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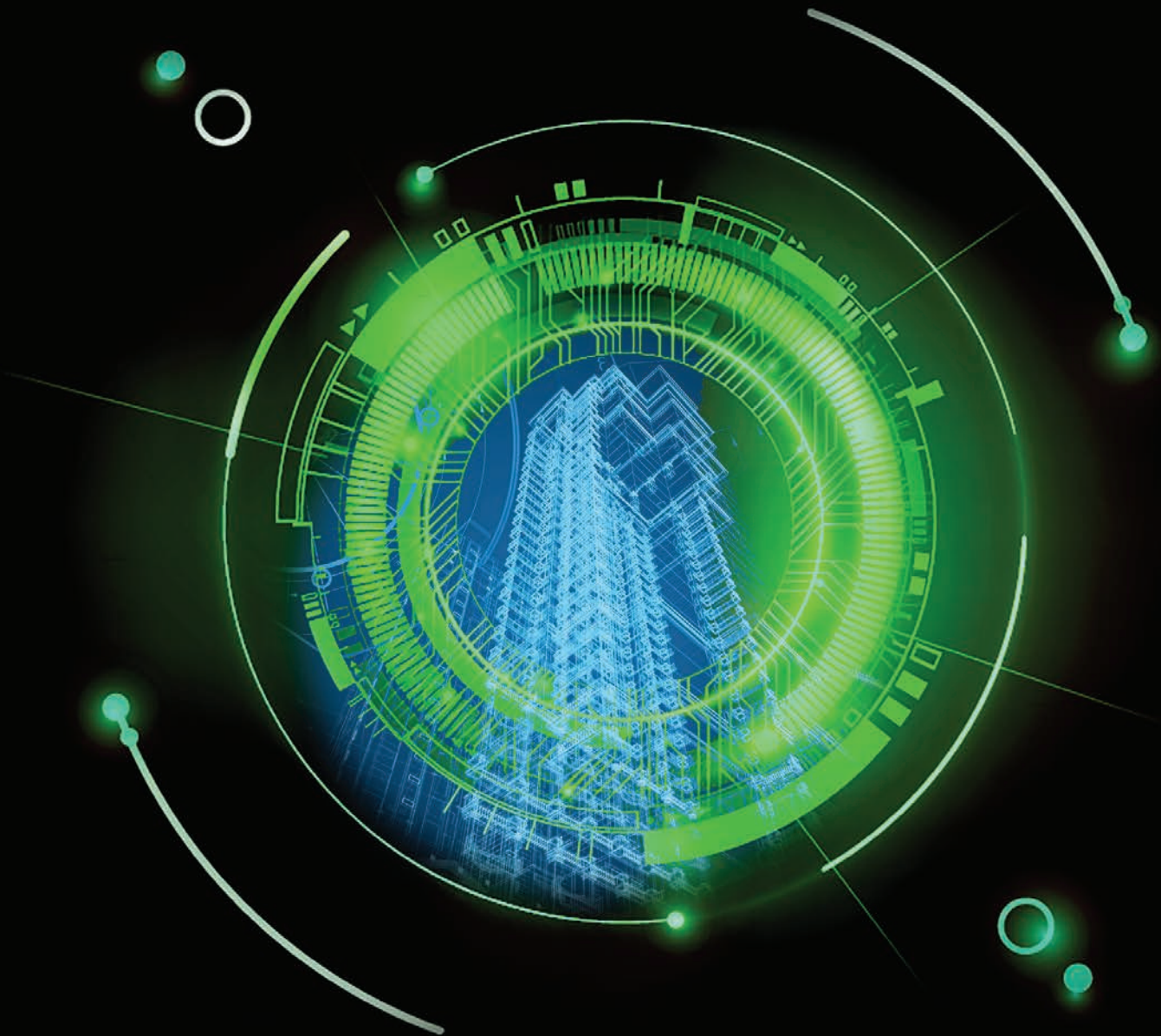
Three roles CEOs need to play to scale Generative AI

Leading a Generative AI-fueled Organization:
A CEO series

Deloitte Global CEO Program
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The strategic opportunities presented by Generative AI require CEOs to dive deep into their organizations' technology agenda.

For many CEOs, that means becoming tech-savvy *enough* to detect how Generative AI could redefine their business models, including understanding disruptions to their industries, identifying the competitive advantage in their enterprise's AI adoption, and understanding where this advantage would likely erode the fastest. We last wrote about the CEO's need to set a vision for adopting Generative AI, communicate that vision, and invest in transformation.[1] However, the path from vision to action is not always clear. While many executives recognize the importance of AI, up to 87% don't feel equipped to transform their business with it, according to recent surveys.[2] Given the types of Generative AI choices that need to be made, their outsized impact, and the significant organizational change demanded by such transformation, CEOs should dive into key decisions they would normally delegate. That's because they are actively shaping their organization's vision and defining its ambitions: whether to be a first mover or fast follower, whether AI is needed for innovation or productivity, and whether they should be building or buying AI capabilities.

CEOs have always had multiple roles, at times serving as skilled dealmakers with the acumen for favorable negotiations; as venture capitalists who place bets on winning strategies and manage portfolios; or as champions who evangelize important business priorities. In the context of Generative AI, **CEOs must apply their experiences from these roles to three distinct areas: securing computing power, selecting an ecosystem for their large language models (LLMs), and standing up centers of excellence.**

The buck stops with the CEO

Yesterday's white-hot innovations are prone to becoming today's modernization or efficiency headaches.

Take multicloud for example. Many enterprises rushed into piecemeal cloud agreements without establishing a central decision-making hub, and years later found themselves with technical sprawl that desperately needed streamlining.[3] Without caution, Generative AI adoption could take the exact same path. With more and more players rolling out AI options and the hype burgeoning, CEOs should learn from the lessons of the past. Given how new Generative AI is, not even your technical leaders may have the expertise necessary to navigate this field alone.

Therefore, CEOs need to take time upfront to make key decisions, such as:

Should we **focus our investments** on a few key choices, or should we maximize optionality while the competitive market for Generative AI plays out?
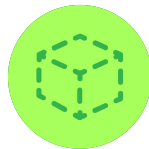
How can our organization **build flexibility** in our execution approach?

How will we **measure direct and indirect cost** and performance implications?

How do we **embed trust and guardrails** in the AI model development?

Some enterprises we've interviewed have already run into issues of making AI investments without reaping strong benefits. **The time is now for CEOs to make effective decisions.**

Securing access
to computing power

With the widespread adoption of Generative AI, **the necessity for swift model training and execution has emerged as a critical business requirement.**

Conventional compute infrastructure relies on central processing units (CPUs) that handle data sequentially. However, for highly parallel workloads, especially when dealing with LLMs, the use of graphics processing units (GPUs) and other specialized AI chips enable massively parallel processing, a crucial element for efficiently processing terabytes of data through algorithms based on Generative AI. As we discussed in Tech Trends 2024, companies are actively tackling this challenge by embracing GPUs as the primary resource for training AI models.[4] The integration of such dedicated AI chips is poised to become standard practice in enterprises, offering early adopters a competitive edge, particularly in a fragile supply chain.[5] Research predicts that the market for specialized chips will be well over US$60 billion in 2024 and climb up to US$120 billion by 2027.[6]

Business models are bound to evolve as AI increasingly becomes a part of knowledge work, which further emphasizes the importance of the CEO in shepherding that change.
Regardless of the level of a CEO's AI ambitions, they will likely need to think creatively about partnerships to secure computing power for Generative AI. As the dealmaker-in-chief, they play a pivotal role in ensuring access to critical resources that can redefine their enterprise.

For some organizations, their needs may be met by niche cloud providers who specialize in GPUs, a number of which are cropping up in global markets.[7] However, those with higher AI ambitions of pursuing innovation and competitive advantage may want to secure more robust computing power. Many such CEOs are engaged in conversations with Generative AI hardware companies. Without delving into the technical details of the actual

chip models, they are negotiating with the CEOs of chipmakers to understand and secure the right level of resources for their company.

As dealmakers, CEOs should be sure to consider investor sentiments and engage with their executive leadership team, specifically their chief information officer (CIO) and chief technology officer (CTO), to facilitate alignment between hardware procurement strategies and overarching business objectives. Additionally, emerging technologies such as edge computing present new opportunities for decentralized AI processing. By staying abreast of technological advancements and market trends, CEOs can make informed decisions to future-proof their organization's computing infrastructure.

Selecting an AI ecosystem for LLMs

The value of Generative AI hinges upon the data it consumes. Or, as the adage says, "Garbage In, Garbage Out." This presents a problem for CEOs, as most LLMs available today are not built with out-of-the-box domain, industry, or organization-level specificity.

Though CEOs may face challenges with data regulations and standards, private LLMs can deliver clear advantages in choice, cost, and control, while enabling enterprises to retain their strategic intellectual property.[8] To capture this value and scale, enterprises need to select the LLMs and broader AI ecosystems that suit their specific needs.

CEOs can also look at their organization's data as a bargaining chip. Many enterprises have an untapped trove of data, which could be highly valuable to companies building AI products. CEOs can consider valuing current and future-state data assets as potential inputs to new business models, as long as they concurrently secure or anonymize data to avoid trust and regulatory concerns. They will likely need to keep all options in mind as they make investment decisions.

As with securing hardware, the CEO need not delve too deep into the technical specifics of different AI models. Instead, the CEO calibrates the company's AI ambition and determines whether it will be a first mover in building custom LLMs or buy them later.[9] Adopting a venture-capitalist-like mindset, the CEO can leverage understanding of the marketplace and established relationships with major players to determine which bets can be made safely, while considering their broader portfolio and being thoughtful about every round of investment.

In this pursuit, **CEOs need to ensure the LLM selection process isn't purely a technical endeavor.** They must go beyond traditional procurement methodologies, relying instead on strategic relationships and market insights to identify ideal partners. Given the pace of innovation, today's exciting AI model can become obsolete tomorrow, and organizations can't rely on lengthy vendor assessments. But by fostering the right collaborations across the Generative AI ecosystem, organizations can start to build custom models for specific functions (e.g., Finance) and then scale up their adoption. For example, the utility company Enbridge built separate copilot tools for developers to code and for office staff to navigate productivity applications, thereby offering diverse benefits to each team.[10] As we've written previously, finding commonality in AI needs can ensure that the enterprise builds a cohesive platform for scaling AI, as opposed to buying one-off products for disparate use cases.[11]

Furthermore, CEOs must recognize the evolving nature of AI models and technologies, necessitating continuous evaluation and optimization of LLM solutions. This might entail engaging with industry thought leaders, cultivating strategic partnerships with research institutions, and more. CEOs can tap their CTOs and CIOs to maintain and check in on key AI relationships that can drive business growth and innovation.

Standing up AI centers of excellence

A recent Deloitte and Fortune CEO survey found that **80% of organizations are already implementing or likely to implement Generative AI** to accelerate innovation, while a whopping 96% are doing so to increase efficiencies.[12]

To reap these expected benefits, organizations are standing up AI centers of excellence (COEs). These organizational hubs serve as catalysts for innovation, enabling organizations to conceptualize, develop, and deploy AI solutions at scale.

A COE can bring together a cross-functional group of AI experts and stakeholders to focus organizational efforts and create a consistent approach to governance and guardrails (e.g., by hiring ethicists), which are increasingly salient topics to consumers and employees.[13] Moreover, this organizational structure may help organizations differentiate their AI transformation from that of their competitors—partnering with a consulting provider may provide the outside perspective and network needed to succeed.

CEOs need not lead the implementation of these centers. Rather, their role is to champion establishment and provide

unwavering support and resources to facilitate inception. They can ensure that critical elements of standing up the COE—such as hardware, data needs, and governance—are sufficiently funded, while delegating the remaining aspects.

The CEO also has to engage in winning hearts and minds of all stakeholders, including customers, employees, the board, and society at large. Working with their chief legal or risk officer, CEOs can help ensure that all members of the enterprise, from the executive leadership team to middle managers and beyond, feel prepared for what's on the horizon. Many employees are fearful of AI transformation in their organizations and are eager to understand what future jobs and skills may look like.[14] CEOs should foster a culture of AI fluency and innovation and champion a clear purpose for AI adoption, as a matter of supercharging humans (not replacing them).

Case in point: Generative AI adoption can be seen as a new frontier in cognitive efficiency, enabling us to tap into the power of a human intelligence unburdened by repetitive activities and able to focus on exploring, connecting, and elevating the human experience.[15] In the era of Generative AI, valuable work is not just repeating known tasks, but asking the right questions, developing and innovating new solutions, assessing the generated outputs, and fine-tuning your model for better performance—uniquely human tasks.

Finally, the CEO's role in articulating the vision, mission, and purpose of AI extends beyond internal stakeholders to external partners, investors, and industry peers. By leveraging AI centers of excellence as platforms for knowledge exchange and collaboration, CEOs can position their organizations as frontrunners in the race to Generative AI advantage.

The AI revolution is bound to alter CEO roles for the years to come. Already, **CEOs have to be more tech-savvy than ever**, given how important technology is to competitive advantage and ways of working.

As AI becomes even more embedded into knowledge work, the details of AI adoption are expanding out of the tech leader's domain to become a CEO priority.

This is especially true when AI adoption is still nascent. CEOs can bring their experience to bear on the many macro and micro decisions that will need to be made when a technology is both very new and very impactful.

As we continue our series on leading an AI-fueled organization, we'll delve into more aspects of the **CEO's role in preparing their organizations to pivot to the Generative AI future.**

Reach out for a conversation

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About the CEO series: Leading a Generative AI-fueled enterprise

A veritable ocean of content exists in regard to Generative AI adoption for enterprises. Through *Leading a Generative AI-fueled enterprise: A CEO series*, we aim to provide a ship for CEOs and leaders to navigate that ocean.

Not all companies may need to board this ship, but for industries that involve knowledge work, Generative AI is poised to have widespread impact, and CEOs can take advantage.

Endnotes

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