



Five Traits of Tech-Driven CEOs

Ravi Chanmugam, Michael Lyman, and Paul Daugherty

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When the chief executive of a global retailer recently faced mounting pressure from online rivals, he chose an unconventional response. Instead of relying on the playbook that once powered the company's growth, he immersed himself in emerging technologies. He sought advice from outside experts, hired executives with digital expertise, and built new technology partnerships.

That personal reinvention set the stage for a corporate one. The CEO transformed the retailer into a digital-first competitor by turning stores into logistics hubs for online orders, embedding data into customer interactions, and launching a technology-driven advertising platform.

The retail CEO's experience reflects a larger shift in corporate leadership: the rise of CEOs who pair their business acumen with technological fluency to create strategic advantage. Whether companies will disrupt or get disrupted increasingly depends on whether their leaders can harness technology, especially in the age of AI. Today, only 5.9% of CEOs at the world's 2,660 largest companies have ever worked in tech, and just 3.2% have held technical roles, according to our research.¹ Even so, we increasingly see in our research and advisory work that experience isn't destiny. More leaders are now cultivating the knowledge to make bold bets, build stakeholder conviction, and push their organizations into new arenas of growth.

This new class of tech-driven CEOs treats technology prowess as a core currency of strategic advantage. They don't dabble with chatbots or dashboards on the side. They study how advanced systems that combine technologies ranging from AI agents to drones and robots can redefine industries. And rather than leaving those high-level strategy decisions to a CIO or CTO, they develop the expertise to steer technology-driven transformations themselves.

What makes this shift possible is not access to tools — those are everywhere. It's mindset. Technologies are advancing fast and becoming more affordable, lowering the barriers for incumbents across industries. The companies that are pulling ahead are those whose CEOs see technology not as a cost center but as a growth engine and have the confidence to reimagine what their companies can become by applying it across customers, products, channels, and data.

We have closely examined the rise of such leaders. Drawing on thousands of client engagements and extensive research, we have identified five qualities that set technology-driven CEOs apart. Through real-world examples, let's explore how these traits enable CEOs to push past incremental gains and pursue reinvention at scale. Let's also consider the five related questions every executive should ask themselves to measure — and strengthen — their readiness for this new era.

Qualities of Successful Tech-Driven Execs

1. They embrace technology personally.

Question to ask: Are you using evolving technologies on a daily basis to learn and improve the way you personally work?

The first step to becoming a technology-driven CEO is to recognize that your company's success in this new world starts with you. As emerging technologies like AI reshape the competitive landscape, CEOs must go beyond a passing familiarity with them. Understanding the limitations of technologies like large language models, digital twins, and robotics isn't just useful — it's essential. Technology is no longer a support function. It's a foundational element of strategy, operations, and growth.

To become tech-driven, a CEO must invest time in personally learning how these systems operate and how they can be applied to decipher core business opportu-

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nities and challenges. Leaders who understand prompt engineering, who grasp how data structures influence model performance, and who are fluent in the strategic risks and possibilities of technologies are far better positioned to make faster, sharper decisions. They also carry far more credibility as champions of change. As technologies continue to rapidly evolve, CEOs must lead as active learners — setting the pace for the C-suite and making clear that continuous learning is a leadership responsibility, not a task to delegate.

The most powerful cultural change happens when the person at the top is seen actively learning and experimenting. To shift a company to rapidly experimenting with emerging technology, CEOs need to lead a culture that asks, “Why can’t we use technology to break through a barrier that we didn’t think was possible before?”

These CEOs personally and professionally invest time in mastering disruptive business models, innovation, technology, data, and ecosystems. They set visions of becoming one of the world’s leaders in technologies and devise strategies to reach that goal. Some, like Vicki Brady, CEO of telecom giant Telstra, devote entire team offsites (not just a session or two) to learning how to apply new technologies to their businesses.

Technology becomes everyone’s job when the CEO leads by doing. This shift sparks organizational energy: People feel permission to try, test, fail, and adapt. The result is a company that moves from using tech for cautious optimization to reinventing the fundamentals. In today’s environment, that cultural muscle is the ultimate differentiator.

Satya Nadella’s transformation of Microsoft offers another masterclass in cultural transformation. When he became CEO, Microsoft was losing ground in cloud and consumer tech. Nadella changed the culture from “know it all” to “learn it all.” He pushed leaders to question assumptions and move faster. He made bold calls — retiring successful products, reshaping teams, and moving aside executives who resisted change. Nadella’s leadership wasn’t just strategic — it was cultural. He built a learning engine that could keep pace with a fast-changing world.

This cultural shift doesn’t require a tech pedigree. It requires belief. CEOs must believe that their company’s future depends on learning faster than the competition. They must model that behavior themselves — reading widely, experimenting with tools, and staying close to the front lines. The most successful reinventions don’t begin with a new product. They begin with a new way of thinking, reinforced every day by the actions of the CEO.

2. They reinvent business models with bold technology bets.

Question to ask: What are your top three strategic technology bets?

Most CEOs today push their teams to harness technology to improve operations. Yet technology-driven CEOs do something more radical: They use technology as a catalyst for rethinking how businesses create and distribute value. For these CEOs, the opportunity is not merely to digitize the old model; it’s to reimagine the model entirely. CEOs must stop viewing technology as a tactical tool and start treating it as the foundation for a new strategic architecture.

This means spending time where it matters most. The CEO’s focus should be on the transformative bets — the breakthroughs that reshape markets, models, and enterprise direction. Table-stakes applications still matter, but they can and should be delegated to the team. What cannot be delegated is the responsibility to envision, commit to, and personally shape the long-term strategic potential of technology.

Sanofi CEO Paul Hudson’s leadership drove the development of a proprietary platform that integrates AI across the organization, from the early days of drug discovery and development to manufacturing and supply. In doing so, Hudson repositioned Sanofi as a data-driven innovation platform. The impact on the company’s scientific model has, in turn, accelerated development timelines and increased the probability of success for new therapies. Hudson won strong buy-in from executive leadership with a commitment to end-to-end inte-

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gration and a recognition that the new insights and resource reallocation enabled by AI can be game-changing.

Such CEOs demonstrate a willingness to use technology to revisit first principles. They ask, "If we were starting from scratch, what would this business look like in a technology-native world?" The answers lead them to redesign core systems, rewrite organizational logic, and create new engines of growth.

3. They treat data as a strategic differentiator.

Question to ask: Can you identify your organization's truly strategic data — and the steps you're taking to accelerate its value?

CEOs have traditionally viewed data as another input for decision-making. That view no longer suffices. Data has become one of the most powerful strategic assets a company possesses. It can unlock entirely new products, services, and revenue models. But to capture that value, the CEO must own the vision. Data strategy must live in the C-suite — not buried under layers of siloed infrastructure or delegated to a chief data officer who lacks sponsorship.

Some CEOs now act as de facto chief data officers. They understand how to combine structured, unstructured, synthetic, and external data in service of reinvention. They understand the legal, regulatory, ethical, and political considerations around data — and how to navigate them. More importantly, these CEOs view data not as an IT issue but as the raw material of value creation and sustainable differentiation. As CEO, they can accelerate the breaking down of silos and investment in enterprisewide data platforms.

Since only the CEO holds the authority to cut across functions and reset incentives, they also need to break through the organizational inertia that traps data in silos. Without that top-level intervention, data strategies can stall — fragmented by turf battles and misaligned priorities.

By personally championing a unified data strategy, CEOs force alignment. They accelerate investment in enterprisewide platforms. They ensure that teams share, govern, and activate data with the speed and trust required to scale insight and innovation. In doing so, they lay the digital foundation for agility, automation, and growth.

Take Onur Genç, CEO of Banco Bilbao Vizcaya Argentaria (BBVA). He didn't just digitize banking at the Spanish banking powerhouse — he reimaged it. Genç reduced customer onboarding from days to minutes by fusing external and internal data. BBVA has doubled its digital sales in the past four years, and today, 70% of its sales are digital.

4. They become tech talent magnets.

Question to ask: What is your personal role in hiring and retaining top technology talent?

Technology talent is the new kingmaker: Companies that attract the best engineers, data scientists, AI specialists, and executives who are able to create disruptive value with technology will win. Yet this talent won't be inspired by incrementalism or being buried in the org chart. They'll want to work on meaningful problems with real impact alongside leaders who value their expertise. That's why today's CEOs must become talent magnets and personally engage in recruiting, retaining, and empowering top tech talent.

This means that CEOs can no longer outsource the recruitment of top-tier technology talent to the CIO, chief HR officer, or layers beneath them. In a world increasingly shaped by digital disruption, attracting senior tech leaders demands direct, sustained engagement from the chief executive. At least once a month, CEOs should meet with high-profile technology executives from outside their company, whether or not a role is immediately available. This sets the stage for CEOs to engage with and recruit top talent who can be difference makers.

These conversations are strategic, not transactional. During such discussions, the CEO should personally articulate a compelling vision for where the industry is headed and how a technologist from a high-performing environment can help reinvent a business — either as a member of senior management or the board.

Without a tech-savvy leadership team and board, a CEO will struggle to gain support for bold, technology-driven bets. That's because strategic reinvention requires more than vision; it demands allies who understand the stakes, the tools, and the pace of change. And once the right talent has been onboarded, the CEO's involvement must deepen — with regular, biweekly check-ins to ensure that integration is seamless and that the executive can drive impact from Day 1.

Next, CEOs need to match the technology prowess at the top with coherent governance. Avoid assigning accountability to a single role without clarifying how the rest of the C-suite will contribute. In the absence of shared roles, clear mandates, and disciplined coordination, momentum stalls.

The global retailer CEO mentioned earlier illustrates this hands-on approach to both talent and governance. He brought in a new generation of technology leaders to reinvent the company's digital strategy. Moreover, he didn't just hire those people — he empowered them. He restructured operations, transformed the corporate campus culture, and built a technology environment capable of attracting top-tier talent. By positioning senior technology leaders at the heart of decision-making, he ensured that technology wouldn't be bolted on. Instead, technology became the engine of growth for the company.

It's also true that advanced technologies are changing the performance frontier. CEOs who understand this are not merely adopting tools. They're also reshaping how work gets done. Whether it's through intelligent bots or next-gen robotics, these CEOs are using automation to both reduce costs and enhance enterprise capabilities. They must understand where technology creates leverage — from the C-suite to a front line that's

increasingly reliant on both humans and machines. These leaders inspire people to want to work in that technology-driven future rather than resist it, by directly shaping what the future will be.

In one pharmaceutical company, for example, a robot now sits in the room where clinical-trial decisions are made. It doesn't vote, but it informs. By ingesting vast volumes of scientific literature and internal data, the robot surfaces insights that would be impossible for humans alone. The result: better decisions, faster. And it was all made possible because the company's CEO made a bold decision to embed the bot into the heart of business R&D.

In the insurance industry, Peter Zaffino, chairman and CEO at AIG, followed a similar path. He didn't automate underwriting at the insurance heavyweight — he supercharged it. Zaffino made it clear that underwriters were core to the business and then surrounded them with cutting-edge data tools. The result was employee empowerment, not displacement. This blend of human judgment and machine intelligence is possible only when CEOs make tech talent a visible priority and demonstrate innovative behaviors themselves.

More broadly, leading companies invest in AI-driven systems that combine human judgment with machine speed. They create new workflows, retrain staff members, and align incentives. Rather than replacing people, they augment them. CEOs who grasp this nuance will lead the way.

5. They engage and elevate top tech partnerships.

Question to ask: Do you have the same level of personal relationship with your top tech partners as you do with your top customers?

No company can innovate in isolation. The most successful CEOs look beyond their four walls and regularly engage with a broader technology ecosystem. They form partnerships with tech giants and technology services companies, invest in startups, and acquire cutting-

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edge capabilities. They understand when to build, when to buy, and when to collaborate, and they make these decisions with precision.

CEOs must engage weekly with ecosystem partners and potential tech acquisitions. These meetings are essential — not just to evaluate deals but to shape joint visions, innovate at the edges, and unlock go-to-market advantages. Leading means being hands-on with external collaborators: codeveloping solutions, co-investing, aligning road maps, and keeping partners close as priorities shift. CEOs who are personally involved earn trust, accelerate execution, and position their companies at the center of the most important innovation networks.

Nicolas Hieronimus, CEO of L'Oréal, offers a striking example. He partnered with Nvidia and Microsoft to create a beauty tech ecosystem that fuses technology with cosmetic science. Through this partnership, L'Oréal launched AI-powered shopping tools that personalize beauty experiences for customers in real time. Hieronimus didn't try to build everything in-house. He orchestrated an ecosystem, blending internal strengths with external innovations.

Roland Busch, president and CEO of Siemens, took a similar path. He expanded a partnership with Nvidia, connecting the chip maker's accelerated computing with the Siemens Xcelerator platform. This ecosystem provides Siemens with the core capabilities to design, run, and improve technology-enhanced product design and factory simulation.

These executives know that building competitive advantage in today's economy means managing ecosystems as well as assets. The CEO's role is to both lead the enterprise and weave it into the networks where the future is being made.

Personal Sponsors of Transformation

We have entered the age of the tech-driven CEO, where mastery of AI, data, and automation is no longer optional but central to enduring leadership. The CEOs who will thrive are those who reinvent their companies by reinventing themselves. They must also become personal sponsors of transformation — mastering technology, championing data, attracting talent, and leading ecosystems.

This shift is underway. BBVA grew to 50 million digital users because its CEO personally understood and applied technology well enough to make bold, tech-powered bets. Leading companies today do not simply digitize existing workflows. They redefine what their industries could be — starting at the very top.

CEOs will be increasingly defined by their command of technology and their courage to use it. Reinvention isn't a function. It's a mindset. And in a world of fast-moving disruption, reinvention is the CEO's most important job.

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1. Accenture Research has tracked biographies for Global 3000 company executives since 2023. For this study, we analyzed a sample of 2,660 CEOs from Global 3000 companies to assess the prevalence of tech prowess in top leadership. We tested three distinct indicators: experience at a tech company, deep expertise in specific technology domains (such as AI or cloud computing), and hands-on experience in a technical role — even within non-tech companies. For each of the three indicators, we created a proprietary list of companies, technology keywords, and tech titles in consultation with senior research and consulting leaders.

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