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Boards in an Unpredictable World:

Navigating Geopolitical Shifts, Climate Crises & Technological Disruptions

Prof Colin Coulson-Thomas*

Boards operate in an increasingly unpredictable world in which unprecedented and previously unthinkable events are occurring that have not been prepared for and for which past experiences and understanding might not be relevant (Rubens, 2025). There are geopolitical shifts underway, climate crises occurring with increasing frequency and multiple technological disruptions to navigate. Unpredictability can be used as a negotiating tool to gain advantage, and when deployed against some it can be successful for a period, but if it is identified as a trait, it may be ignored or become counterproductive (Little, 2025). Complexity, insecurity and the uncertain timing, nature and direction of responses can add to the overload experienced by many directors and boards (Coulson-Thomas, 2025a & b).

A degree of uncertainty may be inevitable where and when imperfect and inconsistent individuals are involved, their behaviour is difficult to predict, incompatible or self-defeating outcomes are pursued, hypocrisy, misrepresentations and smoke screens abound, and various alternative futures could be possible (De Jong, 2023). While the scale and occurrence of certain events and their impacts in particular locations may be unpredictable, adverse consequences of observed changes, monitored developments and feasible scenarios are likely. For example, it is known that climate change and rising temperatures can have public health consequences that could be prepared for, and workers and other people could be better protected from them (Ofagbor and Adejo, 2025; WMO and WHO, 2025).

With certain global risks becoming more evident, boards and CEOs should assume some degree of disruption and endeavour to lead through it to sustainable outcomes (Liveris, 2023; WEF, 2025b). Survival rather than coping is now an issue requiring collective responses and forms and levels of collaboration which seem increasingly difficult if not impossible to achieve, with fragmentation and polarisation occurring (WEF, 2025a & b). This Theme Paper explores areas on the agenda of the 2025 London Global Convention on Corporate Governance and Sustainability. It suggests issues and questions that directors, speakers, and other participants might wish to consider ahead of the event and discuss with their peers, and it highlights contemporary issues and developments since last year's convention. The paper includes references to recent investigations and studies related to the event's agenda.

The relevance of studies cited can depend upon their purpose, context, methodology and participants. Investigators sometimes explore aspects of problems from the perspectives of their discipline or function rather than consider relevant questions that directors might ask, and/or explore the more holistic solutions sought by some boards. As investigator views on what is acceptable, appropriate, ethical, relevant and responsible may diverge and fracture or

polarise, a board consensus on the utility of any results and/or what to do next may not be easy to achieve (WEF, 2025 a & b). Directors should consider the relevance and applicability of study findings, advice received, and questions posed to them and their companies and senior executive colleagues for the contexts, situations and issues that concern them.

Redefining Board Priorities for Resilience and Agility in a Transforming World

Many directors and boards feel unprepared for the combination geopolitical, environmental and technological challenges that confront them in a context that is complex, fragile, uncertain and volatile, and more of them are running out of bandwidth and experiencing overload and stress (Coulson-Thomas, 2025a & b). Existing governance frameworks and practices, past approaches and policies, and board agendas often seem unable to handle the shifting nature and sheer variety of unfamiliar and increasingly inter-related issues occurring simultaneously in various combinations. Board capabilities, priorities, strategies, help and support often requires review and redefining to achieve greater flexibility, resilience, agility and the ability to adapt in a transforming world in which stability and 'solutions' can be transient, and may not 'stand the test of time' or remain relevant as circumstances change.

Future governance arrangements should help and enable organisations to become more resilient and better able to cope with changing pressures and requirements. Some factors deliver multiple benefits. For example, reading the road ahead to spot emerging issues may also identify opportunities. Are communication networks and relationships within a company and its value chain sharing information of both opportunities and threats? Responsive organisations can be resilient and successful from multiple perspectives (Brown and Coulson-Thomas, 1989). Diversification and avoiding over-reliance on a few key customers and suppliers, learning from experience and events, related processes of adaptation, transition and transformation, and a willingness to review and alter policies, priorities, strategies and corporate capabilities can be both advantageous and enhance resilience. Quick and collective responses can be especially helpful. How might decarbonisation and efforts to build resilience in the face of a succession of climate disasters be accelerated (Thomas, 2024)?

More companies now operate as portfolios of projects and changing relationships, with boards overseeing transitions and transformations that are intelligently steered as situations, circumstances and contexts change, rather than according to a periodically updated plan. Organizational resilience is critical. It can depend upon multiple factors, including resiliency management, business continuity and organisational learning capacity, which are related to the levels of its preparedness for potential disruptions, operational flexibility and how quickly a company can reconfigure resources in changing situations (Koh et al, 2024). Are boards prioritising it and identifying the factors that contribute to it? A survey of UAE Ministry of the Interior employees suggests transformational leadership, change readiness, and cultural agility can all have a part to play in enhancing organizational agility (Alzeyoudi et al, 2025). Resilience requirements can also depend upon sector. For example, the longer-term resilience of India's insurance sector may require a strengthening of public-private partnerships, greater use of risk modelling, and integrating sustainable finance (Sai et al, 2025).

The people of organisations, their stakeholders and local communities can experience similar challenges to those confronting directors and boards (Coulson-Thomas, 2025b). Their insecurity can increase if they feel the boards of companies are rigid, uncaring, unable to cope and lack individual and collective resilience. Corporate and strategic agility may encourage employees to stay with an organisation during a period of uncertainty, while trust in leadership can help to develop it (Ludviga and Kalvina, 2025). What governance and board practice

changes would be most conducive of greater foresight, corporate and strategic agility, and resilience? What would enable boards to move beyond compliance, with more priority and focus on sustainability, innovation, risk intelligence and stakeholder trust? How might boards lead with vision, purpose and adaptability to transform challenges into opportunities for long-term value creation so that companies thrive amid disruption?

Transforming Corporate Governance in the Multipolar World

Companies face geopolitical, economic, trade and other risks which abound in a volatile, fracturing, insecure and increasingly multipolar world, in which allegiances are shifting, and polarization is occurring in many entities that increases the challenge of assembling or achieving a board consensus (WEF, 2025b & c). Many changes in multiple arenas may be perceived as transformational in relation to those affected, a location and/or context, and a strategic requirement such as sustainability. How and where corporate governance needs to be transformed will depend upon board and corporate purpose, priorities and objectives, changing stakeholder aspirations and requirements, challenges and opportunities, global risks and existential threats and developments in the contexts in which a company operates. How might corporate governance best adapt to changing circumstances and requirements?

What corporate governance changes would facilitate adapting boardroom strategies to a world shaped by geopolitical tensions and economic realignments, and how might they best be adopted and implemented? How might corporate governance 'live' and evolve and adapt? Impacts and both intended and unintended consequences of governance and strategy changes should be considered when reviewing corporate governance arrangements. Some may be more conducive than others to the achievement of certain outcomes. For example, the integration of human resources in good corporate governance in Indonesia has been found to significantly improve environmental performance, and employee involvement contributes to an organizational culture that supports sustainability practices (Gaguk et al, 2025). What is proposed may affect some stakeholders more than others and they may vary in their reaction to changes. Views can also vary across countries on whether the world really is multipolar.

In the contemporary, fractured and insecure international context in which narratives are manipulated, influence, persuasion and rhetoric can become a strategic imperative for shaping perceptions, building or undermining trust, and driving change (Galston, 2025; Laverick, 2025). Reputation and standing can affect who others might want to trust, buy from and/or collaborate with. When making acquisitions or selecting locations, some companies with lower reputational risk may select targets with higher reputational risk (Hussain et al, 2025). What should the role of a board be in managing cross-border regulatory and reputational risks and responding to technological nationalism, AI regulation, and data localization? How might national differences of approach and/or regulation be handled? Should digital sovereignty issues be addressed when decisions are taken on data localisation?

There may come a point when directors and boards are confronted with more governance issues and regulatory and other complexities than they can comfortably handle (Coulson-Thomas, 2025a & b). What could boards do to encourage simplification, rationalization and focus? How might they navigate governance complexities in emerging versus developed markets? What steps should they take to identify changing stakeholder perspectives, preferences and requirements in relation to complexity and other issues? How might their views be represented and addressed where fragmentation and/or polarization have occurred (WEF, 2025b & c)? What needs to be done to better align board strategy with evolving investor expectations and strengthen disclosures, stewardship, and transparency?

Stewardship should be responsible and sustainable, which may be easier to achieve when board strategy is aligned with investor expectations. Where are boards on a journey from shareholder primacy to stakeholder capitalism and when realigning board accountability? For stakeholder capitalism to be operationalized, stakeholders and their interests need to be visible to board and corporate decision makers and taken account of as and when decisions are taken (Van Buren and Schrempf-Stirling, 2025). Values-based or value-centric leadership may help to make this happen (Coulson-Thomas, 2025d; Gring-Pemble et al, 2025). Are certain interests being overlooked? The rights of invisible and powerless stakeholders need to be taken seriously (Van Buren and Schrempf-Stirling, 2025). Who represents ecosystems, youth and future generations? How should responsible boards take account of their interests?

Board's Role in Climate Risk, ESG and the Sustainability Imperative

Climate change poses significant risks to people and property, and especially to the global insurance industry, leading to increased financial losses, rising premiums, and further asset un-insurability (Sai et al, 2025). Certain mega cities, financial centres, and areas of hitherto prime real estate and significant balance sheet values are at risk. Major coastal cities around the world are sinking, some at an alarming rate, often because of groundwater extraction, which is increasing the risk of inundation because of rising sea levels (Tay et al, 2022). The disruptive effects of climate change and consequences of extreme weather events accumulate. Swiss Re has suggested that in the first half of 2025 global insured catastrophic losses of \$80 Billion and economic losses of \$135 Billion occurred (Bannerjee et al, 2025; Howard, 2025). How should boards track the vulnerability of their locations to climate change impacts?

Another year's compilation of multiple data sets on global emissions and their consequences suggests there is only three years left to achieve the Paris agreement target to limit global warming to 1.5 degrees C, which seems unlikely on current trends (Forster et al, 2025). The frequency and intensity of extreme heat events have risen sharply and approximately half the global population suffers adverse consequences of high temperatures, which can include heatstroke, dehydration, kidney dysfunction, and neurological disorders, impacting longer-term health and economic security (WHO and WMO, 2025). Global warming heatwaves are likely to become hotter and last longer, leading to larger numbers of excess deaths and the disruption of health and transport systems (Kay et al, 2025). For example, at certain temperatures rail lines may buckle. How will infrastructures and services on which companies depend be affected by rising temperatures? Are mitigation measures budgeted for?

Some impacts of global warming, such as melting ice sheets and glaciers, are clearly visible. Vulnerable habitats also continue to suffer from collective human activities and existential threats such as climate change. Examples include last year's mass Great Barrier Reef coral bleaching event (AIMS, 2025). However, how aware are boards of the rings of negative consequences that can emanate from a failure to adequately address an existential threat such as climate change? For example, the consequences of extreme weather events resulting from global warming can reduce community resilience and lead to indirect impacts such as contributing to antimicrobial resistance (Kamadi, 2025). Some such consequences could themselves also be existential. According to a wide-ranging study, rising global temperatures will on average also reduce the world's capacity to produce food from most staple crops, even after accounting for economic development and adaptation by farmers, by 120 calories per person per day, or 4.4 percent of current daily consumption with every additional degree C of global warming (Hultgren et al, 2025). Are the possible consequences on community radars?

In India, where climate risks such as erratic monsoons, flooding, heatwaves, and cyclones are intensifying, the insurance sector is evolving through regulatory reforms, climate risk stress testing, and government-backed insurance schemes (Sai et al, 2025). What should be done to address climate and other risks that are uninsurable at an affordable price? Which climate risks could be better understood as business risks, what are the financial implications, and how could their disclosure and mitigation be improved? How might the framework developed by the Task Force on Climate-Related Financial Disclosures (TCFD) or the International Sustainability Standards Board (ISSB) help public companies and other organizations to more effectively disclose climate-related risks and opportunities, or provide investors with decision-useful information about sustainability-related risks and opportunities respectively?

How might ESG be better embedded into corporate strategy and culture, and ESG metrics be more closely aligned with long-term business performance and incentives? Strategy may change over-night as with companies such as BP switching focus from renewables back to fossil fuels following the US election of President Trump, whereas some cultures require more time to evolve. A study of the impact of severe physical climate risks on corporate investment decisions across emerging economies has found that firms in hierarchical cultures adopt more conservative investment approaches, limiting adaptability to climate challenges, while firms in risk-averse cultures proactively integrate climate risks, leading to better investment efficiency (Arian et al, 2025). What do shareholder and other stakeholder reactions to a resurgence of prospecting for fossil fuels and their extraction reveal about their priorities? How important is it that cultural context is incorporated into policy and corporate governance strategies to enhance climate resilience (Arian et al, 2025)?

Given the speed with which environmental, sustainability and other initiatives and programmes in areas such as DEI considered by US President Trump to be “woke” have been culled in government entities and quickly abandoned in the private sector, what are the implications for overseas companies operating in the US, or selling to the US, and the activities of US companies in jurisdictions in which there are still laws and regulations in these areas? The Trump regime has systematically removed or censored references to climate change and other environmental threats from government websites, suppressed related reports and cut back or dismantled teams responsible for related research, warnings, responses and public protection (Gleick, 2025; Holdren and Lane, 2025). Where should ESG still feature in corporate and individual objectives, incentives and rewards? Should ESG and other metrics only be used in areas such as compensation if they are informative and add to understanding (Ewart and Wagenhofer, 2025)? How can the sustainability imperative be maintained?

What a board might consider its fiduciary duty may alter over time as laws, regulations and other requirements change, stakeholder views evolve, and there is push-back against previous ESG or DEI concerns (de Mariz, 2025). How might board accountability and fiduciary duty in relation to sustainability governance evolve? What should the role of independent directors be in ensuring ESG oversight? ESG reporting requirements can vary across jurisdictions, and those in one place can impact developments elsewhere (Schwartz, 2025). Boards must navigate the global ESG reporting landscape in areas such as sustainability reporting, transparency, materiality assessments and stakeholder engagement. Which areas present most problems and/or are requiring more executive and/or board time, and what changes, simplifications or consolidations would be desirable or helpful? Where could the overload and pressure that more people experience best be reduced, and what might be impacted?

How can a focus on ESG, sustainability and addressing climate change be maintained when issues are multiplying and becoming more inter-related, time and resources are limited, and more business leaders are running out of bandwidth and experiencing stress (Coulson-Thomas,

2025a & b)? What is being avoided, overlooked or short-changed? Evidence from Belgium suggests many companies may not take account of SDGs in materiality assessments or link them to sustainability priorities (Beyne and Moratis, 2024). What are the priorities for building capacity at board level? Increasingly boards may need to find ways of better pursuing multiple objectives simultaneously as well as supporting CEOs. For example, digitisation and infrastructure are important enablers of the circular economy and can increase sustainability and economic resilience (Patwa et al, 2025). How should boards balance profitability with purpose while creating shared value (Mayer, 2023)? How might overloaded directors resolve contemporary dilemmas and find contentment (Handy, 2025)?

Building Future-Ready Boards through Diversity, Ethics, and Generational Insight

Directors should remember the importance of maintaining an overview and the holistic perspective of an informed but sceptical generalist who is concerned with integrating disparate elements drawn from individual functional, disciplinary or other perspectives (Epstein, 2019). How should future-ready boards be built when a variety of future scenarios might be possible and many aspects of them might be uncertain, transient and likely to change? There may be multiple feasible futures that directors could be prepared for. What might induce potential candidates to join boards when future combinations of issues to be addressed and related and future directorial liabilities and stakeholder expectations are unpredictable and unknown? Given the greater variety of inter-related issues, risks and threats that might be encountered, are more rather than less diverse boards required? How might relevant diversity beyond gender and ethnicity factors be achieved (Coulson-Thomas, 2025c)? What role should ethics play in an increasingly transactional world?

Is greater board diversity now a strategic imperative, and what form should it take to drive innovation, resilience, and better decision-making? How should one establish how many of certain categories of board member might be required to change board dynamics and affect outcomes? A literature review suggests a critical mass of 30-33% may be required for women directors to have an impact (Yang and Konrad, 2025). Can one have too many of some categories? Data from 19 countries reveals that women on boards may positively affect corporate sustainability performance in a European context with some 30% participation of women on them, but after this threshold the market value impact might be negative (Rahi, 2025). Those selected as directors will need to be resilient, versatile, capable of growth and development, and satisfy multiple criteria, if future boards are to be manageable.

Younger generations arguably have more of a stake in the future, as their lives will be shaped by today's boards long after current directors have passed away. Are certain generational insights being missed? Who is best placed to represent their interests and those of future generations? Are boards and the CEO and senior executives aware of the contrasting views, perspectives and priorities of different generations? How fragmented and polarised are they (WEF, 2025b & c)? Is there dialogue, engagement and involvement? What should be done to bridge generational gaps and align or accommodate differing values, expectations, approaches and leadership styles? Are directors and senior executives aware of any differing generational reactions to various situations and positions? For example, a study of the effects of organizational culture and pay levels on retention has found that millennials showed higher turnover intention than other generations (Lee et al, 2025).

Could certain generations have distinct cultures that may vary in their openness to diversity and ability to accommodate contextual and other changes? What should the role of the board be in shaping corporate culture and addressing the requirement for different functions and

locations to do things differently to suit roles, situations, circumstances and contexts? Awareness of cultural differences can be important. For example, it can help a board to influence international market entry strategies (Escandon-Barbosa and Salas-Paramo, 2025). How can and should ethical values and factors considered important such as inclusivity best be integrated into an organization's DNA, and how should they be developed? Diversity and development considerations in relation to evolving and future requirements can be important in board succession planning (Bishop-Monroe et al, 2025). Are they addressed?

How should the next generation of board leaders be prepared? Where and to what extent do they need to differ from current directors? What will boards need more or less of? Rather than initiating a search as and when a director retires, board succession planning, search, and assessment should instead be a continuous process, assuring a talent pipeline long before new directors are needed (Morris et al, 2025). How can boards ensure it is undertaken with an eye on diversity and future skillsets, and that global governance codes and regulatory shifts on board diversity are monitored? One corporate governance model may be more inclusive than another, for example in terms of employee engagement and participation (Drpljanin, 2025). How should boards lead with inclusive governance models, and be ready to provide direction on the adoption and use of disruptive technologies and handle the ethical issues involved?

Board's Preparedness and Strategy on AI, Digital Disruption and Cyber Governance

In the digital era, AI and emerging technologies, and issues relating to them, appear on many board agendas. Where are boards positioned on a continuum from reactive oversight to proactive leadership? Are too many of them like passengers in an autonomous vehicle? What needs to happen for more of them to be in the driving seat? The US action plan for winning the AI race includes over ninety federal policies related to AI innovation, infrastructure, diplomacy, and security (EOTP, 2025). These favour a Trump view of the world and, as with the removal of restrictions on fossil fuel production that benefit oil majors, reward a relatively small number of major IT corporations that contributed to the president's election campaign. How might bias, favouritism or state policies affect priorities? What form of extra attention should be devoted to AI tools with a level of autonomy? For example, hidden prompts within an email likely to reach an AI agent could be designed to delete data, make fraudulent, unopposed and/or embarrassing transactions, or initiate links to other targets.

How might boards better understand the applications and implications of AI, GenAI, and automation on business models and ensure their ethical deployment? Are the dangers and areas of vulnerability appreciated? Future scenarios of superhuman AI development, include its realisation as an existential threat (Kokotajlo et al, 2025). Exceptional intelligence is not required to learn that collective human activities represent a threat to humanity, other species and ecosystems, and identify obstacles to our survival such as fossil fuels, climate change deniers and unsustainable growth. Whether or not any technology is helpful or harmful can depend upon how it is used, for what purpose and by whom. Directors need to be alert to threats and vigilant. Applications of AI by bad actors could be used to develop Sarin and other weapons of mass destruction, and evade restrictions and mechanisms put in place to prevent the development and use of chemical weapons (Jogalekar, 2025).

When deluged by hype and promotional claims about the many possible beneficial uses and impacts of AI many boards struggle for a framework or criteria for prioritisation, justification and sorting the wheat from the chaff in terms of what is possible, affordable, ethical and responsible. Should they pause, stand back and reimagine business strategy and value creation in a tech-driven landscape? How might this best be done? What support would be helpful?

Functional strategies as well as overall business strategies can be reimagined (Plangger et al, 2025). What arrangements should be made for cyber governance and resilience, and what should the board's role be in incident readiness and data governance? In which areas are improvements, additional support and authoritative advice required?

AI can represent a direct threat to individual directors as well as to democratic and market systems that offer them relative freedom and an opportunity to thrive. How aware are boards of them? Might they themselves and their members become the targets of malicious attacks? As tools for quickly producing more convincing voice and video deep fakes become more widely available, the risk of them being used by bad actors to impersonate CEOs, executives, leaders, candidates and others to commit fraud, inflict damage, disrupt, or manipulate may escalate (Arunmozhi, 2025). What more should boards do to increase awareness, limit harm and ensure practices such as multi-step verification? How might areas of vulnerability and most likely points of entry be identified and made more secure? Are boards also exercising caution in relation to their own use of AI and its impact on them?

Liberal democracies have vulnerabilities that can be exploited by the rhetoric of authoritarian disrupters to undermine them, infiltrate and secure dominance (Galston, 2025). Are directors sensitive to authoritarian and other social trends that might affect them? Data collected for one purpose can also be combined with other data and then used for a variety of other purposes, both beneficial and malevolent, with data reuse becoming a business, and its processing by data centres adding to energy and water requirements. Its use for surveillance purposes can represent a threat to democracy and constrain what people are willing to say and do, as well as entrenching authoritarian regimes (Venkatasubramanian, 2025). What can be done to encourage greater awareness of possible consequences of data collection and the potential economic value of data, enable its responsible monetisation, and prevent misuse?

Are board members and key executives aware of cyber and other security threats to countries in which a company and its subsidiaries are registered, headquartered, and/or operate, as well as those to its own corporate operations and infrastructures and services upon which they depend, and associated risks and vulnerabilities (CO, 2025)? How prepared are they for responding to threats, vulnerabilities and hostile moves? For example, hostile disinformation has become more sophisticated at exploiting fracturing, amplifying doubt, leveraging uncertainty and widening existing fissures (Hutchings et al; 2024; Markelov, 2025). How do governance and corporate arrangements align with the NIST Cybersecurity Framework (CSF)? Do information systems management processes reflect ISO/IEC 27001 requirements? Are back up, recovery and 'analogue world' arrangements regularly tested?

Do stakeholders trust business leaders (Edelman, 2025)? What can be done to build trust in the age of surveillance, big data, and digital ecosystems? How confident are stakeholders in board oversight, preparedness, general competence and boardroom digital literacy? Where are there deficiencies? Digital literacy significantly enhances individual labour productivity, and as education levels increase, the impact of digital literacy on labour productivity becomes more significant (Mao et al, 2025). How might boards become more aware of and monitor the impact of emerging technologies on productivity and performance? Do they understand cause and effect and the source or drivers of improvements? Digital literacy enhances labour productivity through three main pathways: facilitating transitions into digital occupations, reducing skill mismatches, and improving employment probabilities (Mao et al, 2025).

Future-Proofing Risk Management and Building Antifragility and a Resilient Culture

Many contemporary processes, systems, infrastructures and institutions are fragile and vulnerable to multiple challenges, risks and threats. What can and should boards do to enhance corporate preparedness, build strategic and operational resilience, and address, mitigate and respond to them? Are cultural changes and greater collaboration required? How might corporate systems and processes be made more resilient to disorder and stress? Are there antifragility opportunities and areas that might benefit from disorder (Taleb, 2012)? The context in which companies, boards and risk managers operate is no longer the linear and rational one in which possible events could be more easily prepared for, and estimates could be made of their probability of occurrence and likely outcomes and summarised in risk registers and reports (Rubens, 2025). Have boards registered the changes? Which areas and corporate operations are most likely to be affected by chaos, complexity and disruption?

We may be moving into a new uncharted risk management era, with a paradigm shift occurring (Jivaasha, 2025). Are there blind spots that are being overlooked by corporate management? How robust are corporate risk management frameworks? Can benefits associated with Enterprise Risk Management (ERM) be retained (Gao et al, 2025)? Should certain activities be treated differently? In some sectors and markets of growing future importance, such as solar power plant energy supply and trading, 24/7 risk management and monitoring may now be essential (Oliveira and Ruiz, 2025). Boards should not overlook the significance for risk management of corporate supply and value chains, and positioning within them. In a turbulent market environment, organisational supply chain learning is important for supply chain risk management (Uddin et al, 2025). Who ensures this?

Does ERM need to be critiqued and recalibrated? If so, how might this be done and by whom, and how should board-level oversight for business continuity and crisis responses be built and/or improved? Does its rationale, purpose and execution all require review? According to one developing country banking sector study ERM can be adopted primarily to meet regulatory obligations rather than generate firm value (Biresaw and Sibindi, 2025). A study of the adoption of ERM in India's non-life insurance sector has found that it has resulted in the establishment of data-oriented risk reporting systems, greater actuarial participation in capital and solvency evaluations, and the elevation of chief risk officers (CROs) as strategic consultants, while the incorporation of tools like solvency reporting, retention ratio evaluation, and risk dashboards has enabled a more proactive and comprehensive strategy for risk management (Srinivasa and Venkidasamy, 2025). Are appropriate approaches, systems and tools being used and how can such benefits be realised?

ERM can be more than a compliance tool. The study of India's non-life insurance industry suggests it may be considered and used as a strategic facilitator that enhances resilience, transparency, and sustainable development (Srinivasa and Venkidasamy, 2025). How might companies obtain more business value from their investments in ERM? Hitherto, ERM implementation has been found to be associated with higher reporting quality and reduced volatility in future firm performance in terms of both operating cash flows and stock returns (Gao et al, 2025). What changes may be required to cope with current challenges and uncertainties? What needs to happen for current approaches to ERM to keep pace with changing internal requirements and external and contextual developments?

How might the adoption and use of AI impact ERM? Rather than incremental improvement a fundamental overhaul might be required. Who should undertake this? How can organizational mindsets be developed that anticipate, absorb, and evolve through disruption? Where could emerging technologies be an enabler or a threat? How might AI, big data, and real-time

analytics be used to identify early warning signals? A bibliometric analysis of the literature relating to AI risk management finds the field is fragmented, with limited integration across technical, ethical, legal, and policy dimensions, suggesting the need for more enterprises to develop an AI risk management approach and framework (Bernardelli and Giudici, 2025). How might a board ensure the required level of integration and initiate this?

The use of generative AI and widely available tools can result in additional infrastructure, compliance and specialist support costs that may be unseen and unexpected by early adopters, including the redistribution of complexity (Hasan et al, 2025). Moving beyond adoption and mastering this redistributed complexity can increase the prospect of beneficial application to address significant problems (WEF, 2025d). The cost of such efforts and their importance is likely to increase with the greater use of autonomous AI agents (WEF, 2024). What criteria and guidelines should boards use for justification cases, proposals and the assessment of alternative options and scenarios? How might the prospects of anticipated and unexpected benefits be improved and negative consequences and vulnerability during transition reduced?

How should boards ensure regulatory compliance in jurisdictions in which a company operates and/or is located? Regulatory compliance can be a significant driver of AI adoption and use, especially when significant penalties or the loss of a license to practice could result from non-compliance (Biresaw and Sibindi, 2025). Are possible and proposed changes to relevant laws and applicable regulations, including those affecting value chains, being monitored and prepared for? Supply chain resilience should be assessed and periodically tested (Dolgui et al, 2025). When was this last done and by whom? What lessons were learned? How might supply chain resilience be strengthened and flexibility in global operations improved? Do assessments of supply chain resilience take account of both customer and operational considerations (Ivanov, 2025)?

What concerns do boards have about human capital risk, talent resilience and workforces during volatile times? How can they ensure these, and other areas, are considered within business partners? Multiple factors can reduce the contribution, value or return a company gets from its people or human capital, including dissatisfaction, attrition or turnover, misconduct, working conditions and practices, and inadequate recruitment, retention, promotion, and people or human capital and risk management practices. For example, higher temperatures from global warming can affect corporate performance as worker productivity drops by 2–3% for every degree above 20°C (WHO and WMO, 2025). When considering human capital risk, boards should look beyond hiring and firing decisions at how key executives are reallocated, redeployed, and rotated, including across firms within a group to meet changing needs, for example at whether an internal labour market exists as found in many family firms (Du et al, 2025). How is this wider perspective being encouraged?

What more needs to be done to ensure executives consider relevant factors and practices elsewhere? Are demographic trends in countries and markets in which companies are active and need people being monitored? What preparations are being made to deal with expected issues? For example, higher skill levels in younger cohorts and improvements in human capital may mitigate the decline in output expected from declining and/or aging workforces (Sobiech et al, 2025). What more need to be done to acquire and/or develop the capabilities and skills required to cope with emerging trends, expected requirements and possible scenarios? Companies sometimes respond to events and strengthen human capital by recruiting staff to deal with an event such as a data breach and prevent its repetition (Bana et al, 2025). Anticipation and preparation can reduce human capital risk.

Boardroom Innovation and Corporate Transformation

The nature and scale of inter-related challenges, risks and threats may be such that radical change, new business and operating models, and transformation rather than incremental improvement may be required. The past success rate of boardroom and corporate governance innovation has varied by jurisdiction and been judged to be limited due to a lack of flexibility in the adoption of a standard model for very different areas, and unwillingness to experiment and trial alternatives (Semadeni and Krause, 2020). Codes of practice can entrench certain approaches which once adopted may be imposed on all areas, when and where diversity may be required. Are boards exercising foresight as well as providing oversight, reading the road ahead and considering sufficient options? Do they have the courage to be bold, when needed? How might they become more effective at championing breakthrough innovation?

Agile entrepreneurship can have a significant positive effect on the success of corporate transformation, and on business performance and adapting to change for enduring growth (Grebic et al, 2025). What boardroom strategies for embracing digital transformation and Industry 4.0 technologies might lead to responsible and sustainable outcomes? How should boards work with executive teams to formulate them, and ensure that the various elements of adopted strategies are aligned, re-enforce each other during implementation, and ideally simultaneously deliver multiple desired outcomes, while minimising or avoiding negative externalities? Synergistic combinations should be sought. For example, green innovation, supply chain management, corporate transformation and Industry 4.0 may together enhance ESG performance (Alkaraan et al, 2025). Are boards driving outcome ambition?

What more can and should boards do to engage, motivate and inspire ambitious but achievable visions and instil a sense of motivating and fulfilling purpose? Is the rational, necessity and urgency of innovation and transformation understood? Purpose is as important for directors under pressure and other people seeking meaning and fulfilment as it is for organisations, and individual and corporate purpose should be compatible with each other and ideally aligned (Brooks, 2023). Board dynamics can reflect composition and influence outcomes. For example, a study of manufacturing firms in Sub-Saharan Africa found that board dynamics and specifically gender diversity, educational background, and age diversity positively influence circular economy performance, with environmental regulations strengthening board dynamics impact on circular economy adoption (Boakye et al, 2025).

What boardroom dynamics and competences are especially important for leading transformation? How might these best be created and kept current and relevant during transitions? How important are certain stakeholder groups? For example, ownership strategy can influence board dynamics and owner-board alignment could maintain focus during transformation journeys (Jonsdottir et al, 2025). Key customer and supplier engagement and involvement may also be required, with special attention given to those most likely to be affected and/or critical for success. Are boards aware of the attitudes of stakeholders and influential members of stakeholder groups towards innovation and transformation?

Recent studies tend to examine board dynamics in terms of composition and identify various factors as being significant, for example independent directors in the case of Indian banks (Pandey et al, 2025). Are desired qualities supportive of responsible innovation and necessary transformation taken into account in board selection and appointment decisions? Evidence from French listed firms suggest independent directors can exhibit a conservative and cautious approach to innovation and may favour limiting disclosure of information on research and development to protect intellectual property, balancing a desire to preserve competitiveness with stakeholder calls for transparency (Lahyani and Ayadi, 2025). Caution and ambition may

both be needed. Boards should keep an eye on externalities and the sustainability of the processes of innovation and transformation as well as their outcomes.

How might boards ensure that sustainable innovation models are aligned with ESG goals? Digital developments and transformation can enhance the sustainability of innovation, the purpose of which may determine whether its implications are positive or negative (Florek-Paszkowska and Ujwary-Gil, 2025). With some AI and other digital applications, a degree of scepticism may be desirable. For example, without breakthrough innovation, corrective action and scaling back elsewhere, AI energy demand and supporting data centre energy and water requirements are expected to increase at an environmentally unsustainable rate (MacCarthy and Klaus, 2025). How can boards ensure digital applications are responsible and not leading to hidden and ignored negative externalities?

Needed innovation can be external as well as internal, and what is required can often be bought-in, licensed or accessed through various forms of cooperation, collaboration or joint venture. Relevant skills may also be head-hunted or obtained via consultancy. Innovation and transformation can sometimes be a driver for Merger and Acquisition (M&A) activity. What oversight should a board provide of innovation-driven M&A, technology and other strategic investments? Cross border mergers and acquisitions may be motivated by a country's industrial policy as well as innovation driven (Wu and Ma, 2024). National policies may also influence investments and the repatriation or protection of cutting-edge technologies and prevent their re-location in certain countries. What arrangements are made to reassess the rationale and justification for siting corporate activities in particular jurisdictions?

Resilient Leadership and Responsible Governance in an Era of Global Turbulence

Given the number of inter-related global risks and existential threats that are largely caused by human activities, including corporate operations, and our collective lifestyles, an expanding human population and widespread growth ambitions, what can boards do in the context of multiple environmental, geopolitical and technological challenges to provide resilient leadership and responsible governance in an unpredictable and turbulent era? Do their members have the required qualities and capabilities to cope, and the social mindset that has been found to have a positive impact on enterprise resilience (Bai, 2025). Is sufficient attention being given to supply chain resilience? A combination of a stability-based approach, which views resilience as an outcome or return to a norm, and an adaptation-based approach, which sees it as a quality, may be required for building strong supply chain immunity through an integration of general protection and adaptability (Ivanov, 2024). How can boards ensure that relevant and appropriate approaches, criteria and frameworks are being used?

Are some supply chains overly complex and vulnerable to disruption? Case studies of supply chains suggest their resilience can depend upon their ability to maintain intra-tier connections within each stage or tier and inter-tier connections between them, with disruptions lasting longer the more stages or tiers there are within a supply chain, while expanding a supplier base from one to two regions may reduce recovery time by up to 50% (Habibi, 2025). Large, established, complex and bureaucratic organisations and systems can and often do produce disappointing and harmful outputs, despite the resources and talent that they can access (Coulson-Thomas, 1992; Davies, 2024). Some boards may feel they are swimming against a tide as increasing resistance to measures resulting in higher costs and climate scepticism are encountered outside of the US (Wright and Vaughan, 2025). If politicians go with the flow and mirror the shifting positions of electorates, how should boards respond?

Are governments easing their commitments, and is citizen interest in the pursuit of net zero falling, while evidence mounts that some previous activities were beginning to have a positive impact? For example, in the US prior to the re-election of Donald Trump, a review of peer-reviewed journal articles published between 2010 and 2023 suggests 'green bonds' significantly boosted renewable energy funding, and reduced greenhouse gas emissions by 12–15%, while carbon pricing mechanisms lowered emissions by 10–20% in states with strong and robust regulatory frameworks (Damoah and Yeboah, 2025). Gains in air quality because of less use of fossil fuels have more recently been lost in Canada because of wildfires (AQLI, 2025). What could directors do to highlight the dangers of dialling back climate and other responsible business action as global warming continues, and accelerates in vulnerable areas with ice sheets? Particulate air pollution is the most significant factor reducing life expectancy, with the average person losing two years of expected life because of air quality being worse than WHO guidelines (AQLI, 2025). Can boards step in and pick up the baton?

Should caring and responsible boards remind stakeholders of how they might be affected by negative externalities? These persist and in many cases they are forecast to increase. Plastic production is accelerating. It represents a grave and growing danger to human and planetary health and is responsible for health-related economic losses exceeding US\$1.5 trillion annually (Landrigan et al, 2025). Environmental damage and pollution continue and are widespread. Less than 10% of plastic is recycled (Landrigan et al, 2025). A sixth round of global UN talks failed to reach agreement on a treaty to end plastic pollution, with some 100 states favouring a curb on plastic production, while oil producing states favoured a focus on plastic recycling (Stallard and Poynting, 2025). What could the implications be for board discussions and negotiations in Brazil at COP30? How might resources be switched from damaging activities to exploiting the many opportunities that accompany current challenges?

Responsible leaders and boards recognise the risk of negative externalities from human activities. They act to contain and minimise or reverse them. Specific human interventions and their impacts on the natural world can have unintended negative consequences that result in excess deaths, in addition to the adverse results of collective human activities such as climate change (Frank et al, 2025). How might boards reduce unwelcome collateral damage, externalities and side effects? Going forward and when making things, collaboration and learning from different arenas could be the key to future industrialisation that is justifiable commercially but also responsible and with a minimal carbon footprint (Mindell, 2025). What can boards do to encourage, enable and support the exploration of possibilities, alternatives, different and more beneficial scenarios, and enterprise and entrepreneurship?

Future boards may increasingly be questioned and held accountable for the environmental and other harm that corporate activities cause. A non-binding advisory ruling of the International Court of Justice has opened the door to reparations for damage caused by global warming, if practical challenges such as determining country contributions to greenhouse gas emissions and establishing climate change as a cause of damage can be overcome (Stallard and Rannard, 2025). With the world facing successive combinations of accumulating crises, can corporate boards provide the decisive leadership, situations, circumstances and contexts require, and which governments alone cannot offer or afford? Greater complexity can require more holistic, imaginative and thoughtful responses from them. As multiple challenges, risks and threats are inter-related, directors should look for ways of simultaneously achieving multiple objectives, for example pursuing conservation and ecological restoration initiatives that improve air and water quality, enhance human health and well-being, provide climate mitigation and increase community resilience to extreme weather events (Seastedt, 2025).

How should forward-thinking boards avoid hype, confront realities, adapt governance strategies, fortify resilience, and lead responsibly to navigate uncertainty, seize emerging opportunities, safeguard long-term sustainability and ensure our collective survival? The hype surrounding the AI push of 'Big Tech' is a barrier to a realistic understanding of AI's potential for both helping and harming (Bender and Hanna, 2025). While ethics and a moral compass may sometimes seem out of place in a more transactional world in which individuals and organisations seek advantage, AI's responsible governance and regulation may depend upon understanding the dilemmas that implications of its potential development paths pose, and they may help their resolution (DiCarlo, 2025). Relying upon blind faith, abdicating or avoiding responsibility, and not exercising critical thinking may prove fatal, with a technology that is accessible to bad actors and can be used to weaponize existential threats. Cyber incidents, and especially IT disruptions, are regarded as the top business risk by respondents to Alliance's 2025 Risk Barometer survey (Alliance, 2025). How might boards be made more aware of the dangers and possible consequences of GenAI, their duties, responsibilities and potential liabilities, and how best to respond (DSIT, 2025)?

Viewing Aspirations and Growth Projections from a Sustainability Perspective

Finally, while responding to immediate issues and short-term turbulence, are some boards losing sight of longer-term trends, looming existential threats and fundamental realities? Our planet and its eco-systems are struggling to cope with and feed a human population of some eight billion, as average global temperatures rise on a planet with insufficient resources to accommodate the combined growth aspirations of companies and countries. Rather than creating demand, seeking ever more and over consumption, could satisficing, sufficiency and producing just enough to meet core needs or minimum requirements be a more sustainable strategy (Dhir, 2025)? Outcomes from one simulation model suggests that sufficiency measures could help to ensure that information and communication technologies (ICT) have a positive environmental impact and their negative consequences are addressed (Szalkowski and Windekilde, 2024). Could sufficiency be a route to sustainability?

Needed transitions that the resources of the planet can support may depend upon future innovations and the determination and persistence of currently unknown entrepreneurs that the experience of Nvidia has shown may arise from unlikely sources (Witt, 2025). What can and should responsible boards do to avoid practices such as built-in obsolescence, the premature ending of product lines, and sales commissions that encourage over-selling, and instead drive sufficiency (Dhir, 2025)? As elected governments compete with promises to achieve faster growth, will more directors and boards have the courage and imagination to be responsible moderators rather than unbridled maximisers, ensure that growth is inclusive and sustainable, identify and tackle negative externalities, and act in the best long-term interests of companies and their stakeholders, ecosystems and those who do not have a vote?

If engaged and if adverse consequences and negative externalities were discussed and understood, would investors be prepared to accept lower profits and could customers pay a premium to reduce them? Might they be willing to adopt different measures of achievement and progress that are not illusions, but supportive of life and what is affordable and attainable within the limits of the earth's eco-systems? Do directors and boards recognise the awesome responsibility they now have, and the unprecedented nature of opportunities to do things differently and offer alternatives while they are still feasible? Will boards do enough to provide sufficient time for effective collective responses and necessary innovations to emerge before further fragmentation, polarisation and triggering of tipping points occurs? After a year of Donald Trump 2, the 2025 London Global Convention on Corporate Governance and

Sustainability provides a timely opportunity for directors to share insights, make or renew connections, refresh their thinking and discuss what might be both desirable and possible.

Further information

Details of the 2025 London Global Convention on Corporate Governance and Sustainability, including the agenda, can be obtained from the events section of the website of the organiser: India's Institute of Directors (www.iodglobal.com)

References

- AIMS (2025), *Annual Summary Report of Coral Reef Condition 2024/25*, Cape Ferguson, Queensland, AIMS (Australian Institute of Marine Science), 6th August
[<https://www.aims.gov.au/monitoring-great-barrier-reef/gbr-condition-summary-2024-25>]
- Alkaraan, Fadi, Elmarzouky, Mahmoud, Lopes de Sousa Jabbour, Ana Beatriz, Chiappetta Jabbour, Charbel Jose and Gulko, Nadia (2025), Maximising sustainable performance: Integrating servitisation innovation into green sustainable supply chain management under the influence of governance and Industry 4.0, *Journal of Business Research*, Vol. 186, January
[<https://doi.org/10.1016/j.jbusres.2024.115029>]
- Alliance (2025), *Alliance Risk Barometer 2025*, January, Munich, Allianz
[<https://commercial.allianz.com/news-and-insights/reports/allianz-risk-barometer.html>]
- Alzeyoudi, Mohamed, Ahmed, Saleh, Abdullah, Nik and Ab Halim, Nik (2025), Impact of Transformational Leadership on Organizational Agility: Mediation of Change Readiness and Moderation of Cultural Agility, *Pakistan Journal of Life & Social Sciences*, Vol. 23 Issue 1, pp 3371-3384
- AQLI [Air Quality Life Index] (2025), *AQLI Annual Update*, Chicago, IL, Energy Policy Institute Clean Air Programme, University of Chicago, August [<https://aqli.epic.uchicago.edu/dataInsights/>]
- Arian, Adam, Zharfpeykan, Ramona and Busulwa, Richard (2025), Physical climate risks and investment behaviour, the role of cultural differences, *Applied Economics*. July, pp 1-22
[DOI:10.1080/00036846.2025.2536877]
- Arunmozhi, Manimuthu (2025), *Deep Dive into Deepfake in the Era of AI*, Presentation to Aston India Centre 7th International Research Conference, Susan Cadbury Lecture Theatre, 30th August, Birmingham, Aston University
- Bai, Xiuna (2025), Impact of social mindset of private entrepreneurs on enterprise resilience in environmental dynamism, *Applied Economics*, March, pp 1-15
[DOI:10.1080/00036846.2025.2472048]
- Bana, Sarah H., Brynjolfsson, Erik, Wang Jin, Steffen, Sebastian and Xiupeng Wang (2025), Human Capital Acquisition in Response to Data Breaches, *MIS Quarterly*, Vol. 49 Issue 1, March, pp 367-388
- Banerjee, Chandan, Bevere, Lucia, Gahlot, Shilpa and Puttaiah, Mahesh H. (2025), Unseasonal fires trigger above-trend catastrophe losses in first half 2025 [*Natural Disasters Report*], 6th August, Zurich, Swiss Re
- Bender, Emily M. and Hanna, Alex (2025), *The AI Con: How to Fight Big Tech's Hype and Create the Future We Want*, London, Bodley Head
- Bernardelli, Adelaide Emma and Giudici, Paolo (2025), AI Risk Management: A Bibliometric Analysis, *Risks*, Vol. 13 Issue 7, July, p 131 [DOI:10.3390/risks13070131]

- Beyne, Jan and Moratis, Lars (2024), A material world: how can materiality assessments be used to define organizational sustainability priorities, while taking into account the United Nations' SDGs? *Corporate Governance: The International Journal of Business in Society*, Vol. 25 Issue 1, pp. 47-70 [DOI:10.1108/CG-03-2023-0106]
- Biresaw, Tsega Meseret and Sibindi, Athenia Bongani (2025), The Assessment of Enterprise Risk Management Practices of Ethiopian Commercial Banks, *Risks*, Vol. 13 Issue 3, March, p 51 (34 pp) [DOI:10.3390/risks13030051]
- Bishop-Monroe, Robbie, Phillips, Marliisa, Makoko, Sylvester and Waldrup, Bobby E. (2025), Board Succession Planning, *CPA Journal*, Vol. 95 Issue 1/2, January-February, pp 44-51
- Boakye, Prince Brefo, Akparep, John Yaw and Salakpi, Andrews (2025), Enhancing Environmental Quality through Board Dynamics: The Role of Environmental Regulations in Advancing Circular Economy in the SSA Region, *Circular Economy and Sustainability*, Vol. 5 Issue 3, pp 1757-1783
- Brooks, Arthur C. (2023), *From Strength to Strength: Finding Success, Happiness and Deep Purpose in the Second Half of Life*, London, Green Tree
- Brown, Richard and Coulson-Thomas, Colin (1989), *The Responsive Organisation, People Management, the Challenge of the 1990s*, London, British Institute of Management
- CO (2025), *National Security Strategy 2025, Security for the British People in a Dangerous World*, CP 1338, 24th June, London, UK Cabinet Office (CO) [https://www.gov.uk/government/publications/national-security-strategy-2025-security-for-the-british-people-in-a-dangerous-world/]
- Coulson-Thomas, Colin (1992), *Transforming the Company: Bridging the Gap Between Management Myth and Corporate Reality*, London, Kogan Page
- Coulson-Thomas, Colin (2025a), Boardroom Pressures and Directorial and Corporate Resilience, Addressing Performance and Wellbeing Consequences of Increasing Workloads, *Director Today*, Vol. XI Issue VIII, August, pp 15-19
- Coulson-Thomas, Colin (2025b), Coping with Complexity and Overload, *Management Services*, Vol. 69 No. 3, Autumn, pp 37-42
- Coulson-Thomas, Colin (2025c), Increasing Engagement and Widening Diversity and Inclusion, *Management Services*, Vol. 69 No. 2, Summer, pp 28-34
- Coulson-Thomas, Colin (2025d), Value-centric Leadership and Corporate Social Responsibility, *Effective Executive*, Vol. 28 Issue 1, pp 5-36
- Damoah, Benjamin and Yeboah, Clement (2025), Harnessing innovative financial instruments for robust climate change mitigation in the United States, *Academia Environmental Sciences and Sustainability*, Vol. 2 Issue 3, 27th August [doi.org/10.20935/AcadEnvSci7826]
- Davies, Dan (2024), *The Unaccountability Machine: Why Big Systems Make Terrible Decisions—and How the World Lost Its Mind*, London, Profile Books
- De Jong, Thimon (2023), *Future human behaviour: Understanding what people are going to do next*, London: Routledge
- de Mariz, Frederic, Aristizábal, Laura and Andrade Álvarez, Daniela (2025), Fiduciary duty for directors and managers in the light of anti-ESG sentiment: an analysis of Delaware Law, *Applied Economics*, Vol. 57 Issue 30, June, pp 4309-4320
- Dhir, Amandeep (2025), *Sufficiency*, Presentation to Aston India Centre 7th International Research Conference, Susan Cadbury Lecture Theatre, 30th August, Birmingham, Aston University

DiCarlo, Christopher (2025), *Building a God: The Ethics of Artificial Intelligence and the Race to Control It*, Essex, CT, Prometheus Books/Globe Pequot

Dolgui, Alexandre, Ivanov, Dmitry and Simchi-Levi, David (2025), Stress tests for supply chains: towards resilience and viability, *International Journal of Production Research*, Vol. 63 Issue 9, pp 3254-3258

Drpljanin, Vildan (2025), Beyond Boardrooms: A Brief Exploration of Corporate Governance Models, *Journal of Law & Politics* (2671-342X), Vol. 6 Issue 1, pp 141-157

DSIT (2025), *Cyber Governance Code of Practice*, London, DSIT (Department for Science, Innovation and Technology) [<https://www.gov.uk/government/publications/cyber-governance-code-of-practice/cyber-governance-code-of-practice?>]

Du, Jinzhao, Pham, Peter, Zein, Jason and Masulis, Ronald (2025), *More Than Capital: How Family Business Groups Mobilize Executive Talent*, 11th July [<https://www.ecgi.global/publications/blog/more-than-capital-how-family-business-groups-mobilize-executive-talent?>]

Edelman (2025), *2025 Edelman Trust Barometer*, New York, NY, Daniel J Edelman [<https://www.edelman.com/trust/2025/trust-barometer>]

EOTP (2025), *Winning the Race: America's AI Action Plan*, Washington, DC, EOTP (Executive Office of the President of the US), July [<https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf>]

Epstein, David (2019), *Range, Why Generalists Triumph in a Specialised World*, New York, NY, Riverhead Books

Escandon-Barbosa, Diana and Salas-Paramo, Jairo (2025), The board director's role in the relationship between organizational innovation and organizational learning in the sustainability innovation performance: an approximation from culture context, *Environment, Development and Sustainability: A Multidisciplinary Approach to the Theory and Practice of Sustainable Development*, Vol. 27 Issue 8, pp 18203-18219

Ewert, Ralf and Wagenhofer, Alfred (2025), ESG Metrics in Management Compensation Systems: An Agency Theory Perspective, *Swiss Journal of Business*, Vol 79 Issue 1, pp 13-26

Florek-Paszkowska, Anna and Ujwary-Gil, Anna (2025), The Digital-Sustainability Ecosystem: A conceptual framework for digital transformation and sustainable innovation, *Journal of Entrepreneurship, Management & Innovation*, Vol. 21 Issue 2, pp 116-137

Forster, P. M., Smith, C., Walsh, T., Lamb, W. F., Lamboll, R., Cassou, C., Hauser, M., Hausfather, Z., Lee, J.-Y., Palmer, M. D., von Schuckmann, K., Slangen, A. B. A., Szopa, S., Trewin, B., Yun, J., Gillett, N. P., Jenkins, S., Matthews, H. D., Raghavan, K., Ribes, A., Rogelj, J., Rosen, D., Zhang, X. et al (2025), Indicators of Global Climate Change 2024: annual update of key indicators of the state of the climate system and human influence, *Earth System Science Data*, Vol. 17 Issue 6, 19th June, pp 2641–2680 [<https://doi.org/10.5194/essd-17-2641-2025>]

Frank, Eyal G., Wang, Qinyun, Wang, Shaoda, Wang, Xuebin and You, Yang (2025), Campaigning for Extinction: Eradication of Sparrows and the Great Famine in China, *EPIC Working Paper*, 4th August [<https://epic.uchicago.edu/working-papers/campaigning-for-extinction-eradication-of-sparrows-and-the-great-famine-in-china/>]

Gagak Apriyanto, Fajar Supanto, Ilham Z. Salle and Masion Sumtaky (2025), Transforming corporate governance: Excellence in human resources and environment in Indonesia, *SA Journal of Human Resource Management*, Vol 23, Issue 0, pp e1-e10 [DOI: <https://doi.org/10.4102/sajhrm.v23i0.2922>]

Galston, William A. (2025), *Anger, Fear, Domination: Dark Passions and the Power of Political Speech*, New Haven, CT, Yale University Press

Gao, Siwei, Hsu, Hsiao-Tang and Liu, Fang-Chun (2025), Enterprise Risk Management, Financial Reporting and Firm Operations, *Risks*, Vol. 13 Issue 3, March, p 48 [DOI:10.3390/risks13030048]

Gleick, Peter (2025), Running blind: The silencing and censoring of environmental threats to US national security, *Bulletin of the Atomic Scientists*, 12th May [https://thebulletin.org/2025/05/running-blind-the-silencing-and-censoring-of-environmental-threats-to-us-national-security/]

Grebić, Bojan, Lalić, Danijela Ciric, Veljković, Slavica Mitrović, Zivlak, Nikola and Savković, Milena (2025), Elevating Corporate Transformation: The Power of Agile Intrapreneurship, *International Journal of Industrial Engineering and Management*, Vol 16, Issue 1, pp 64-75

Gring-Pemble, Lisa, Unruh, Gregory and Shaked, Efrat (2025), Implementing a stakeholder capitalism approach through values-based leadership: case studies in the private, nonprofit and educational sectors, *Corporate Governance: The International Journal of Business in Society*, Vol. 25, Issue 1, pp. 31-46.

Habibi, Farhad, Chakraborty, Ripon K., Abbasi, Alireza and Ho, William (2025), Investigating disruption propagation and resilience of supply chain networks: interplay of tiers and connections, *International Journal of Production Research*, 26th February, pp 1-23 [DOI: 10.1080/00207543.2025.2470348]

Handy, Charles (2025), *The View from Ninety: Reflections on How to Live a Long, Contented Life*, London, Hutchinson Heinemann

Hasan, Sharique, Oettl, Alexander and Sampsa, Samila (2025), From Model Design to Organizational Design: Complexity Redistribution and Trade-Offs in Generative AI, *SSRN*, 10th June [https://ssrn.com/abstract=5287538]

Holdren, John P and Lane, Neil (2025), Time for Congress to save American science ... and the nation, *Bulletin of the Atomic Scientists*, 6th June [https://thebulletin.org/2025/06/time-for-congress-to-save-american-scienceand-the-nation/]

Howard, L. S. (2025), Global Insured Losses From Natural Disasters Could Top \$150B in 2025: Swiss Re Report, *Insurance Journal*, 6th August [https://www.insurancejournal.com/news/international/2025/08/06/834711.htm]

Hultgren, Andrew, Carleton, Tamma, Delgado, Michael, Gergel, Diana R., Greenstone, Michael, Houser, Trevor, Hsiang, Solomon, Jina, Amir, Kopp, Robert E., Malevich, Steven B., McCusker, Kelly E., Mayer, Terin, Nath, Ishan, Rising, James, Rode, Ashwin and Yuan, Jiaca (2025), Impacts of climate change on global agriculture accounting for adaptation, *Nature*, 18th June [https://impactlab.org/research/impacts-of-climate-change-on-global-agriculture-accounting-for-adaptation/]

Hussain, Tanveer, Saeed, Abubakr and Riaz, Hammad (2025), Reputational risk and target selection: An evidence from China, *International Journal of Finance & Economics*, Vol. 30 Issue 3, July, pp 2574-2602

Hutchings, Stephen, Tolz, Vera, Chatterje-Doody, Precious, Crilley, Rhys and Gillespie, Marie (2024), *Russia, disinformation, and the liberal order: RT as populist pariah*. Ithaca, NY, Cornell University Press

Ivanov, Dmitry (2024), *International Journal of Production Research*, Two views of supply chain resilience, Vol. 62 Issue 11, June, pp 4031-4045

Ivanov, Dmitry (2025), When is the supply chain resilient? Customer and operational perspectives, *International Journal of Production Research*, Vol. 63 Issue 15, August, pp 5512-5527

Jivaasha, Delzad Dinyar Tanaz (2025), New Age Enterprise Risk Management - Navigating Unchartered Territories and Steering Clear of Blind Spots - A Paradigm Shift, *Journal of the Insurance Institute of India*, Vol. 12 Issue 3, January-March, pp 156-159

Jogalekar, Ash (2025), The Sarin shortcut: How AI lowers the bar for chemical weapons, *Bulletin of the Atomic Scientists*, 25th August [<https://thebulletin.org/2025/08/the-sarin-shortcut-how-ai-lowers-the-bar-for-chemical-weapons/>]

Jonsdottir, Gudrun Erla, Arnardottir, Audur Arna, Sigurjonsson, Throstur Olaf and Poulsen, Thomas (2025), The influence of an ownership strategy on board dynamics, *Journal of Management and Governance*, Vol. 29 Issue 1, pp 39-67

Kamadi, Geoffrey (2025), Climate change and antimicrobial resistance: A combination driving disease spread in Africa, *Bulletin of the Atomic Scientists*, 25th August [<https://thebulletin.org/2025/08/climate-change-and-antimicrobial-resistance-a-combination-driving-disease-spread-in-africa/>]

Kay, Gillian, Dunstone, Nick, Smith, Doug M., Brown, Simon, J., Kent, Chris, Lockwood, Julia F., Scaife, Adam A. (2025), Rapidly increasing chance of record UK summer temperatures, *Weather*, 18th June [<https://rmets.onlinelibrary.wiley.com/doi/10.1002/wea.7741>]

Koh, S.C. Lenny, Suresh, Karthik, Ralph, Peter and Saccone, Michelle (2024), Quantifying organisational resilience: an integrated resource efficiency view, *International Journal of Production Research*, Vol. 62 Issue 16, August, pp 5737-5756
Laverick, Susan (2025), The Rhetoric of Influence: Reflections from Diplomacy, Boardrooms, and Peacebuilding, *Ukrainian Policymaker*, Vol 16, pp 96-104 [<https://doi.org/10.29202/up/16/7>]

Kokotajlo, Daniel, Alexander, Scott, Larsen, Thomas, Lifland, Eli and Dean, Romeo (2025), *AI 2027*, Berkeley, CA, AI Futures Project

Lahyani, Fathia Elleuch and Ayadi, Salma Damak (2025), Innovation capital disclosure and independent directors: evidence from France, *International Journal of Disclosure and Governance*, Vol. 22 Issue 1, pp 125-139

Landrigan, Philip J., Dunlop, Sarah, Treskova, Marina, Raps, Herve, Symeonides, Christos and Muncke, Jane et al (2025), The *Lancet* Countdown on health and plastics, *The Lancet*, 3rd August [DOI: 10.1016/S0140-6736(25)01447-3]

Lee, Myeongju, Oh, Kyetaik and Kim, Hyunok (2025), Effects of Organizational Culture and Pay Levels on Employee Retention: Focused on Generational Difference, *Administrative Sciences (MDPI)*, Vol. 15 Issue 4, pp 1-19

Little, Allan (2025), How Trump is using the 'Madman Theory' to try to change the world (and it's working), *BBC InDepth*, 6th July [<https://www.bbc.co.uk/news/articles/czxww2kez0go>]

Liveris, Andrew N. (2023), *Leading Through Disruption: A Changemaker's Guide to Twenty-First Century Leadership*, New York, NY, HarperCollins Leadership

Ludviga, Iveta and Kalvina, Agita (2025), Can Strategic Agility Help Retain Public Sector Employees in Times of Uncertainty? A Longitudinal Study, *Administrative Sciences* (2076-3387), Vol. 15 Issue 5, May, p165 [DOI:10.3390/admsci15050165]

MacCarthy, Mark and Klaus, David M. (2025), Why AI demand for energy will continue to increase, *Brookings Commentary*, 12th August [[https://www.brookings.edu/articles/why-ai-demand-for-energy-will-continue-to-increase/?](https://www.brookings.edu/articles/why-ai-demand-for-energy-will-continue-to-increase/)]

Mao, Chunying, Han, Minchun and Huang, Lei (2025), Digital dividend or digital divide? The differential impact of digital literacy on labour productivity, *Applied Economics*, August, pp 1-19 [DOI: 10.1080/00036846.2025.2540607]

Markelov, Maksim (2025), Amplifying doubt: How Russian trolls leveraged pandemic uncertainty for strategic gain, *Bulletin of the Atomic Scientists*, 13th May 13 [<https://thebulletin.org/premium/2025-05/amplifying-doubt-how-russian-trolls-leveraged-pandemic-uncertainty-for-strategic-gain/>]

- Mayer, Colin (2023), Reflections on corporate purpose and performance, *European Management Review*, 28th November [https://doi.org/10.1111/emre.12626]
- Mindell, David A. (2025), *The New Lunar Society: An Enlightenment Guide to the Next Industrial Revolution*, Cambridge, MA, MIT Press
- Morris, Claudia Pici, Van Der Zon, Kim and Goodman, Anthony (2025), Board Succession Planning: The Blueprint and The Talent, *Corporate Board*, Vol. 46, Issue 273, July-August [https://www.corporateboard.com/current-issue/]
- Ogabor, Ojone and Adejo, Charity (2025), Climate change and urological health in sub-Saharan Africa: neglected risks and solutions, *Academia Medicine*, Volume 2; Issue 3, 14th August [doi.org/10.20935/AcadMed7842]
- Oliveira, Fernando S. and Ruiz, Carlos (2025), Risk management in solar power plants with storage: a comparative study, *International Journal of Production Research*, June, pp 1-17 [DOI:10.1080/00207543.2025.2510455]
- Pandey, Krishangi, Said, Radwa Radwan, Alam, Md Shabbir and Akhtar, S. M. Jawed (2025), Board Dynamics and Firm Performance: A Wavelet-Based Empirical Analysis: Board Composition Index and Bank Performance in Emerging Markets: Insights from Indian Banks, *Asia-Pacific Financial Markets*, 22nd May, pp 1-24 [DOI:10.1007/s10690-025-09537-3]
- Patwa, Nitin, Paul, Roshni, Dsilva, Jacinta and Chadha, Karman Kaur (2025), Enhancing circular economy practices in Asia through digitalization and infrastructure, *Academia Environmental Sciences and Sustainability*, Vol. 2 No. 1 [Doi: 10.20935/AcadEnvSci7583]
- Plangger, Kirk, Montecchi, Matteo, de Ruyter, Ko, Keeling, Debbie I., Scott, Maura L. and Dahl, Darren W (2025), "We could be heroes": Reflections on reimagining marketing strategies for a better world, *Journal of the Academy of Marketing Science*, Vol. 53, pp 301-309 [https://doi.org/10.1007/s11747-025-01099-0]
- Rahi, Abm Fazle (2025), Unpacking women's power on corporate boards: gender reward in board composition, *International Journal of Disclosure and Governance*, Vol. 22 Issue 1, pp 64-80
- Rubens, David (2025), *Chaos and Complexity: Sense Making and Risk Management in Unprecedented Times*, FS Club lecture, Wednesday 18th August
- Sai, M. Eswar Prem, Mudigonda, Satya Sai and Baruah, Pallav Kumar (2025), The Impact of Climate Change on the Global Insurance Industry: Risks, Challenges, and Responses, *Journal of the Insurance Institute of India*, Vol. 12 Issue 4, April-June, pp 14-24
- Schwartz, Jeff (2025), Transnational ESG: The impact of EU sustainability directives on US law and policy, *Journal of Law and Political Economy*, Vol. 5 Issue 2 [https://doi.org/10.5070/LP60065151]
- Seastedt, Timothy R. (2025), Accelerating contributions of restoration ecology for enhancing natural climate solutions, *Academia Biology*, Vol. 3 Issue 1, 24th January [doi.org/10.20935/AcadBio17502]
- Semadeni, Matthew and Krause, Ryan (2020), Innovation in the Boardroom, *Academy of Management perspectives*, Vol. 34 Issue 2, pp 240-251
- Sobiech Pellegrini, Izabela, Chmura, Rafał, Sawulski, Jakub and Mętrak, Tymoteusz (2025), Can the improvements in human capital quality mitigate the negative impact of ageing on growth? Evidence from selected EU countries, *Economics of Transition & Institutional Change*, Vol. 33 Issue 2, April, pp 253-274
- Srinivasa, H. T. and Venkidasamy, K. (2025), Implementing Enterprise Risk Management in India's Non-Life Insurance Sector: Challenges and Opportunities, *IUP Journal of Financial Risk Management*, Vol. 22 Issue 1, March, pp 35-51

Stallard, Esme and Rannard, Georgina (2025), Top UN court says countries can sue each other over climate change, *Climate News*, www.bbc.co.uk, 23rd July [https://www.bbc.co.uk/news/articles/ce379k4v3pwo]

Szalkowski, Gabriel Andy and Windekilde, Iwona Maria (2024), *Proceedings of 10th International Conference on ICT for Sustainability (ICT4S)*, June, pp 183-193

Taleb, Nassim Nicholas (2012), *Antifragile: Things That Gain from Disorder*, New York, NY, Random House

Tay, Cheryl, Lindsey, Eric O., Chin, Shi Tong, McCaughey, Jamie W., Bekaert, David, Nguyen, Michele, Hua, Hook, Manipon, Gerald, Karim, Mohammed, Horton, Benjamin P., Li, Tanghua and Hill, Emma M. (2022), Sea-level rise from land subsidence in major coastal cities, *Nature Sustainability*, Vol 5, pp 1049-1057, 12th September [https://doi.org/10.1038/s41893-022-00947-z]

Thomas, Vinod (2024), *Risk and Resilience in the Era of Climate Change* [2nd edition], London, Palgrave Macmillan

Uddin, Mohammed Belal, Jayaram, Jayanth, Amin, Al and Islam, MD. Riajul (2025), impact of supply chain organisational learning on organisational role redefinition and supply chain risk management: the moderating role of market turbulence, *International Journal of Production Research*, July, pp 1-23 [https://doi.org/10.1080/00207543.2025.2523526]

Van Buren, Harry J. and Schrempf-Stirling, Judith (2025), Making the invisible visible: stakeholder capitalism and powerless stakeholders, *Corporate Governance: The International Journal of Business in Society*, Vol. 25, Issue 1, pp. 128-143

Venkatasubramanian, Suresh (2025), How AI and surveillance capitalism are undermining democracy, *Bulletin of the Atomic Scientists*, 21st August [https://thebulletin.org/2025/08/how-ai-and-surveillance-capitalism-are-undermining-democracy/]

WEF (2024), *Navigating the AI Frontier: A Primer on the Evolution and Impact of AI Agents*, White Paper, Cologny, WEF (World Economic Forum) in collaboration with Capgemini, 16th December [https://www.weforum.org/publications/navigating-the-ai-frontier-a-primer-on-the-evolution-and-impact-of-ai-agents/]

WEF (2025a), *The Global Cooperation Barometer 2025*, Second Edition, Insight Report, Cologny/Geneva, WEF (World Economic Forum) in collaboration with McKinsey & Co) [https://reports.weforum.org/docs/WEF_Global_Cooperation_Barometer_2025.pdf]

WEF (2025b), *The Global Risk Report 2025*, Cologny/Geneva, WEF (World Economic Forum)

WEF (2025c), *The Global Risks Perception Survey 2024-2025 (GRPS)*, Cologny/Geneva, WEF (World Economic Forum)

WEF (2025d), *What's working in AI? Real-world transformations from the first MINDS cohort*, Cologny, WEF (World Economic Forum), 26th June [https://www.weforum.org/stories/2025/06/first-cohort-of-world-economic-forums-minds-programme-winners-announced/]

WHO and WMO (2025), *Climate Change and Workplace Heat Stress, Technical Report and Guidance*, 22nd August, Geneva, WHO [World Health Organisation] and WMO [World Meteorological Organisation] [https://library.wmo.int/idurl/4/69616]

Witt, Stephen (2025), *The Thinking Machine: Jensen Huang and Nvidia, the company shaping the future of AI*, London, Bodley Head

Wright, Oliver and Vaughan, Adam (2025), Rising tide of voters warm to climate scepticism, *The Times*, 10th September, pp 1 & 10-11

Wu, X.-M. and Ma, Z.-H. (2024), Industrial policy and cross - border M&As: Policy orientation or innovation driven? *Studies in Science of Science*, 15 January 2024, Vol. 42 Issue 1, pp 54-66

Yang, Yang and Konrad, Alison M. (2025), Effects of women on corporate boards: An integrative review from a political capital perspective, *The Leadership Quarterly*, Vol. 36 Issue 1, January, Article 101841 [<https://doi.org/10.1016/j.leaqua.2024.101841>]

*Author

Prof (Dr) Colin Coulson-Thomas, President of the Institute of Management Services and Director-General, IOD India, UK and Europe, leads an International Governance Initiative and is an experienced chairman of award-winning companies and vision holder of successful transformation programmes. He has helped directors in over 40 countries to improve director, board and corporate performance and held public appointments at local, regional and national level and professorial roles in Europe, North and South America, Africa, the Middle East, India and China. He is currently *inter alia* Honorary Professor at the Aston India Centre of Aston University and at Lincoln International Business School, College of Arts, Social Sciences and Humanities of the University of Lincoln. Colin was educated at the LSE, London Business School, and the Universities of Chicago, Southern California and Westminster and obtained first place prizes in the final exams of three professions. He has authored over 70 books and reports and some 2,000 articles. Details of his recent publications can be found on: <http://www.policypublications.com> and <http://www.academia.edu>