper) 12.

²⁰⁴ Ibid.

²⁰⁵ Ibid.

should be incorporated into the mapping exercise that is a feature of Australia's expanding individual executive accountability regime.²⁰⁶

The AI Systems landscape is radically changing. The proposals suggested above seek to retain an element of responsibility and accountability in the corporate decision-making process. This is particularly important as AI Systems are looked upon as a way to overcome existing institutional failures that beset the boardroom – constraints in time, in the provision of information, and in board composition. There is a risk that in an attempt to address these constraints, we undermine our existing accountability framework and create new potential for corporations to evade liability for the decisions that incorporate elements from AI Systems. Most importantly, we need to continue to innovate when it comes to corporate governance to match the speed of innovation introduced through the adoption of increasingly more sophisticated AI Systems. This means that we can no longer afford to 'set-and-forget' our laws and governance frameworks. It would be useful, in this context, to re-introduce into Australia a permanent body to review our corporations laws.

²⁰⁶ See footnote 158.

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