



Leading the charge on AI

Are you considering naming a chief artificial intelligence officer (CAIO) to spearhead your AI transformation? If so, you are not alone. One company in ten has already done so, almost half say they may soon, and all federal agencies must do so this year. If your business is likely to be affected by AI in the next three years, your chief executive officer (CEO) and board need to address AI leadership soon—and make a decision.

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Introduction



Game-changing generative AI (GenAI) technology is forcing many companies to rethink how they do business. Now, as they move from trials to widespread adoption, ensuring effective leadership of the AI transformation will become more urgent. Appointing a CAIO to lead the charge is a compelling option to consider.

To manage their AI transformation, a growing number of companies have created a new C-suite position—the CAIO. Some 11 percent of medium- to large-sized companies have already appointed a CAIO or equivalent role, according to a survey by Foundry.¹ This includes Morgan Stanley, Intel, Dell, SAP, and Levi’s. Eight months ago, KPMG LLP joined this group by appointing our new vice chair of AI and Digital Innovation, a C-suite executive who acts in a CAIO capacity.²

We expect this trend to accelerate this year. In our recent quarterly GenAI survey of US companies with more than \$1 billion in revenue, 45 percent have already, or are planning to, hire new leadership to oversee AI in the next 12 months.³ And the Biden administration is now requiring all US government agencies to appoint a CAIO “to make sure that AI is used responsibly,” according to Vice President Kamala Harris.⁴

If you believe that AI will be a key driver for your company’s success in the next three years, appointing a CAIO to help lead the charge is an option that your CEO and board should

consider. A deliberate focus on AI from the top now may generate lasting benefits. The existing leadership could pilot the effort, but we believe successfully integrating AI across the organization is a full-time job. In this paper, we discuss what we can learn from the early pioneers, how to tailor the role for your needs, and in part based on our own experience, how to set your new CAIO up for success.

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¹ Fabio Moiola and Till Roga, “The rise of the chief artificial intelligence officer,” Spencer Stuart, February 2024

² “[KPMG Establishes New AI and Digital Innovation Group](#),” October 1, 2023

³ “[KPMG GenAI Study: the path to sustainable returns](#),” KPMG LLP, March 22, 2024

⁴ Emilia David, “Every US federal agency must hire a chief AI officer,” The Verge; and “Memorandum for the Heads of Executive Departments and Agencies: Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence,” Office of Management and Budget, March 28, 2024

Meet the pioneers

The initial cohort of CAIOs come from diverse career and professional backgrounds. Intel’s Gila Kamhi was previously a principal engineer, while Dell’s Mei May Soo’s experience was in finance, accounting, and procurement.⁵ The Justice department hired Jonathan Mayer, a Princeton computer science professor who also has a law degree.⁶ KPMG appointed Stephen Chase, who previously led our Consulting business, advising clients on enterprise, technology-driven transformations. In many of these early cases, the CAIO is a change-maker recruited from within the firm.

“Establishing our Trusted AI policy put ethical and compliance guardrails in place that allowed us to move fast, safely, and responsibly.”

Stephen Chase, Vice Chair, AI and Digital Innovation, KPMG LLP

⁵ Amber Jackson, “Top 10 Chief AI Officers,” AI Magazine, July 19, 2023

⁶ “Attorney General Merrick B. Garland Designates Jonathan Mayer to Serve as the Justice Department’s First Chief Science and Technology Advisor and Chief AI Officer,” US Department of Justice, February 22, 2024

Many of the CAIO pioneers share similar responsibilities that include:

Shaping vision and strategy

on how to use AI technology to achieve corporate objectives, tailored to the unique strengths/challenges, starting position, and culture of the company. This includes defining how this impacts products and services and forging partnerships with key players in the external AI ecosystem, e.g., providers of large language models such as ChatGPT.

Establishing a trusted AI framework

, including policies and procedures for ethical, sustainable, and responsible use, ensuring adherence to ethical guidelines and risk protocols, compliance with the evolving regulatory environment, and preventing cyber-related risks.

Integrating AI into the portfolio of offerings

, enabling more effective delivery of current products and services as well as improving the customer experience and quality of services. AI can also add new differentiating features and functionalities to products and services.

Enabling and accelerating internal adoption

by rapidly deploying GenAI tools and proofs of concept, launching a comprehensive change-management and communications program, and providing practical examples and updates on what is working to deliver value across the organization.

Leading the investment and tracking value

all the way to the income statement. Placing value—both revenue growth and cost savings—at the center of the AI program and mission will ensure that efforts are aligned to impact and the right initiatives will be prioritized. Measuring results and sharing success stories create momentum and empower adoption.

Leading an AI movement within the organization

by raising awareness, assessing and planning for the workforce shape and skills of the future, identifying talent gaps and required changes in key roles, developing robust learning and development programs to upskill employees, and advocating structural and culture changes.

Key drivers of change

We see three different types of companies entering the AI space.

There are those who are transforming themselves into AI companies that develop and sell AI products and services. A second group is rolling out AI across their enterprise to transform how they operate and do business, and to move faster to seize new opportunities. And a third group is looking to AI primarily as yet another lever to drive incremental productivity in parts of their organization—at least for now. The last category seems likely to be the slowest to embrace the CAIO as a separate role, but the first two categories are likely either to appoint CAIOs or strongly consider doing so.

The main considerations in choosing your CAIO include:

Need for speed

The position focuses the organization’s attention and creates a visible AI advocate who can accelerate critical decisions and help overcome internal barriers—cultural, legal, and compliance—that might otherwise slow AI adoption.

Leadership time

Moving from pilots to transformational programs will likely require a higher magnitude of change and complexity of coordination. This warrants greater focus and leadership time, which are going to be more challenging to achieve by dividing AI responsibilities among current C-suite officers, on top of their prior responsibilities. It’s simply a full-time job.

Strategic capabilities

According to our GenAI pulse survey, 46 percent of companies expect GenAI to generate new product and revenue streams, and 54 percent new business models in the next 12 months. This will require dynamically shaping and evolving strategies that cut across business units and functions. Most companies are not flush with senior executives capable of dealing with something as fast, cross-functional, and potentially disruptive as this technology. Continuing to rely on the CEO to drive GenAI strategy, which currently 34 percent said they do, may not be sustainable.

Investments

With rising AI investments come an increasing need for tight coordination across the business. Of the 97 percent of leaders who said GenAI investment remains a priority in the next 12 months, nearly a quarter plan to spend between \$100 million and \$249 million, another 15 percent between \$250 million and \$499 million, and 6 percent more than \$500 million. These investments, however, often fall outside current budgets, which means they will require more frequent evaluation cycles and clear “business requirements” not easily delegated to a single business function.

Early mover advantages

The earlier you appoint a CAIO, the easier it is to shape and coordinate the transformation before business units and functions have invested in similar capabilities. In addition, first movers may secure scarce CAIO talent in the external or internal market before they become even more in demand.

Not a silver bullet for all

Not everyone agrees that a CAIO is necessary. A Harvard Business Review article last year suggested that chief AI and data officers were set up to fail because the jobs were “a high-pressure balancing act with a technology that offers huge risks and opportunities.”⁷ Others such as Shelly Palmer of Syracuse University recognize valid concerns that “adding another C-suite role could lead to redundancy and unnecessary complexity in leadership, particularly if existing leaders are already handling AI-related tasks effectively.”⁸ He argues that “embedding AI within the remit of existing tech leaders might ensure better governance, risk management, and alignment with overall business technology infrastructure” and that “adding a CAIO involves not just the cost of another C-suite salary but also potentially building out a separate team ... for some companies, particularly smaller ones, this might not be cost-effective.”

How well the first group of CAIOs can deal with these challenges may influence how fast or slow others follow suit. It also depends on your starting position and level of aspirations in the market. As the adoption of this technology continues to move ahead, we believe the case for a CAIO to take charge of this pivotal AI transition is likely to strengthen.

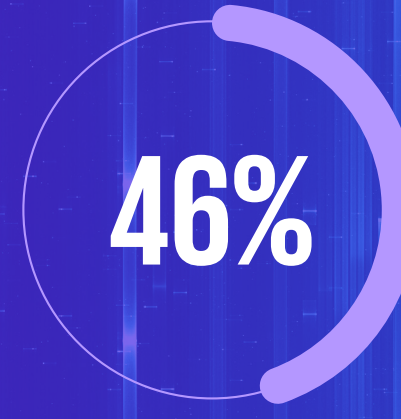
⁷ Randy Bean and Allison Sagraves, “Why Chief Data and AI Officers Are Set Up to Fail,” Harvard Business Review, June 20, 2023

⁸ Shelly Palmer, “Do You Need a Chief AI Officer (CAIO)?,” www.shellypalmer.com, April 21, 2024

How will GenAI impact the growth of your organization in the next 12 months?



New business models



**New product or
revenue streams**



Productivity

Tailoring the role

Companies will want to tailor the role to their unique business circumstances and priorities. Here are some areas to consider when shaping your CAIO role:

Reporting structures could vary from those reporting directly to the CEO or chief operating officer to a subordinate reporting to another C-suite executive (e.g., the chief technology officer, chief information officer, or chief innovation officer). The company size and your overall AI ambition would influence your choice.

Scope of the role could vary from more narrowly focusing only on GenAI to including all types of AI, as well as potentially much broader responsibility encompassing digital transformation and/or innovation. If speed to roll out GenAI is the priority, consider a narrower scope. If you see untapped potential for traditional AI and innovation, a broader scope may better suit your needs.

Strategic focus could stretch from more narrowly emphasizing operations, technology, and risk to more broadly shaping AI corporate strategy and launching enterprise-wide business transformations. The more ambitious your growth and transformation strategy is, the broader you would go.

Budget authority could range from an influencing role guiding business units and functions on where to place their bets to full budget ownership of all AI-related investments across business units. The size of the investment required, speed to activate, and the degree to which it can be shared across business units would guide your choice. The more budget, the more power to create impact, but there would also be more challenges in managing the change.

Staff and team size could range from a small group of senior executives to a central, multifunctional team with dedicated resources and key capabilities. The larger the focus, budget authority, and scope, the bigger the staff and team size would be likely.



Regardless of differences among company needs and ambitions, CAIOs for all organizations will share some common attributes. This role demands a visionary leader who grasps the transformative potential of the technology and a trusted partner who can engage the whole enterprise to react quickly and dynamically to the AI challenge. The key characteristics to look for in a CAIO include:

Strategic thinker

A voice with vision for how AI can transform the business and go from pilots to value creation and scale for clients and employees. Identifies the most strategic choices that have to be made in advance of them being required.

Experience with business transformation

A change-maker seen as capable of launching a movement inside the enterprise with a keen eye for opportunities to optimize and create new engines of value.

To date, many of the CAIO hires have been from within. Indeed, if you have a high-performing C-suite executive leading the charge effectively, elevating the person to this position may accelerate momentum. But as the demand for CAIOs grows, we expect to see a higher share of external hires over time, given that more talent will be available in the market and the premium of having proven performers in these roles increases for management and shareholders.

We also believe the appointment may be needed only for the next three-to-five years. As companies integrate AI into their everyday workstream, how best to use it will become everyone's job. Adopting new technologies often faces major hurdles at the outset, but once they take off, they also rapidly become familiar tools. The CAIO's role would be akin to jump-starting a new movement that will become self-sustaining rather than standing up a new business function. Former C-suite positions focused on specific technologies—such as the chief internet officer or chief cloud officer—have largely disappeared as the technologies became more widely adopted.

Knowledge of the AI domain

Someone with a deep understanding of the technical capabilities and limitations of AI as well as all things data, and who can balance the risks and opportunities to monetize AI safely and help people get better.

Proven people skills

A person who can be a key influencer in the organization with the people skills to help humanize the AI technology. A trusted leader who can build relationships across the business, inspire diverse perspectives and mitigate unconscious bias, and tell the AI story in a compelling way to different audiences.



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Setting up for success

Once a company names a CAIO, top leadership and the board will need to provide the right level of support, communications, resources, and change management to set their new CAIO up for success on the first “big 5” tasks:

1 Establish responsible AI governance

as your first order of business. This enables the company both to go “safe,” i.e., mitigate ethical and legal risks and ensure regulatory compliance, and to go “fast” by providing clear guidance and support to business leaders eager to run their initiatives. KPMG calls it “[Trusted AI](#).” The CAIO plays a key role in drafting the policies but needs the backing of several C-suite officers (e.g., risk, legal, and IT/cyber) and the board to gain rapid approval and support across the business. It’s not just about establishing the policy but then operationalizing at scale throughout the organization.

2 Build a strong cross-functional team

and establish a cadence of interactions across all businesses. The composition and size of the CAIO team will differ but often be driven by at least three forces: e.g., the scope of the role and level of investment; the number of key functions and business units it needs to interact with; and how much of the unique AI talent and resources that can be centralized. Look to bring people from all parts of the organization with a diverse mix of backgrounds and skills.

3 Size the AI opportunities and threats

on your business across at least three dimensions: capturing productivity improvements within your knowledge workers; revenue uplift from embedding new AI-enabled functionality to make your offers more competitive in the market; and how your business may be impacted over time if all of your customers, partners, suppliers, and competitors rolled out AI simultaneously. Leverage existing AI impact assessment tools and scenario analyses to quantify the addressable opportunities and help prioritize them.

4 Shape a vision and strategy for AI

that help realize your ambition, focus everyone on the tasks ahead, and prioritize your investments. This should cover how you sell and go to market faster/better and evolve your portfolio of offerings, how you better deliver the products and services you have today, and how you leverage AI in your own operations. Also consider having a dedicated workstream focused on how to disrupt others and prevent being disrupted. Naturally, this first AI strategy faces many unknowns and hence will evolve over time.

5 Tailor your portfolio of AI initiatives

to get the right mix of safely and securely getting AI into the hands of all employees to become comfortable to drive broad-based innovation; targeting the highest value areas of use with a replicable top-down proof-of-concept approach; proactively scaling what has proven to work across the organization; thinking about the workforce transformation required, including dedicated training; and accelerating any data migration and technology modernization efforts required to effectively run the first waves of GenAI initiatives.

The first 100 days of a CAIO are critical

In October 2023, KPMG LLP appointed Stephen Chase as its new vice chair of Artificial Intelligence and Digital Innovation and a member of the firm's Management Committee. Formerly the head of the US Consulting practice at KPMG, Chase's mandate is to "set a firmwide innovation agenda that will enhance how we serve our clients, transform our operations, and create exciting career opportunities for our people—while ensuring we have the right safeguards in place to maintain the trust of our stakeholders," in the words of Chair and CEO Paul Knopp.

The main challenges facing Chase at the outset were articulating the firm's vision and strategy while balancing the hype with a realistic pace for its AI program. The scope of KPMG's internal transformation program, titled KPMG aIQ, is enterprise wide and covers everything from how services are marketed and sold to how they are built and delivered to how the firm is managed and operated. It aims to integrate AI into every part of KPMG's business and to empower all KPMG professionals to adopt the technology in their everyday work. To ensure success, Chase first needed to quickly find a strong team of leaders to work with him to mobilize the whole firm. While the technology is complex, the biggest obstacle to change at this scale is people. So he pushed for investing heavily in prioritizing broad access to GenAI tools, training, and

change management to ensure KPMG employees have the skills to adopt and use the constantly evolving technology.

In hindsight, Chase said he was able to build a collaborative AI leadership team, with dedicated executives from KPMG's three business units: Audit, Tax, and Advisory. By bringing these leaders together, the team has been able to prioritize initiatives that have broad relevance across the firm while reducing redundancy and directing investment toward the biggest opportunities.

The decision to give all KPMG employees access to GenAI tools paid off, which led to immediate productivity and employee experience benefits. It also sparked innovation, with employees finding new ways to improve the quality and speed of services they are delivering for clients and the firm. At the same time, the firm delivered specialized tools to specific work groups, such as GitHub Copilot for coders and proposal tools for sales. Chase believes the most important highlight of his first 100 days was establishing KPMG's Trusted AI commitment and associated governance to allow the firm to move fast and responsibly. According to Chase, "making a public statement about our commitment to trust and responsible use of AI has differentiated KPMG in the market."

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Conclusion

We believe that AI requires a full-time business leader in the C-suite empowered to pursue it boldly, quickly, and responsibly. As organizations move beyond pilots to large-scale deployment across the enterprise, most would do well to consider a CAIO to lead the charge. You need a business leader who knows not only how technology can shake things up, but also how to get the whole company and its people moving into the future. The time to wait and see is over.

How KPMG can help

At KPMG, we're embracing the power of AI to elevate the experiences of our clients and our people—guided by our Trusted AI framework at every turn. We help you think through your own AI plan—including whether to create a CAIO position—then develop it, launch it, and guide you as you execute your program. To learn more about how KPMG can help you define and implement an AI strategy, shape your future workforce, and partner with you along your AI transformation journey, [see our full solutions and services](#).



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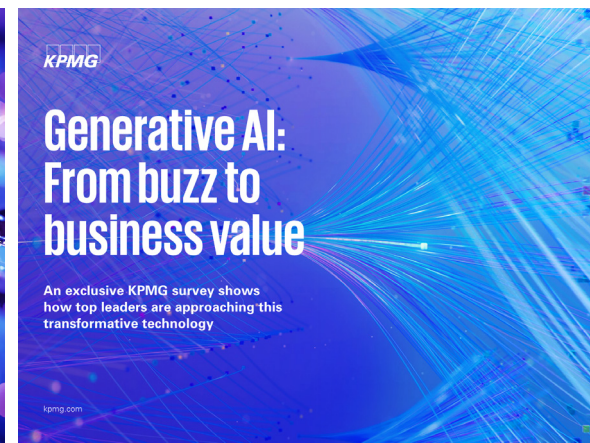
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