'Bending Time' in the Age of Generative AI: Is Your Board Ready?

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Boards must overcome a gap in understanding technology so they can unlock value at scale.

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Technology is now ubiquitous across businesses and increasingly the deciding factor between industry leaders and laggards. Companies that effectively internalize and harness intelligent technologies like generative and predictive artificial intelligence, and then transform their businesses *at scale* **are driving industry-leading performance, as evidenced by growth in enterprise value**. In fact, these companies are 'bending time' by accelerating product development, manufacturing, operations, and customer centricity. Yet while everyone is experimenting, unfortunately only 10% of more than 1000 organizations we surveyed are adopting intelligent technologies at a scale that can fast-track their business strategies.[1]

One reason for the small portion of businesses that are strategically applying these technologies at scale, is that doing so requires a forward-looking CEO, C-suite, and board of directors. Today, boards of directors who enjoy the technology expertise to enable companies to successfully play "offense," by deploying technologies to accelerate innovations, and also to play "defense" by implementing technological advances that safeguard operations from risks, remain a minority. While most boards of Standard and Poor's 500 companies have the customary audit, compensation, and governance committees of the board, relatively few have technology committees.

In tech-responsive fields like life sciences, technology can have an exponential impact on performance by integrating unstructured and structured data, and thus

- speeding up discovery and development, and
- personalizing drugs for diseases previously considered untreatable, and
- helping with access to, and appropriate usage by patients.

Even in such fields, technology-savvy board members are few and far between. Only 8% of board members at the world's 20 largest life science companies are technology experts, according to Accenture Research.[2] Similarly, just 8% of board members at the world's leading 40 life sciences companies have completed planned generative AI training sessions or engaged with outside experts. A mere 14% actively leverage generative AI to transform their own companies' businesses.[3] Taken together, these findings suggest that technology-deficient boards can cause companies to leave critical opportunities on the table.

Boards seek to build appropriate capabilities to fulfill their fiduciary duties in corporate governance, audit and compensation. Now, the more modern, more performance-oriented boards strive to be sufficiently tech-proficient in order to be able to provide expert guidance on decisions that could profoundly affect a company's future.

So how can companies effectively embed technology expertise in their boards? Based on our decades of experience as board members, CEOs, and advisors, as well as in-depth interviews with CEOs at some of the largest biopharma companies, we believe that those boards who

Top 20 Life Sciences board technology representation
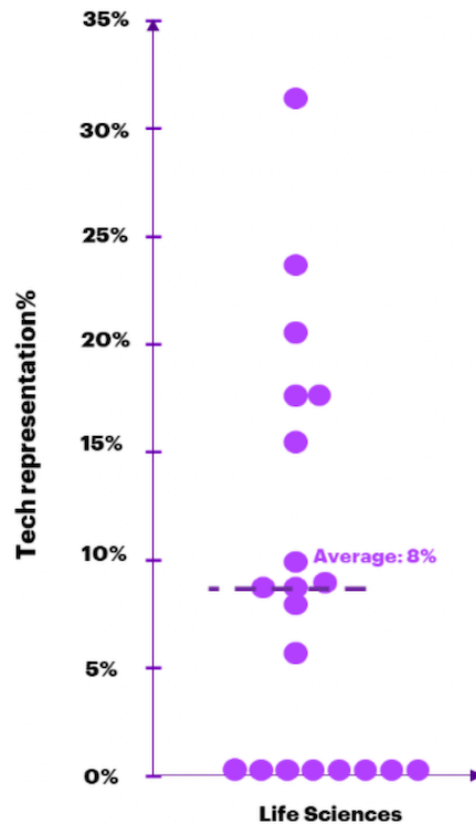

Source: Accenture Research. 2024.

- recruit technology experts as new members, and who
- install formal technology committees of the board, and who
- continuously train and provide refreshers on technology topics

are the most successful at guiding management teams through technology-driven decisions, that can help secure competitive advantages. Below, we explore three ways companies can make this happen.

1. Improve Technology Representation

As technological advances increasingly impact, and potentially reinvent, every part of companies' operations, all board members need to be up to speed on the latest relevant technologies and their implications for their business. They must understand and sharpen their technology knowledge well enough to evaluate the options and to oversee the strategy and the execution of a management team's leveraging of technology. On technology, boards need to ask the right questions and proactively surface new ideas to support the

management team's efforts to gain the competitive edge. Simultaneously, boards should do their part in helping protect the company from risks, whether they be in cybersecurity or the responsible use of technologies.

Ideal board composition

20% **Tech expert**
Deep technology knowledge coupled with real life experience

30% **Tech literate**
Understands technology well, able to ask the right questions to evaluate risks and opportunities

50% **Tech aware**
aware of the latest technologies and their implications for the business

To power-up their technology capabilities, boards need to develop three levels of expertise that we refer to as "tech aware", "tech literate" and "tech expert." All board members should be at least at the level of "tech aware" i.e., aware of the latest technologies and their implications for their business. In addition, several directors should function at the "tech literate" level. These directors should understand technology well enough to ask the right questions, to competently discern both opportunities and risks. Finally, at least a few directors should qualify at the "tech expert" level. They should have deep technology knowledge coupled with multiple real-life experiences of getting things done. These "tech-expert" board members should engage in multiple industry initiatives, bring in new ideas to challenge the executive team, and be comfortable in providing expert advice to the other members of the board and to management, on the oversight of tech-oriented decisions.

Given the high demand for directors with both functional expertise and experience in technology, we recommend companies seek out three types of individuals who can complement the experience, knowledge and skills of their other board colleagues:

- executives who have held technology-related positions and have driven enterprise-wide digital technology transformations,
- former and current technology company C-suite executives, with functional or industry expertise and
- senior leaders in consulting or private equity who have helped scale business technology transformations.

Consider Merck's board of directors...With four of 13 board members coming from a technology background, Merck's board has the highest technology representation of the top 20 life science companies we analyzed. Their board level technology experts hail from both large technology companies and venture capital firms alike, with expertise ranging from knowledge management to aeronautics to cybersecurity.

The board's deep understanding of technology strategy, emerging trends and the opportunities and risks associated with them, helped Merck quickly decide on capital allocations and a plan for their business reinvention. Their transformation includes new techniques to examine cells and proteins and how they interact, in addition to high-performance computing capability to analyze complex molecular processes and pathways. It also means involving more new and more diverse partners to execute an ambitious clinical agenda. "With the board's support, we could effectively prioritize, invest in, and scale about half a dozen AI use cases across the company while modernizing the technology that underpins its technology architecture and upskill our talent," Merck CEO Rob Davis told us in a recent interview.

2. Form and Empower a Formal Technology Committee

Once the right mix of tech-savvy members is assembled, a formal "technology committee of the board" with clear set of roles and responsibilities should be formed to ensure that technology remains high on the board's agenda. [While 65% of directors at the world's leading 40 life sciences companies we surveyed said they have committees focused on emerging technologies,[4] our research revealed that none have strictly defined "technology committees of the board." Instead, half of them have "science and technology" committees typically composed solely of functional experts such as academics and medical doctors.[5] What is needed is a technology committee with robust technology expertise, similar to the way that accounting and talent experts participate in audit and compensation committees.

To ensure a company stays ahead of the curve and safeguards itself from associated risks, we believe technology committees should be responsible for periodically reviewing and advising the full board and management on the company's strategic direction in the

context of maximizing the leveraging of technologies, especially intelligent technologies. They should identify and discuss significant emerging trends in technology, and opportunities in deploying them, and also discuss the type of investments required.

Like audit and compensation committees, technology committees should have codified tasks or regulated processes and standards, which underscore their collective accountability and their authority. A clear-cut delineation of oversights and responsibilities with measurable outcomes should also be created to permit the committee to operate with the ability to make a meaningful difference.

3. Conduct Continuous Training on Emerging Technologies

Finally, boards must periodically participate in deep training sessions on emerging technologies to meet their duties, which include discussing the leveraging of technologies, approving IT budgets and being aware of and looking to help mitigate technology-associated risks. Given the intertwining of business with technology the company should keep upskilling their boards to ensure that a sound baseline awareness of key technologies exists and keeps growing.

Nearly half (47%) of the board members we surveyed at life science companies said they need to pursue technology training sessions on an ongoing basis to be effective.[6] Continual coaching, simulation exercises and case studies around technology-related decisions not only improve technology knowledge, but also sensitize boards to view technology from the perspective of opportunity, in addition to the scrutinizing of risks. For example, one company's board became able to discuss and align on generative AI-related strategic bets and consider a company's readiness for change. After reading up on the basics of generative AI before the program, board members learned in classes how generative AI can create value and transform their enterprise, the three to five most important actions boards should take (including the watch-outs for accompanying risks), regulatory landscape and responsible AI principles. Armed with this knowledge, they could then understand and agree on their oversight role regarding generative AI. They could subsequently guide the discussion, and then review various real-life applications or demos

of generative AI that apply to their business. Additionally, the board could, in parallel, give sound advice to management on accompanying upgrades in mindsets, talent and culture, so that intelligent technologies would be leveraged to their fullest.

A Tech-Savvy Board

At a time when most C-Suite executives anticipate a faster rate of change and want to unlock the potentially exciting opportunities now available to them from rapidly evolving technologies like generative AI, embedding technology expertise within the boardroom is no longer a choice but a strategic imperative. Boards have a duty to ensure management teams remain at the vanguard of innovation by proactively guiding strategic decisions in intelligent technologies and safeguarding companies against associated risks. Those boards that embrace three key strategies—improving technology representation, forming technology committees, and conducting regular technology training— are the most likely to fulfill their obligations while cultivating an environment conducive to enabling companies to harness their full potential.

In conclusion: today's governance standards are even sharper in holding boards accountable for their collective performance, just like management is held accountable for their performance. More than ever before, the boards of today need to lean-in on what's happening in the business, while also fulfilling their oversight duties. Given that technology trends can now enable companies to become the winners in their own verticals, building up technology firepower inside the board has now become pivotal. Ever more demanding shareholders expect nothing less...

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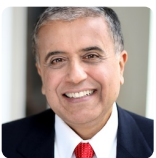
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