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Center for Board Effectiveness

On the board's agenda | US
Questioning technology
governance orthodoxy

Why it matters

Formerly a siloed and specialized topic, technology has become interwoven throughout many facets of governance. Yet even for the tech-savvy, strategizing around the increasingly rapid pace of advancement could prove challenging. Deloitte's *Tech Trends 2024* may be useful for boards looking to separate the signal from the noise of current technology dialogues. According to the report, upcoming technology advancements are poised to fundamentally change how humans and machines interact in the workplace (and beyond). The board's technology oversight processes may (or may not) be prepared for that kind of potential shift. But in either case, there are ways for boards to improve capacity in this area.

> Development speed

Emerging tech's speed of development may indicate a need to assess risks more frequently.

> In us we trust

Technology can facilitate stronger connections with the board's stakeholders.

> Raising the (digital) bar

Consider increasing the minimum technology fluency expectations for directors.
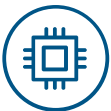
The more things change, the more they stay the same

Deloitte has chronicled how the form of the latest "breakthrough" technology changes frequently over time. But while the innovation of the moment is ever-changing, the elevating and grounding forces that drive it remain steadfast. From the design of the very first computer to today's widespread use of artificial intelligence (AI), Deloitte's data suggests the progress of interaction, information, and computation have acted as elevating forces that foster technological change over time.[1] Grounding these are countervailing factors involving the business of technology, cyber and trust, and core modernization. Taken together, these six macro technology forces can help illuminate the direction of future trends.

The connections between 2024's technology trends and board oversight, strategy, and governance may seem to echo the 2023 report. But a closer look reveals important nuances—especially in terms of risk and opportunity assessment.[2] For instance, the 2023 report noted the emergence of AI—and presciently, the possibilities that lay beneath its computational power.[3] As the AI trend has evolved, the focus has shifted in 2024 to its use as a growth catalyst. In other words, technology evolution has led to a potential business revolution.[4]

The implications for directors could be far-reaching, depending on industry and whether there are existing AI use cases in the organization.[5] Comparing the six macro technology forces between the two years reveals a few other differences that may have board implications.

Changing *Tech Trends* implications

Tech Trends force	What's changing	What's not
Interaction	Change in focus from evolution of interfaces beyond traditional screens to spatial computing and the industrial metaverse.	Emphasis on immersive and interactive technology experiences that are transforming how users engage with digital environments.
Information	From the commoditization of AI tools for competitive advantage to the practical applications of AI in enterprise settings.	The role of AI and its integration into business processes—and the many benefits and pitfalls therein—remains a constant undercurrent.
Computation	Simplification of the multi-cloud remains important, but the rise of specialized hardware for complex tasks marks a shift beyond binary computing.	The need for advanced computational capabilities and the evolution of computing infrastructure to handle more demanding workloads.
Business of technology	From an abundance mindset on curating and cultivating technology talent to leveraging developer experience in ways that enhance productivity.	While the discrete strategy for recruiting and retaining technology talent may change, the importance of these workers from a competitive advantage standpoint is a constant.
Cyber and trust	The use of blockchain-powered ecosystems in developing digital trust may still have value, but the challenges of synthetic media have taken center stage.	Whether using blockchain to build digital trust or combating deepfakes that seek to destroy it, the connections between cyber and trust are evolving.
Core modernization	The emphasis on core technologies has changed from connecting and extending legacy systems to a "technical wellness" approach.	Advancements in technical health may help affirm the value of updating foundational technology infrastructure.

To navigate 2024's technology trends, a few examples of discrete strategies and oversight considerations may be helpful. For instance, companies may want to consider how they balance embracing innovation, managing risk, and determining whether technology investments align with the company's long-term goals. By doing so, directors can help their companies to not only keep pace with tech trends but capitalize on them.

Elevating forces

Tech force	What does it mean?	How might it shape governance?
Interaction	Advanced technologies like augmented reality (AR) and virtual reality (VR) are affecting consumer and industrial spaces. Enterprise use of these technologies in the industrial metaverse, including digital twins, spatial simulation, and augmented work instructions, may enhance industrial safety and efficiency.	Spatial computing and the industrial metaverse may enhance governance processes via offering new methods of stakeholder interaction. There could be outsized value for boards that track the evolution of these technologies and incorporate their development into the company's long-term strategy.
Information	Generative AI has dramatically changed technology business dialogue. In part, that's because it enables machines to behave, comprehend, and narrate in humanlike ways. Due to recent expansions in computing power availability and streamlined access to large data sets, this ability to scale may continue to accelerate.	This could be an area of opportunity for boards to drive innovation and efficiency. At the same time, the ethical and operational implications of generative AI have given rise to new types of risk. It might be worth assessing how the board plans to balance these forces through AI governance and similar strategies.
Computation	While cutting-edge computational resources are expensive, there is corresponding benefit in terms of increasing the organization's agility. But there are other ways to research such goals, like being more strategic about when to add new hardware.	The demand for specialized hardware has risen concurrently with enterprise needs to train AI models and perform similar tasks. As part of the board's oversight processes, it might be worth discussing how to meet use case requirements in a manner congruent with other strategic priorities.

Grounding forces

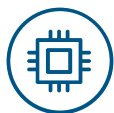| Tech force	What does it mean?	How might it shape governance?
Business of technology	To help improve the productivity of top tech talent, a transition is underway from development velocity to development agility. This approach involves enhancing the interactions developers have with the organization to retain institutional tech knowledge.	Though the level of engagement varies widely by industry, boards may become increasingly involved in workforce oversight. It could be worth discussing existing processes for attracting, retaining, and developing IT talent as a strategy to reach broader business goals.
Cyber and trust	As AI tools proliferate, security risks are also increasing, particularly with the advent of synthetic media like deepfakes. These tools can be used for malicious purposes such as bypassing security controls or phishing. In response, organizations might consider a mix of policies to identify harmful content.	In an era where digital trust is vital, there could be a benefit to focusing oversight on cybersecurity and the pitfalls associated with synthetic media. As both a technical and strategic risk, it's worth considering how governance processes might be used to maintain reputational integrity and stakeholder trust.
Core modernization	There is growing urgency to modernize core technology assets. This trend involves moving away from piecemeal strategy of "one mainframe and data center at a time." A new wellness paradigm has emerged that includes preventive assessments and care across the tech stack.	When it comes to large-scale projects like updating foundational business systems, the board's strategic involvement and oversight may be critical. There could be a role for boards in assessing how such efforts are aligned with the company's long-term strategy.

How tech trends can shape governance

The findings of *Tech Trends 2024* are suggestive of a few takeaway implications for board governance and strategy.[6]

- **Oversight**: The board's role in technology oversight has continued to evolve.[7] In some spaces, technology development that was formerly measured in years can now happen in just a few months. Such a rapid pace means it may be worth assessing the risks and opportunities found in the technology landscape more frequently. It could also be worth considering how a technology's use case aligns with other long-term goals.

- **Strategy**: Innovation goes through many stages. Each point in the development life cycle may thus change the board's risk and opportunity strategy. As a technology becomes more mature, the consideration of factors like regulatory change may rise in importance. The large-scale implementation of AI, as an example, gave rise to privacy concerns from many corners—while also piquing the interest of regulators.[8]

- **Governance**: It can be difficult to know whether adopting the latest innovation will aid or inhibit the organization's strategic priorities. For adoption assessment, it could be worth using techniques like outlining potential legal/regulatory reporting impacts.[9] As a starting point, it could also be worth considering use of adaptive tools such as Deloitte's governance framework.[10]

Guideposts for technology strategy

Avoiding the siren call of short-termism

Breakthrough tech can potentially add new efficiencies in record time. But a singular focus on using the innovation of the moment as a shortcut can result in missing the (digital) forest for the trees.

Investing before the storm, not during it

New technologies can create pressure to act. But *when* the company acts may be just as important as *how*. There can be advantages to making strategic tech moves in the calm before the storm (and not during it).

From an ephemeral grand vision to a technological reality

Like other governance matters, decisions on technology may ultimately center on the board's assessment of its risks and benefits. Traditionally, this included considerations around how an innovation might bolster operational efficiencies or otherwise enable a competitive advantage in the digital economy.

But recently, business dialogues on technology have taken on a much grander scale. Innovations are increasingly discussed as a way to build trust, help us better understand the world, and foster meaningful connections with each other.[11] Such utopian notions are not new, but data from *Tech Trends 2024* hints we may be closer to that vision than ever before. As the arc of innovation bends toward helping us be even more human, and machines take on a larger role in the organization, new heuristics may be needed.

Though governance structure should be tailored to the circumstances of each board, the possibilities of a broader tech approach may be worth considering. The road to a brighter tech future could begin with boards that use technology to foster stronger relationships with stakeholders. Admittedly, viewing technology through this lens may not be easy. It means treating innovation like a strategic asset for interpersonal growth—not a novelty. Because as *Tech Trends 2024* highlights, organizations cannot "shrink their way to success".

Board questions on technology trends

When technology trends shift, the following questions might serve as boardroom conversation starters:

- How does a technology contribute to long-term goals and add value for stakeholders? Could adoption of the technology adversely affect broader risk management strategy?

- If a technology is adopted, what are the likely short-term and long-term impacts on existing data privacy and information security practices?

- Does the board have a sufficient skill set to fully evaluate the technology? If so, does management have sufficient experience to implement the business use case?

- Should the board regularly inventory technology skill sets? If so, what types of advancements might merit a need for director development in this area? What level of tech knowledge or tech "savviness" is sufficient?

- How has the board applied its governance processes to emerging technology trends in the past—and what was the result? In other words, does the process still work, or does it need to change?

- Are there regular updates on how the emerging technology landscape is affecting the company? If not, should there be? If so, are they useful for oversight?

- Is the resiliency of core business systems, including changes that arise from interactions with emerging tech, part of existing oversight activities?
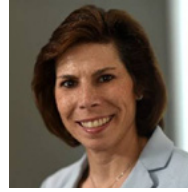
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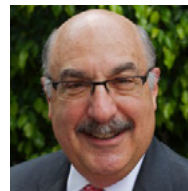coven@deloitte.com

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