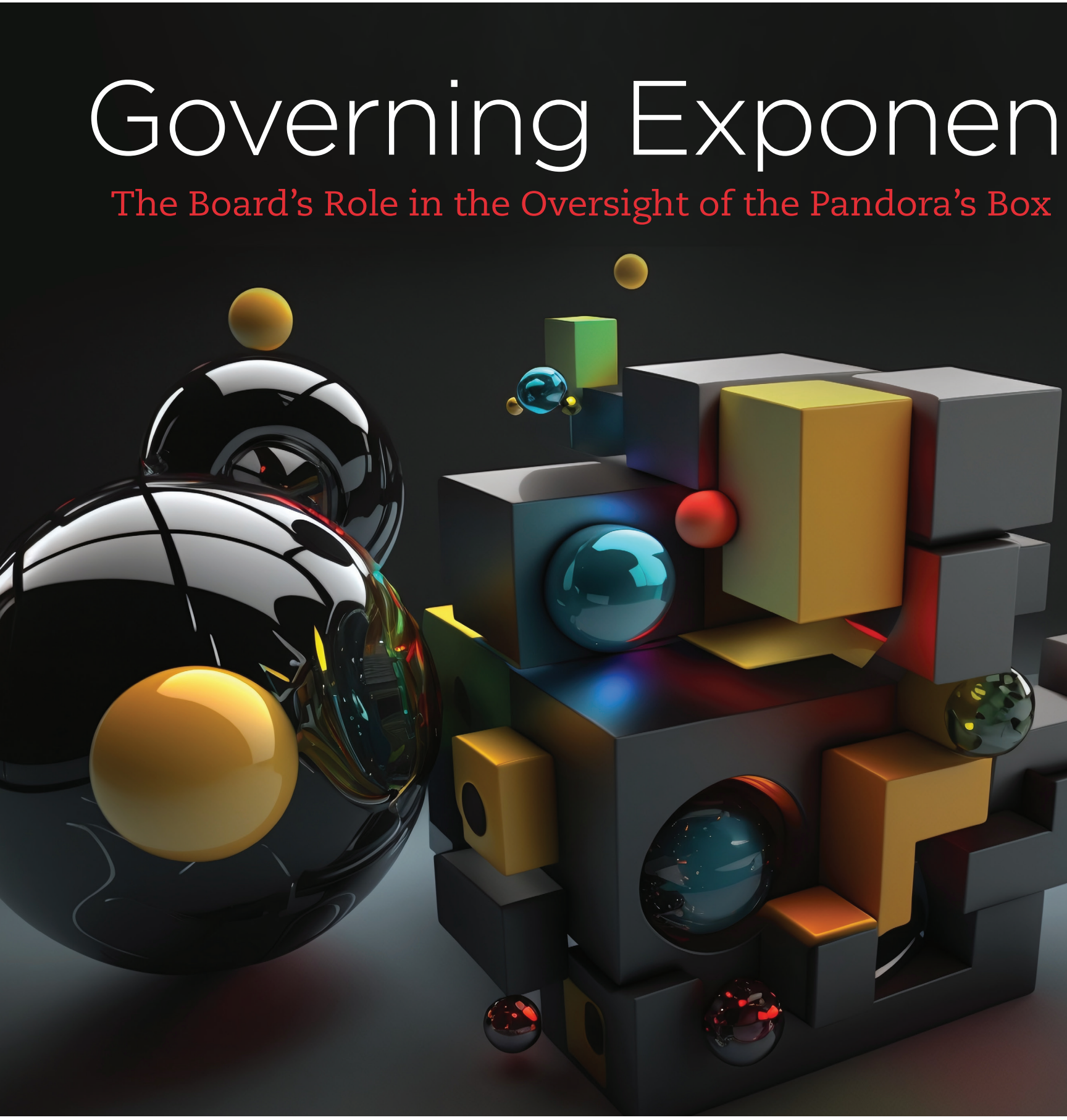
Governing Exponen

The Board's Role in the Oversight of the Pandora's Box



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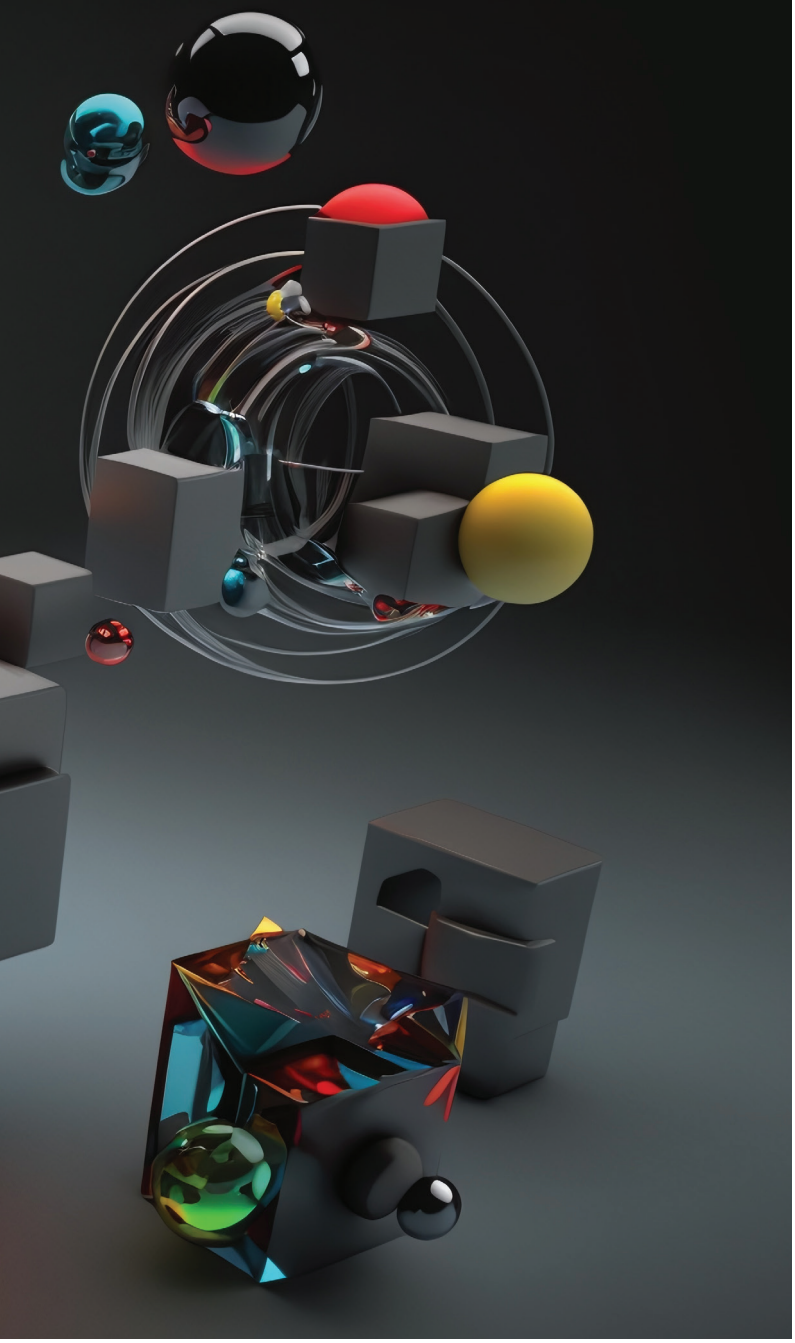

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By Andrea Bonime-Blanc

WE MAY HAVE JUST TURNED THE CORNER into the Fifth Industrial Revolution. Why are we so shaken—in good and not so good ways? What does the invasion of a new crop of artificial intelligence (AI) known as generative large language AI tools mean? Represented by the likes of ChatGPT, GPT-4, Google's Bard, Bing's web search, DALL-E, and other programs generating language, images, videos, code, and audio, generative AI has burst into the marketplace like an opened Pandora's box, full of the good, the bad, the ugly, and the truly unknown.

The advent of generative AI builds on the use of other already exponential and potentially exponential technologies—think bioengineering and neurobiology, cleantech and geoengineering, mobility and Web 3.0, quantum computing and space tech, cloud and edge computing—all of which could become doubly exponential with the integration of generative AI into each of them.

Those paying attention to these developments have a sense that we are living on the precipice of something truly extraordinary, where the earth under us is moving, the sky is parting, and our brains, infused with heretofore unknown possibilities, are igniting with double and triple takes.

Together with everything else that is happening in the world today, our poor minds are overloaded and can't really fathom, let alone understand, the shape of things to come. But we do know and feel that something big is happening that is moving so much faster than our limited, yet still precious, human brains can process.

Sociobiologist Edward O. Wilson said it in a powerful, profound, and all-too-real way a few years ago: "The real problem of humanity is the following: we have Paleolithic emotions, medieval institutions, and godlike technology."

Think about that. Then consider what Yuval Noah Harari wrote in the *Economist:* "AI has gained some remarkable abilities to manipulate and generate language, whether with words, sounds, or images. AI has thereby hacked the operating system of our civilization."

Then, for a full hour of deep insights, take a look at "The AI Dilemma" on YouTube, in which Tristan Harris and Aza Raskin, cofounders of the Center for Humane Technology and the folks behind the 2020 docudrama *The Social Dilemma*, which warned us of the downsides of social media, cite a recent survey that found that "50 percent of AI researchers believe there is a 10 percent or greater chance that humans go extinct from our inability to control AI."

As if all that weren't enough to rattle some cages, Geoffrey Hinton, called the "Godfather of AI" by many and the former head of AI for Google, just resigned from Google to speak out more proactively about the dangers of AI. He stated to the *New York Times*, "It is hard to see how you can prevent the bad actors from using it for bad things."

Finally, one of the critical junctures where the rubber of generative AI will meet the road of everyday life is in the continuing flood of misinformation and disinformation that will soon become indistinguishable from fact. As Wael Abd-Almageed, a University of Southern California research associate professor, told the *Washington Post*, "Once the line between truth and fake has eroded, everything will become fake. We will not be able to believe anything."

And now, try to process all of this.

A Spectrum of Exponential Tech Actors and Behaviors

Consider this definition by the World Economic Forum of one of the top tech risks for the coming decade, "adverse outcomes of frontier technologies": "Intended or unintended negative consequences of technological advances on individuals, businesses, ecosystems, and/or economies. Includes but is not limited to AI, brain-computer interfaces, biotechnology, geoengineering, quantum computing, and the metaverse."

With these rapid-fire generative AI and exponential tech changes also come boundless opportunity and boundless risk. What are company leaders and boards to do with this ongoing, earth-shattering change? Remember when the Internet and browsers first became a thing? The iPhone and other smartphones? The size, expanse, and depth of what is happening with generative AI will put those changes to shame.

I personally don't believe we are facing the imminent advent of sentient autonomous AI that will take over the world—at least not now. Nor are we in imminent danger of what the 50 percent of AI researchers quoted earlier are concerned about: humanity's extinction (although that too could come about eventually).

But when people like Geoffrey Hinton speak, we should all listen.

What we are facing imminently is the massive and largely opaque invasion of generative AI and related data—good, bad, and ugly—that are being fed into everything we do, without guardrails. At the heart of it all is data: the collection, scraping, creation, recreation, manipulation, packaging, and repackaging of every type of data imaginable whose qualities, provenance, and safety are often unknown. Meanwhile, in the race to be first, these generative AI capabilities are being incorporated left and right into products and services, which, in turn, can be used as much for good purposes as for nefarious ones.

This is truly alarming from a governance, ethics, and risk management standpoint because we are not able or prepared to keep up with the velocity, volume, decentralization, and ferocity of the information, misinformation, and disinformation that may be involved. And that doesn't even get into the international and national security implications of all this.

From the vantage point of someone who views tech innovation from governance, ethics, risk, and impact lenses, I am most worried about the human dimension behind the creation or cocreation, development, and deployment of generative AI, and would suggest that an important way to think about generative AI is to understand who the actors and users are behind the tech that is being created, along the following spectrum of responsible to criminal or evil users:

- **Responsible or intentionally constructive actors:** companies, nongovernmental organizations (NGOs), or governments developing and deploying generative AI while proactively and intentionally building governance, risk, ethics, and impact guardrails around it in real time.
- **Negligent actors:** companies, NGOs, or governments developing and deploying generative AI without thinking about the necessary governance, risk, ethics, and impact guardrails that need to be built around it.
- **Grossly negligent actors:** companies, NGOs, or governments developing and deploying generative AI while knowingly avoiding building governance, risk, ethics, and impact guardrails around it.
- **Intentionally irresponsible actors:** companies, NGOs, or governments developing and deploying generative AI while proactively and intentionally disregarding governance, risk, ethics, and impact guardrails.
- **Intentionally destructive or criminal actors:** companies, NGOs, or governments developing and deploying generative AI without governance, risk, ethics, and impact guardrails to safeguard others and with the specific intent of harming others.

We need to prepare immediately and deal with the above spectrum of behaviors and actors. If yours is a business that wants to

maintain the confidence, trust, and reputation you currently have, you'd better fall into the first category of actor. Your reputation will be turbocharged for better or worse depending on the choices you make today.

Exponential Tech Requires Exponential Governance

What does all of this mean to the average corporate board, if there is such a thing? Given the pervasiveness and universality of what is happening with generative AI, there are five key actions boards should consider now:

Action Item 1: Get ready for the business model paradigm shift. Be ready to understand how generative AI (and the data that are fed into it) currently affects your business model, your products, and your services; how it can provide new business opportunities; and how it can lead to market share losses or even oblivion. Understand data provenance and safety. Demand answers from management, bring in experts to enlighten you, or better yet, add one or two digital economy experts to your board.

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Action Item 2: Prepare for the talent revolution. Many think that generative AI will destroy employment as we know it, including the job security of professionals such as lawyers, accountants, and other white-collar workers—akin to what past industrial revolutions did to blue-collar workers and the working class. Ask yourself, How does the generative AI revolution together with the other exponential tech impacts affect our particular business footprint and sector? Get ready to deal with the human capital consequences, both negative and positive.

Action Item 3: Refresh the board of directors. If your board hasn't already added new members who are deeply savvy in all things digital, you are dangerously behind the times. Blow up your self-assessment matrix to include relevant future tech skills. Not only should your board composition be refreshed accordingly, but so should your committee structure. Equip yourselves like never before, with deeply relevant continuous education, expert briefings, and future-oriented presentations.

Action Item 4: Reboot enterprise risk management. Just when you thought you had good risk management, the risk management game changed dramatically. Build on the tried-and-true tools that are already in place, but make sure that the structure, software, and content of such systems are deeply inclusive of tech risk and are futureproof oriented.

Action Item 5: Create a holistic systemic approach to environmental, social, and governance (ESG) issues and technology. Everything in the hyper-complex world that is dawning is interconnected and interoperable. Your climate risk and opportunity are intertwined with tech solutions and value creation. Your geopolitical risk intersects deeply with supply chain matters, human rights, and climate tech. Think about technology and ESG risk and opportunity as part of a holistic strategy, a systems approach to doing business. It is time to bust silos and create a coherent environmental, social, governance and technology framework, operations, and strategy team.

Your Reputation Depends on It

In the coming generative AI-infused marketplace, an even greater premium will be placed on companies that are consistently responsible and transparent about integrating technology into their larger product, service, customer care, and overall strategy. Stakeholders, especially younger employees and consumers as well as caring older ones who are savvy to the emerging landscape, will expect nothing less. Reputation risk and opportunity are about to become technology turbocharged.

But there is more to all of this. Beyond our work as board members or senior executives, each of us needs to do our part to safeguard our world from the unleashing of exponential technologies without guardrails. Trade associations and those in leadership roles should join private, public, and social hands in a cross-sectoral, national, and international collaboration to help develop common guardrails, safety, and protections, and to find solutions akin to what is finally being done in the cybersecurity field. Anything short of this would be putting our collective heads in the sand.

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