

Generative AI: The Top Six Things Tech Executives Need To Know

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Summary

Generative AI is one of the hottest topics in tech — and business — right now. It is also one of the most misunderstood. To help understand how to get value from these burgeoning technologies, tech execs should start with understanding these top six things: what generative AI is, how enterprises can use it today, where it can take us tomorrow, the catch, how to access generative AI's capabilities, and what to do in the short term.

Tech Execs Need To Plan For Generative AI

Prepare yourself: Generative AI is here. Like other major breakthroughs in artificial intelligence, generative AI seemingly came out of nowhere in 2022. Even before the current surge in excitement over ChatGPT, over 70% of global data and analytic decision-makers whose organizations are implementing AI said that their companies planned to increase spending on transformer networks (the technology at the core of ChatGPT) over the next 12 months, according to [2022 Forrester data](#). The tech world has been disappointed by several recent bubbles promising much but delivering no real value, but generative AI is already improving content creation, software development, and knowledge management at enterprises. However, hype begets bad information and misunderstanding. Tech execs need to know some basics like what generative AI is, how it can be used, what the future holds for generative AI, and what to do with it in the short term.

What Is Generative AI?

Forrester defines generative AI as:

A set of technologies and techniques that leverage massive corpuses of data, including large language models, to generate new content (e.g., text, video, images, audio, code). Inputs may be natural language prompts or other non-code and non-traditional inputs.

Generative AI is more than ChatGPT. Large language models (LLMs), which undergird many generative AI capabilities, are seeing a surge in public interest, as companies like Google and Baidu announced their own LLM-based chat applications. But the training and application of these models isn't limited to the giants of the tech world — startups along with more staid providers have already started to integrate them into their offerings over the past year.

How Can Enterprises Use Generative AI Today?

Despite generative AI's relative immaturity, tech execs can capitalize on a [wide variety of use cases](#) by accelerating and augmenting workflows across their organizations. Among the many opportunities available are: 1) increasing developer productivity through text-to-code generation tools, 2) enabling visual designers to iterate and ideate quickly with text-to-image generators, 3) empowering marketers to create product descriptions matching their preferred brand language and tone, or 4) even scaling the presence of executives by allowing synthetic avatars of themselves to appear in videos without having to record themselves.

Where Can Generative AI Take Us Tomorrow?

While generative AI is exciting today, the applications of tomorrow will seem like magic. For example, a future analytics platform with embedded generative AI capabilities could allow a user to submit a query like: “Create an infographic of our past year’s sales revenue, operational expenses, and customer satisfaction and include an explanation for the trends summarizing our last three quarterly reports.” Today’s generative AI would struggle with the math calculations as well as combining the text and images, but these are problems that are already being tackled by both academic and industry research teams. Another future application is the creation of fully AI-generated video content — using it to generate a script and then generating the video and audio of your best spokesperson (using a model trained with their likeness) announcing a new product without them ever having to film a thing.

What’s The Catch?

Generative AI technologies are plagued by a litany of problems that hamper their effectiveness and limit their current application to targeted and lower risk use cases. Text generators have a tendency to output **coherent nonsense** — confidently written text that is grammatically correct and factually wrong. Both visual- and language-based tools are prone to recreating the harmful biases that are baked into their training data. Dozens of outstanding questions around copyright and intellectual property for generative AI’s inputs (including training data) and outputs are unanswered. The overall economic picture of how best to use generative AI is unclear as well — generative AI models are expensive to train and run, and for some use cases the compute cost of using the model may outweigh any experiential or productivity benefits.

How Do Tech Execs Access Generative AI’s Powerful Capabilities?

Generative capabilities are accessible to enterprises through a growing landscape of cloud-based generative AI providers. Moreover, many enterprise applications will include generative AI as a capability. While few organizations will endeavor to build their own base LLM, companies that have the technical sophistication and an appropriate use case may train and deploy their own model with one of the many open source frameworks available. The most important consideration for whether you build or buy is how the LLM can be fine-tuned to your specific business questions.

What Should I Be Doing Over The Next Six To Nine Months?

Even in a down market, the smart tech exec will find ways to experiment with technology to position their company for the rebound. Find time to experiment with generative AI in a manner that reaps benefits while staying mindful of potential pitfalls.

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Your first stop is your security and risk team to make sure you are following best practices for responsible AI. Then, pick one or two low-risk use cases that will not disrupt your operations. Finally, ask tough questions of your vendor partners around the underlying training data, content moderation for both the inputs and outputs, what capabilities exist for fine-tuning the vendor's model to your business, and what guardrails are in place to limit bad actors (both internal and external).



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