TECHNOLOGISTS ON CORPORATE BOARDS: RECRUITING AND POSITIONING CRITICAL BOARD TALENT

Written by Rochelle Campbell

Table of Contents

Technologists and **Boards**

Cybersecurity breaches and disruptive innovation are as pervasive in business as the air we breathe. Yet technology leadership roles have remained a second thought in the board space for the last 30 years despite the fact that their work has transformed the way boards operate. Technological expertise helps to shape and secure the backbone of the economy regardless of whether a company is tech-first, traditional agriculture, heavy industry, or a small retail business. Now more than ever it's time that corporate boards make room for and recruit these critical board roles.

In this paper, the term technologist will be used to refer to roles with titles such as: Chief Information Officer, Chief Security Officer, CISO, CTO, Chief Innovation Officer, Chief Data Officer, Chief Digital Officer, Chief Data and Analytics Officer, Chief Artificial Intelligence Officer, and CRO. These are dynamic roles, though they are relatively new in the corporate world. It's been fewer than 40 years since the advent and wide use of digital technology as part of corporate strategy. The first use of Chief Information Officer was in 1981, and other roles such as Chief Technology Officer and Chief Information and Security Officer originated in the mid to late 90s.

A technologist's career trajectory, background, and responsibilities can vary widely from company to company and year to year. However, through their often diverse and strategic skill sets, technologists can bring a host of relevant and supportive experiences to board deliberations in a dynamic and interconnected world.

This paper will address boards and the value of technologists from the ecosystem approach to governance, regulation, and business norms. The initial focus will be on public companies where diversity and the placement of technologists at the board level is highest, and second how pervasive the adoption is for many private businesses (such as ESOP, Coop, PE, VC, and family-owned) for public company board norms. Third, this paper will address the current board environment as it relates to technologists' availability and board placements, the value they can provide to a board, how they are recruited, and how they can best position themselves for board service and committee work. The last topic will cover networking, interviewing, and a board's role in interviewing and placing technologists.

> "Companies who do not recognize and embrace the need for a technologist with strong business acumen proceed at their own peril. Without in-depth expertise in all aspects of technology, Boards cannot fully understand the risks, and without understanding mitigation is impossible."
>
> Elaine Eisenman, Ph.D., Managing Director, Saeje Advisors, Chair, Board of Directors, Private Directors Association

> "As technology advances at an even more dizzying pace raising the board's technical quotient is more of an imperative than ever before."
>
> Nora Denzel, Lead Director and Chair of the Nominating and Corporate Governance Committee, Advanced Micro Devices (NASDAQ: AMD); Board Member, Gen Digital (NASDAQ: GEN) and National Association of Corporate Directors

The Current Environment

Almost every company uses some form of technology throughout the normal course of business, yet the proportion of boards that have technologists has not remained on par with the growth of business use of technology as a strategy, tool, or platform. The U.S. Chamber of Commerce found in a recent study that 93% of small businesses use technology, and a 2022 study by IDG found that 91% of all companies have adopted a digital-first business strategy.

Despite widespread adoption, significant discrepancies remain in digital-first strategy versus digital skills in the boardroom. A 2020 survey by the National Association of Corporate Directors (NACD) found that only 43% of board directors at S&P 500 companies and 38% of those in the Russell 3000 had technology backgrounds mentioned in their public disclosure. These numbers have increased from 34% and 33%, respectively, in 2018. Furthermore, many companies have declared that their board members have technology backgrounds without them having held deep technology roles and without technical know-how – a skill critical to ensuring a board can fulfill its fiduciary duties and oversight of strategy and risk in the boardroom.

A 2022 survey by Heidrick and Struggles found that in Fortune 500 boards, 17% of new board members had cybersecurity expertise, and 41% had what they deemed to be relevant digital or social media experience. This is a significant increase over their 2021 survey where only 8% had cybersecurity expertise, but this leaves many boards lacking. Fortune 500 companies have the most significant board diversity practices, with the highest percentages of overall board members cutting across gender and ethnicity. However, due to a myriad of factors, companies below the Fortune 500 tend to have less board level diversity overall as their respective rankings drop – which effects the inclusion of gender, ethnicity, and technical skills. When it comes to cybersecurity expertise specifically, the limited number of board members possessing this skill set becomes more alarming. A February 2023 piece by Forbes, noted,

"Only 51% of Fortune 100 companies have a director on their boards with relevant cybersecurity experience... companies in the Russell 3000 smaller than those in the Fortune 500: only 8% have cyber directors. There is a total shortage of 2,724 directors with cybersecurity expertise across all Russell 3000 companies."

The absence of technologists on boards has also contributed to numerous high-profile company, customer, and PR issues. One can look no further than the December 2022 Southwest Airlines meltdown. The company's COO, Andrew Watterson, testified on Capitol Hill in February 2023 shortly after the incident which effected 16,700 flights. He noted that Southwest had been riddled with technology problems for years, and shared that the company would be investing $1.3 billion in technology upgrades this year, adding that the figure marks a 25% increase from 2019. Southwest has notably lacked a technical CISO, CSO, CIO or CTO on its board at any point in time.

Target, which suffered an infamous data breach in 2013 that exposed personal data of 70 million customers, replaced several board members due to the incident. However, according to its current governance documents, Target still does not have a board member with a technical cybersecurity background and it has not instituted a standing cyber risk committee.

Juxtaposed to Target is a board like Zoom, which has a leading practice committee structure including a standing chartered cybersecurity committee led by an independent committee chair who is a former CDO/CIO and Global VP of Technology for heavily regulated industries. Zoom has yet to have a notable cybersecurity issue since April 2020.

The Current Environment

Regulation for Public Companies and Private Company Alignment

The lack of technologists on boards has become a larger issue, bringing attention by the SEC who in March 2022 proposed new rules on Cybersecurity Risk Management, Strategy, Governance, and Incident Disclosure by Public Companies. The proposed amendments were intended to enhance and standardize disclosures and had included the need for cybersecurity expertise at the board level. when opening the proposed rule change for public comment the SEC chair noted,

"Today, cybersecurity is an emerging risk with which public issuers increasingly must contend... A lot of issuers already provide cybersecurity disclosure to investors. I think companies and investors alike would benefit if this information were required in a consistent, comparable, and decision-useful manner... if adopted, it would strengthen investors' ability to evaluate public companies' cybersecurity practices and incident reporting."

On July 26, 2023, the SEC finalized the new rules, passing by a 3-2 vote along party lines, strengthening reporting requirements after a breach among other new reporting guidelines. However, the SEC opted to leave out the proposed requirement to disclose board members with cybersecurity expertise. Rather, they, "require registrants to describe the board of directors' oversight of risks from cybersecurity threats and management's role and expertise in assessing and managing material risks from cybersecurity threats."

Though the new rules are not as strongly worded as the proposed, and shift more responsibility to the executive team, general board governance still requires a board to foster the long-term success and safety of the enterprise by fulfilling their fiduciary duties to the company and its shareholders' interests.

The new guidance requires the board to explain oversight of such risks, arguably more effectively done if sitting board members are also technology leaders, and if the board already has a cybersecurity committee

in place. In 2023 Gartner predicted that 40% of boards will have a dedicated cybersecurity committee by 2025, like that of Zoom's.

Although not required, private companies are likely to eventually adopt, at least in part, portions of the regulatory requirements mentioned above. According to NACD, private company boards increasingly adopt committee structures typical of public company boards. An example of this is the audit committee, which now has an estimated over an 80% adoption rate among private companies.

Aligning private company governance with leading practices, such as those required of public companies, will ensure they are prepared for not only cyber breaches and technology failures but it will also increase their value, support access to capital, a more rapid IPO, due diligence, valuation, loans, and other financial needs.

"It is critical that all board members have knowledge of the risks and opportunities that technology provides to increase value. Since strategy is an essential component of a board's responsibilities, it is imperative to understand your technology strategy and ensure it is aligned with the overall strategy of the organization."

Mary Beth Vitale, Chair of Nom/Gov, Luna Innovations, Inc., (LUNA: Nasdaq); Chair of Pareteum, Inc.; and Chair of the Risk and Technology committee, GEHA, Inc.

The **Value** of Technologists on Boards

Aside from the regulatory requirements and disclosures for public companies, board members with expertise in technology and cybersecurity add significant direct value to organizations and board deliberations. They provide technical expertise; strategic focus; the ability to understand and set risk appetite; and the ability to understand, estimate, and communicate volumes of detailed technical information.

Many technologists have spent much of their careers deciphering and communicating complex information to a variety of leaders and team members and distilling ideas, projects, and issues down to their most simple terms for easy consumption.

What skill sets are valuable?

Technologists can bring a deep understanding of innovation's pitfalls and opportunities at the micro, organizational, and systems levels. They can provide significant expertise in the regulatory and compliance areas, both nationally and internationally, such as CCPA in California and GDPR throughout Europe.

> "A director with experience in IT and IS standards such as NIST, ITIL, and ISO coupled with knowledge of regulatory requirements, systems of controls, and monitoring/testing, positions the board for robust dialog of IT and Cyber Risk management."
>
> Gabrielle Vitale (retired) Chief Compliance and Ethics Officer, Chief Information Security Officer, and Chief Operational Risk Officer, American Express, and member of the National Cybersecurity Governance committee, Private Directors Association

Technologists create data governance, develop organizational data strategy, and have a deep understanding of data and digital systems. They can lead board conversations, explain the applications of innovative and disruptive technologies such as ChatGPT (OpenAI), predictive AI, and BARD (Google's conversational AI), and educate other members on how emerging technologies may change the way companies do business.This is especially true with the rapid advancement of AI and its unparalleled potential to drive transformative changes to today's companies, revolutionizing operations, customer engagement, and decision-making processes. To stay competitive, boards need technologists who can evaluate the potential impact of AI on their business and guide them in harnessing its potential to drive innovation and maintain a strategic lead in the market.

"AI represents the most significant disruption since the microchip, fundamentally reshaping industries and transforming the way we live and work. Its rapid evolution, progressing at a pace reminiscent of Moore's Law, is driving continuous innovation and expanding the boundaries of what we previously thought possible. Embracing AI is no longer optional but essential for businesses and societies that aim to thrive in this new era of accelerated growth and technological advancement."

Marcus Daley, CTO for 3E and prior CTO Emeritus for S&P Global

When it comes to smaller companies, board technologists can facilitate code audits, mentor and coach executive technologists (including helping them understand how to prepare for and present during board meetings), and help guide the course of the company. They can also ensure technology

The **Value** of Technologists on Boards

3

executives are asked relevant detailed questions and lead executive session discussions on technology and strategy topics.

Many technology leaders have had significant expertise across organizational strategy, innovation, business growth, sales, leadership development, and risk appetite, and they maintain a breadth and depth of knowledge often across multiple industries.

"I find it hard to overstate the strategic value of technologists on a board, in most markets in today's dynamic ecosystem. The role of a technologist on a board is more than simply as a translator of insider jargon: they are critical because they can help craft estimations of direction and required adaptations from emerging and overlapping new technologies. They can translate the macro effects of technology choices and the enormous strategic impacts on every aspect of the company."

Josh Klein, Advisor, Author, and CEO of Indigometrics, Member, BP Advisory Board

At the committee level, technologists can lead the work of cybersecurity, innovation, and technology committees. Beyond the obvious, they are an excellent addition to other standing or ad hoc committees depending on the industry and company size. Technologists can help review and evaluate M&A transactions and support due diligence through multiple lenses including assessing the quality of the potential acquisition's technology systems and the potential difficulty of integrating and securing systems, and evaluations of Company's IP and talent. If there is not a standing Cybersecurity committee, they can support risk or audit addressing their roles in cyber risk and technology oversight.

Technologists can help monitor whistleblower hotlines and ensure accurate cybersecurity evaluations, responses, and reporting on cyber risk issues and opportunities. Through their experience as business leaders, technologists add value to nominating and compensation committees by interviewing and adding additional technology-focused board members or compensating and retaining executive tech talent, particularly within tech-focused companies.

Technologists' **Pathway** to the Board

4

While the value of a technologist may be clear to some, discerning, understanding, and evaluating those skills are not as clear to leaders and directors who have not held technology roles. Compounding the absence of technologists on boards is the fact that there is often a non-technical individual responsible for sourcing, interviewing, and recruiting technologists for board roles. This gap between technical knowledge and those recruiting requires that technology-focused aspiring board members share both their technical expertise and their general leadership value with boards in simple business-oriented language, in both written and verbal formats.

A technologist aspiring to a board seat can begin the process by understanding and defining their brand, updating or writing a board-focused bio and resume, and updating their LinkedIn profile with board-level, oversight, and leadership language. These documents should include industry and company information, and positive, tangible, and business-oriented outcomes. Acronyms should not be included unless they are common knowledge across industries and functional roles, and even then, only sparingly.

Beyond general technical skills and experience, technologists should take stock of their personal accomplishments, share diverse functional roles and varied organizational and industry experience, and positive outcomes. They should demonstrate or obtain experience not just within IT/Technology roles but far beyond, and consider experience in strategy and other organization-wide roles such as sales, P&L, finance, transactions, leadership, HR, and national and international issues and implications.

Soft skills are equally important. A technologist's goal is to avoid or overcome the traditional social stereotypes that can come with any role. Technologists need to show that they can communicate well and openly, are thoughtful, and can mentor and lead others to success. They need to demonstrate that they are as preoccupied with "people" strategy as they are with technical strategy, and that they can communicate complex ideas to a board, leading to positive outcomes.

While the details referenced above matter, delivery is even more important. Language should be relevant and delineate value. This will ensure that the reader, whether a junior recruiter, research assistant, or board leader (none of whom may have both technical and

> "A technologist with strong soft skills can effectively communicate a technology infused vision, bridging the gap between technology and business objectives. Ultimately, a technologist who masters soft skills holds the key to transforming an organization, unlocking the potential of its human capital and elevating it to new heights of success."
>
> Marcus Daley, CTO for 3E and prior CTO Emeritus for S&P Global

governance expertise) can easily understand the technologist's value.

Having and communicating prior board experience can also be helpful. Nonprofit or private board experience, regardless of size, can help build the muscles for governance language and demonstrate preparedness for board deliberations, oversight, and small group dynamics – all of which are necessary for successful boardroom discussions. Technologists will be well served by working toward a role on a finance, budget, or fundraising committees where more traditional governance practices tend to be active and relevant, particularly when joining a nonprofit board.

Previous or current board roles, either for-profit or nonprofit, should be listed at the top of the resume, biography, and LinkedIn profile, with relevant committee experience or outcomes, such as CEO succession or supporting company transactions. Once clear on paper, the next step is to network that information to relevant parties in and around the board ecosystem.

Networking and Board Interviewing; Value in Conversation

5

While there is very little consistent data on the number of board members recruited through networking vs. outside recruiters, anecdotally, board placements from outside recruiters who find and vet candidates range from 15 – 20% of all placements. The remaining placements (anywhere between 80 – 85%) occur through a vetting process where boards present candidates networked into a board by a board member – often through secondary or tertiary relationships. These candidates typically receive additional vetting from in-house council or a CHRO. In other circumstances, the outside recruiter is presented with a list of candidates from the board and provides additional vetting and assessments. The most effective way for an aspiring board member to obtain a board role is by sharing their board value via networking.

Networking can take several forms. When networking, casting a net both wide and deep is often the most successful route. Technologists should consider how to connect or reconnect with current and former colleagues, share board value with in-house colleagues, current CEOs, and boards to which they currently report or to which they have reported in the past. It is also helpful to meet two to three new people every week with whom they can share their unique board-level value.

Technologists should seek to join board and executive-level networking groups, ask questions, join committees, add value, and make connections. Speaking engagements and publications are an opportunity to demonstrate expertise and governance knowledge at the same time. Use current news headlines to discuss thoughtful topics and demonstrate a breadth of technical skills and board-level value. Listen to others, ask questions, and tell memorable stories; be both interested and interesting.

Focusing on this path to a board seat can take 2-4 years of active work before it pays off via obtaining a paid board role. Technologists should approach networking as if it were a strategic plan to ensure thoughtful, clear, and consistent action steps. Get buy-in from champions and follow-up regularly with them to share career and board journey milestones and next steps.

When invited for a board interview, technologists must understand the company, have a high-level view of the company's position within the industry and be confident in the value they may bring to a given board.

Networking and Board Interviewing; Value in Conversation

Technologists should be prepared to provide a board-ready resume and bio in case it is requested. It is important to always speak directly to the question being asked, and not make assumptions about what the interviewers want to hear. Boards will have differing levels of technological understanding. When interviewing technologists, they may ask a vague or detailed question. Questions may sound specific and detailed with company language, but the board may not understand alternative technology or jargon. It is impossible to know exactly what an interviewer is thinking or their knowledgebase, so never assume any information is table-stakes. It is important to balance overall strategic answers with details and direct experience. It is almost always best to start at 30,000-foot-level, not making assumptions, and then move into detailed experience, all the while checking in with the interviewers to ensure they are receiving the most relevant information.

"When interviewing for a technology-focused board role, stories not only demonstrate technical expertise, but also illustrate one's ability to solve problems, adapt to change, and connect on a human level. By sharing stories, candidates bring to life their achievements and potential, capturing the essence of their leadership and vision, ultimately capturing the hearts and minds of decision-makers."

Marcus Daley, CTO for 3E and prior CTO Emeritus for S&P Global

Always practice board interviewing skills. Boards need both high-level information and deep dives that use oversight and leadership language. Practicing questions with non-technologists can help refine answers for clarity and brevity while highlighting areas that may be too technical. Again, it is always important to be patient, persistent, and get support along the journey.

Adding **Value**
While Serving

After joining a board, it is critical that the technologist remembers that a board's role is to fulfill its fiduciary duty on behalf of the company and its shareholder's interests through oversight and strategy, and in accordance with all relevant laws and regulations.

Education

A technologist seeking a board role must ensure that they understand and are aware of leading practice board roles and responsibilities and fiduciary duties. Finding a membership or board education program that provides education on public and private board best practices will ensure that they are sharing value and supporting the board and company. Technologists can acquire board education through programs from organizations like Private Directors Association, Harvard, Stanford, and NACD.

A technologist should possess a consistent and up-to-date understanding of technical trends, business news, industry trends, and proposed rules and regulations. They should learn board and oversight vocabulary by reading daily news pieces from national news organizations like the Wall Street Journal, New York Times, and Washington Post, and follow board-related trends from national accounting firms and leading consultancies.

Onboarding

All new board members should seek out a proper onboarding experience which includes meeting individually, if possible, with board members and leading executives including executive technologists. New members should also acquire an understanding of the company's structure, business model, executives' skills, technology budget, current and proposed strategy, and company process to provide background for boardroom deliberations.

"Onboarding is different than orientation which is usually conducted prior to your first board meeting. Onboarding is a yearlong formal and informal program that educates you about the company's business, its risks and opportunities and culture. This is critical so you can add value, advice and counsel which is why you were selected to be on the board."

Mary Beth Vitale, Chair of Nom/Gov, Luna Innovations, Inc., (LUNA: Nasdaq); chair of Pareteum, Inc.; and Chair of the Risk and Technology committee, GEHA, Inc.

New members should use this experience to develop positive relationships with executives and board members and demonstrate value more quickly. They should also ask good questions, remember that a board member's role is oversight, not management, and take care not to task executives. Rather, it's important for new members to understand the business model, roles, and responsibilities to ensure they can ask thoughtful questions during boardroom presentations and discussions.

Recruiting Technologists for Board Roles

A board that is looking to recruit a board-level technologist should consider hiring a board-level recruiter who understands the intersections between governance, leadership, and adding diverse skills to a board. Before or while engaging a recruiter, the board should review its skillset matrix not just for skills, ethnicity, age, and gender, but also for functional roles, technical and technology roles, geography, and industry. It's important that boards add short- and long-term strategy, understand any gaps, and ensure the recruiter can recruit against the skills required.

A board that is adding technology experience for the first time should ensure that it has the right level of support from its recruiter. The board must be certain that the recruiter can help identify the technical, broad leadership, and problem-solving skills that would be helpful for the board and that they have the track record to help interview for those skills. Some boards will use a technology-focused recruiter, and some will consult with a technologist prior to board interviews to ensure they have the right questions and understanding. Some boards allow their executive technologist to review the skills of finalists to help select the most appropriate for the company and the strategy.

When conducting the interview, the board should draw out the candidate's ability to understand and apply information to the general themes of the company's strategy and establish the candidate's ability to help clearly ask questions of the executive, condense and disseminate information to the board, and lead the company to the right answer.

Board members can also improve their board-level technology skills to better support the board, board interviews, and other board technologists by up-skilling their own credentials with a board-level certification such as the QTE from Digital Directors Network or PDA's Cybersecurity Governance Certificate.

"Governance is more effective when there are voices around the table that understand the underlying technology that enables the business to run. Not every director needs a technology degree, but every board needs to have a few members that are business-oriented technologists"

Nora Denzel, Lead Director and Chair of the Nominating and Corporate Governance Committee, Advanced Micro Devices (NASDAQ: AMD); Board Member, Gen Digital (NASDAQ: GEN) and National Association of Corporate Directors

Tying it **All Together**

Regardless of the SEC's new rules, the need for technologists on boards is increasing and will continue to increase as long as people find new uses for technology. Moore's law, originally established in 1965, has held true through today, ensuring that technology and its uses are multiplying exponentially year-after-year.

"Innovation is the lifeblood of every company because every company is essentially a technology company. All technology is converging and that outside-in view, at the board level, brings new insights and strategy and drives growth, squarely in line with the board's fiduciary duties."

Sandy Carter, COO, Unstoppable Domains, Board Member, Altair (Nasdaq : ALTR), Chair Of The Board, Girls in Tech, Inc., Founder, Unstoppable Women of Web3, Blockchain and AI

Both technologists seeking board seats and boards who need to add technologists should take advantage of the changing regulatory, innovative, and economic environments, immediately. One way to do this is to begin the board education and recruitment process for talented technologists, before the top-tier candidates are lost to boards who are early adopters.

Boards and executive teams should seek to avoid the problems faced by companies like Southwest, which chose to ignore its technological shortfalls until it melted down in spectacular fashion. They can also learn from the demise of companies such as Kodak and Encyclopedia Britannica, brands who, in their time, were industry leaders, and whose boards and leadership teams repeatedly refused to realize the impact of new technologies, rapid shifts in the marketplace, and changing consumer needs.

If those companies had the foresight to add innovative and diverse skills addressing the new market to their boards, they might still be industry leaders now. Where do you want your board to be in the next transformative decade?

The Author

Rochelle Campbell

CEO and Managing Member of Leadership Elevated

Rochelle Campbell is the CEO and Managing Member of Leadership Elevated, a board recruitment and governance consultancy. She has had a successful career supporting boards and executives, across industries, customizing, developing, and delivering a suite of board recruitment services including placement, governance education, evaluations and more. She has placed directors on boards from the F500 to large family-owned, private, and nonprofit organizations, across industries, while leading the board recruitment industry with an 85% diverse candidate placement rate.

Rochelle speaks and writes on board composition, board diversity, governance and board recruitment-related topics. She has advised thousands of board directors and supported over 700 military flag and general officers (1-4 stars).

She is on the board of the Private Directors Association, DC Chapter, serving as program chair, and on the PDA National Cybersecurity Committee, and as nominating and governance chair on Civics and Service International.

Editor
Callie Le Renard PhD

Contributors
Robert Barr
Doug Neal