

Why Energy and Defense Companies Are Rethinking Board Composition.

And why this question is gaining relevance across more industries than you might expect.



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By Wendy Daines

Across sectors, technology shifts, geopolitical complexity, and evolving workforce needs are prompting executive teams to reexamine not just how they operate—but who’s helping guide the most consequential decisions. While this reassessment is especially urgent for capital-intensive industries like energy, defense, and industrial manufacturing, it’s a conversation increasingly resonating across the boardroom spectrum.

As investment in automation, AI, and large-scale transformation accelerates, boards that blend institutional knowledge with lived experience navigating modern operational complexity can serve as true

strategic partners. For energy and defense companies, where innovation must be balanced with resilience and oversight, that combination is fast becoming essential.

Technology advances, geopolitical shifts, and workforce constraints are spurring many energy, defense, and industrial companies to reassess not just their global operations, but also the governance structures steering critical decisions. A refreshed board—diverse in perspective and attuned to emerging risks and technologies—can make the difference between legacy preservation and market leadership.

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Long-tenured directors often bring precisely the kind of institutional knowledge and geopolitical perspective that companies in the energy and defense sectors rely on to steer through complexity. But as the pace of change accelerates, companies are also asking whether the expertise around the table reflects today’s operating and technological realities.

In a recent analysis of companies in these industries, the average board age was slightly above the national range and significantly fewer directors were current operators, compared to the national average. These figures suggest an opportunity to complement existing experience with additional perspectives that reflect today’s dynamic business environment.

As these sectors face mounting pressures to their supply chains, alongside labor constraints and geopolitical volatility, companies need governance that can provide more than institutional knowledge and sound business advice. Without directors who understand both the promise and complexity of emerging technologies, companies risk falling

behind at precisely the moment when the ability to adapt and lead through change matters most.

The Value of Lived Experience

Boards fortunate enough to have directors with first-hand experience riding similar waves of transformation will find the boardroom becomes a place to engage in high-value dialogue about the various options. These directors don't just "know tech"—they've made tough calls under real conditions. They understand the tradeoffs between capital efficiency, customer satisfaction, workforce impact, and long-term value creation. Their input enables management to navigate decisions like automation with insight that is both practical and forward-thinking.

After all, advanced technology is not a panacea. Though geospatial intelligence, AI-filtered insight, predictive maintenance solutions and other cutting-edge technologies are rapidly reshaping how things get done, not every product or process can be automated or digitized cost-effectively. The upfront investment, technical complexity, and organizational change involved require a steady hand and informed decision-making.

A board with directors who understand the realities of scaled transformation—from modular robotics to AI-enabled systems—can help management design a roadmap that balances ambition with operational feasibility. An ideal board for this sector will also understand the human element, as workforce strategies—reskilling, apprenticeships, and talent pipeline development—must evolve in parallel with technology adoption.

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Management teams sometimes view robust boards with caution: Will directors challenge every idea or need so much bringing along that they slow things down? But the right board doesn't signal a loss of autonomy. It signals the presence of seasoned partners who've built systems, led transformations, and seen around corners. It can be the ultimate support system.

Yes, an engaged board may ask more questions and seek more information before approving a new strategy, but that's a reassuring sign that the board is fulfilling its role. A board that brings together both recent operating experience and long-standing sector knowledge can offer management an unparalleled spectrum of insights—supporting decisions with a blend of fresh perspective and hard-earned wisdom. It's not a matter of new replacing old, but of combining experience types in service of stronger strategic thinking. When that balance is in place, the board becomes not a barrier to progress, but a strategic multiplier—helping management see through the lenses of oversight, hindsight, and foresight.

The Best Boards Bring Oversight, Hindsight & Foresight

As the pace and complexity of change accelerate, the value of the board lies in ensuring good governance, while also helping management think both broadly and specifically about what can be learned from past experiences and what the future may hold.

Oversight Ensures Transformational Efforts Align with Strategy

The board, of course, is charged with overseeing the company's strategy, risk management, finances, and all critical decisions; therefore, directors will naturally need to be well-informed about possible investments in new technologies or strategic plans. That said, board oversight doesn't mean

micromanagement of technology decisions. It means ensuring that technology transformation efforts (and their financing) are fully aligned with the broader strategy and that risk—whether cyber, operational, or reputational—is properly assessed. The board can also help management consider the impact on the workforce—will upskilling or reskilling be needed, for instance—and ensure management sets KPIs and timelines to measure the outcomes of transformative initiatives, including efficiency, productivity, quality, and cost savings.

By asking insightful questions and potentially challenging management's assumptions, experienced tech-savvy directors can help ensure that management adopts a promising strategy and tracks metrics that reflect true business performance, rather than those that merely appear favorable on paper.

Engaged board members who bring relevant expertise will help management to evaluate advanced technologies not as a silver bullet, but as part of a thoughtful strategic plan.

Hindsight Helps an Enterprise Avoid Past Mistakes

While past performance is not indicative of future results, historical insight often leads to better decisions. One reason boards seek talent with relatively recent industry experience and specific functional expertise is to ensure the group can draw upon substantial knowledge based in first-hand experience.

Board members who have experienced the adoption of other transformational technologies often bring pattern recognition that can help a company avoid repeating the mistakes others have made in the past. Directors who can identify why certain investments in robotics or AI failed to deliver ROI, or why offshoring decisions once made for cost advantage now pose resilience challenges. This experience-informed insight can help management avoid costly errors and might inspire novel initiatives designed to overcome known challenges.

Foresight Helps Management Anticipate the Future

Directors with deep industry or innovation experience also contribute context, having seen how economic, political, and technological forces converge over time. They help management look around corners, not just navigate what's in front of them. With shifts in trade, geopolitics, and the rapid pace of technological advances, this perspective is vital. Foresight is evident not just in individual expertise, but also in how boards engage, asking forward-looking questions and connecting dots across multiple landscapes.

A well-rounded board with recent technology and operations expertise can help an organization make the best decisions in fast-moving times by providing guidance around activities such as:

- Scenario planning for tariff volatility, supply chain disruptions, and technological evolution.
- The consideration of investments in modular and scalable automation solutions (like Robots-as-a-Service) that allow flexibility without overcommitting capital.
- Cross-functional innovation—examining how AI, data analytics, and automation might allow for new business models or competitive advantages
- The anticipation of policy and geopolitical shifts, considering how immigration reform, trade agreements, or domestic manufacturing incentives might affect long-term strategy

Foresight from the board helps management avoid short-term thinking and prepare for long-term competitiveness in an increasingly complex and tech-driven economy.

Conclusion

As the pace and complexity of change accelerates, the value of the board lies not just in governance, but in its ability to help management think more broadly, act more confidently, and prepare more wisely.

Periodic reflection on the alignment between boardroom expertise and the organization's evolving challenges can be a valuable exercise. That partnership is most powerful when grounded in real-world experience and shared strategic intent.

In times of accelerated technological and geopolitical change, boards may want to consider how best to combine the steady judgment of experienced directors with fresh perspectives that reflect emerging risks, technologies, and ways of operating.

A board that brings together both recent operating experience and long-standing sector knowledge can offer management an unparalleled spectrum of insights, supporting decisions with a blend of fresh perspective and hard-earned wisdom. It's not a matter of new replacing old, but of combining experience types in service of stronger strategic thinking.

Thoughtful steps—whether engaging outside advisors or gradually evolving board composition—can help ensure the board remains equipped to support strategic decisions with both confidence and relevance.

About the Author

Wendy Daines is Board Search Practice Leader at Boardspan, guiding boards of directors in identifying and appointing exceptional board members. She draws on deep expertise in governance, leadership advisory, and executive talent to ensure every board search aligns with the organization's strategic priorities and long-term success.



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