

Eight trends of generative AI

What businesses and professionals can expect from AI in 2024

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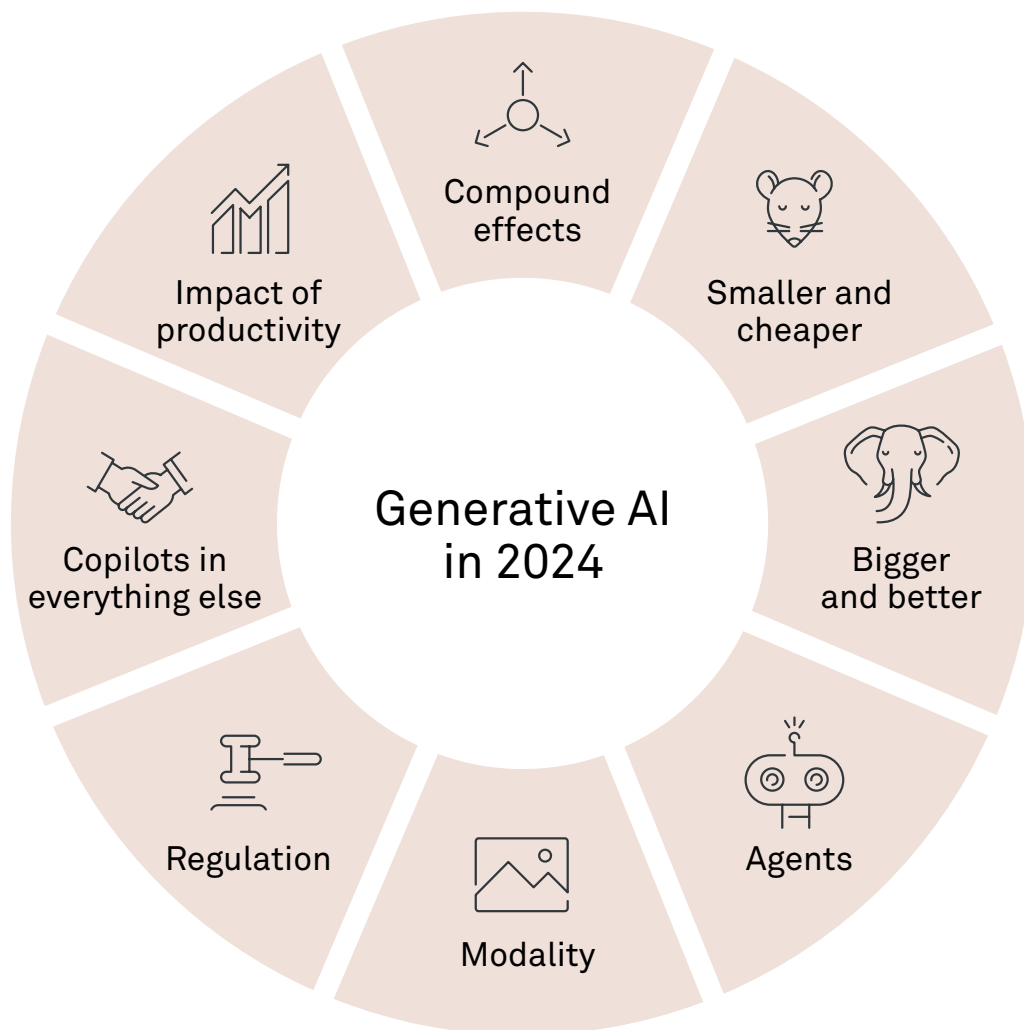


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We see eight key trends in generative AI in 2024

Cheaper, better, more widespread, better user adoption and more advanced implementations all lead to hard-to-predict outcomes for businesses.

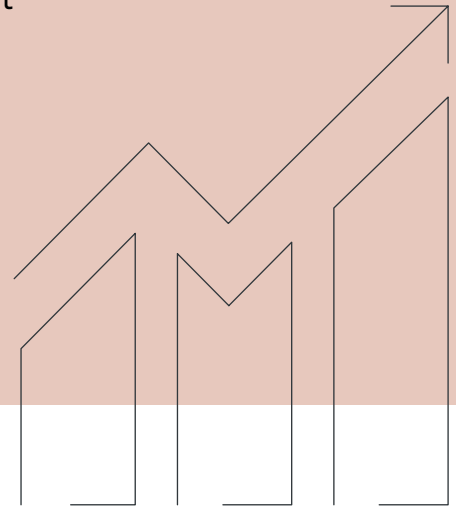
Be aware of the compound effects of many of these trends, and how they might multiply.



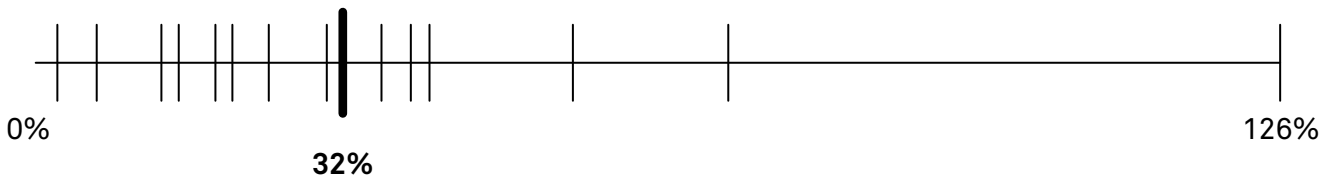
Impact on productivity

We know the productivity effects are there, but they have not sunk into the competitive environment of most firms yet.

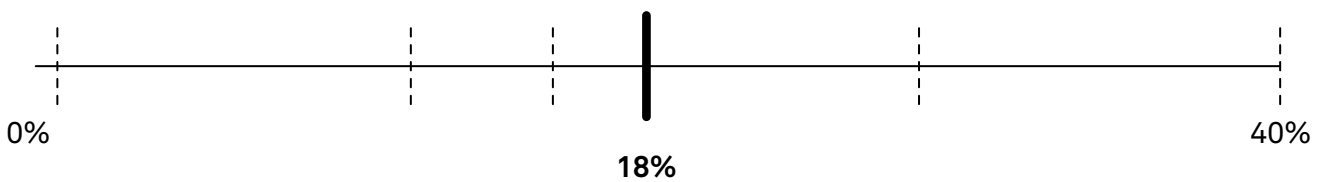
Soon, most companies will face a “new normal”.



Studies in productivity



Studies in quality



Chang & Noy, MIT (2023), Peng & Kannan, Microsoft Research (2023), Nielsen, Nielsen Normann Group (2023), Tabachnyk & Nikolov, Google (2023), Goldman Sachs Research (2023), Chui, et.al., McKinsey & Company (2023), Mollick et al., MIT, Harvard, Boston Consulting Group (2023), Brynjoflsson, Li & Raymond, National Bureau of Economic Research (2023), Korinek, National Bureau of Economic Research (2023), Congressional Budget Office (2023)

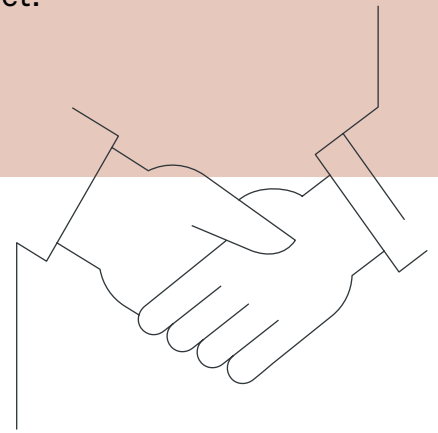
Copilots in everything else

Microsoft is adding copilots to everything.

Everyone else is adding copilots to the rest.

Startups are creating copilots for things that do not even exist yet.

But are copilots the right format?



Copilot

Joules

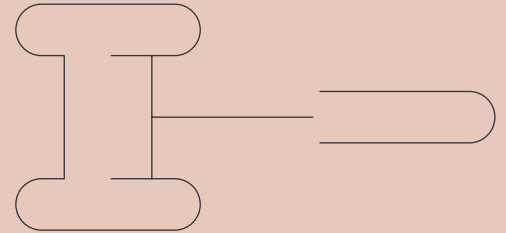


Intelligence



Regulation

The EU AI Act has been settled and is going into effect.
The New York Times vs OpenAI lawsuit is finally rolling.



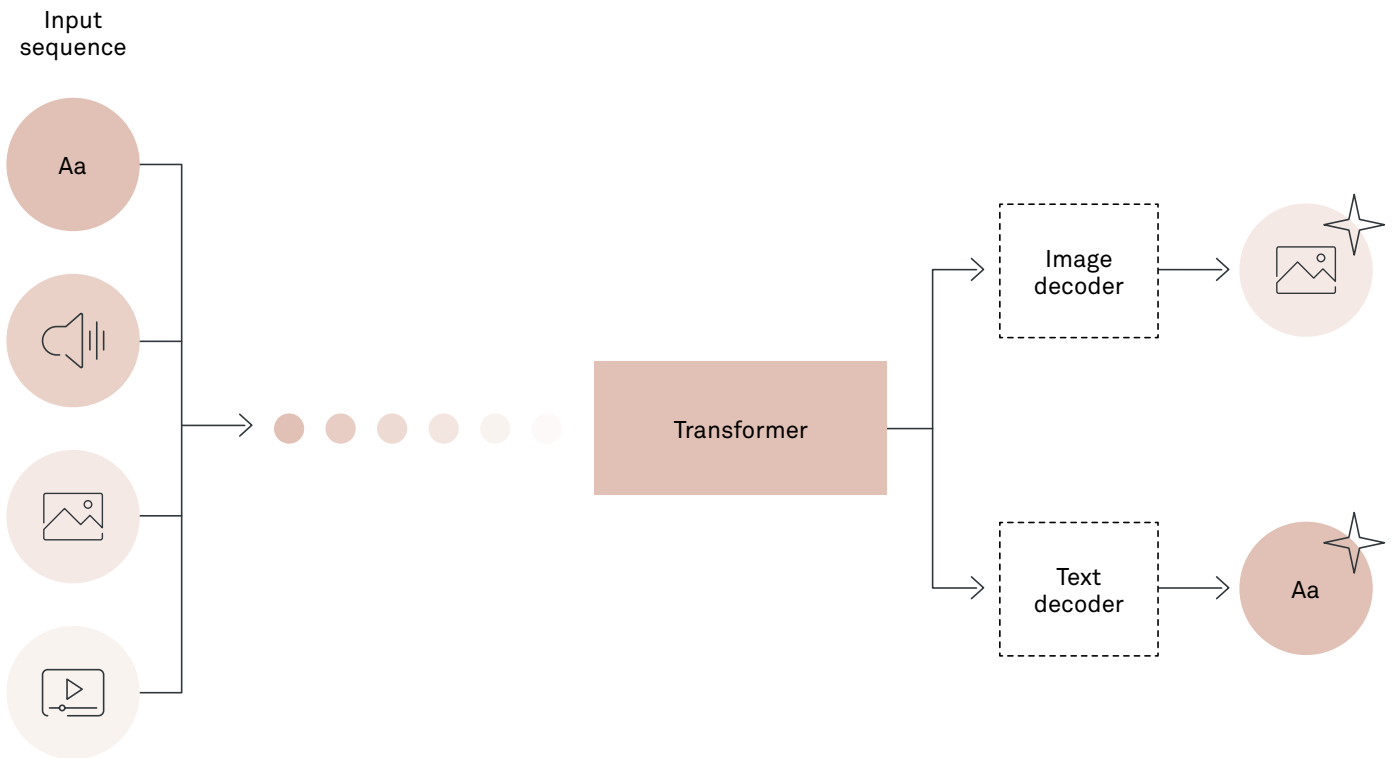
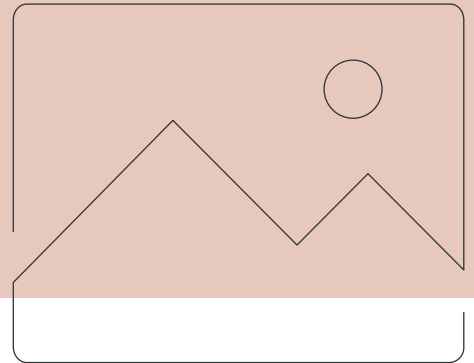
EU AI Act – five key points

Harmonisation	Aims to establish a harmonised framework for the development, deployment and use of AI systems across EU. The scope is broad.
Purpose	Purpose is to underpin security, compliance and fundamental human rights .
Risk-based	Adopts a risk-based approach , categorising AI systems into four levels of risk. Focus is given to high-risk AI systems that will face strict requirements. Generative AI is getting its own category.
Prohibitions	Sets out a list of prohibited AI practices considered to impose unacceptable risks to individuals or societal values.
Penalties	Infringement of certain prohibitions will be subject to administrative fines of up to EUR 40,000,000 or up to 7% of a company's worldwide annual turnover.

Modality

Models will be able to analyse and create both images and audio.

While this came online in 2023, we will see the effects of especially image analysis in 2024.

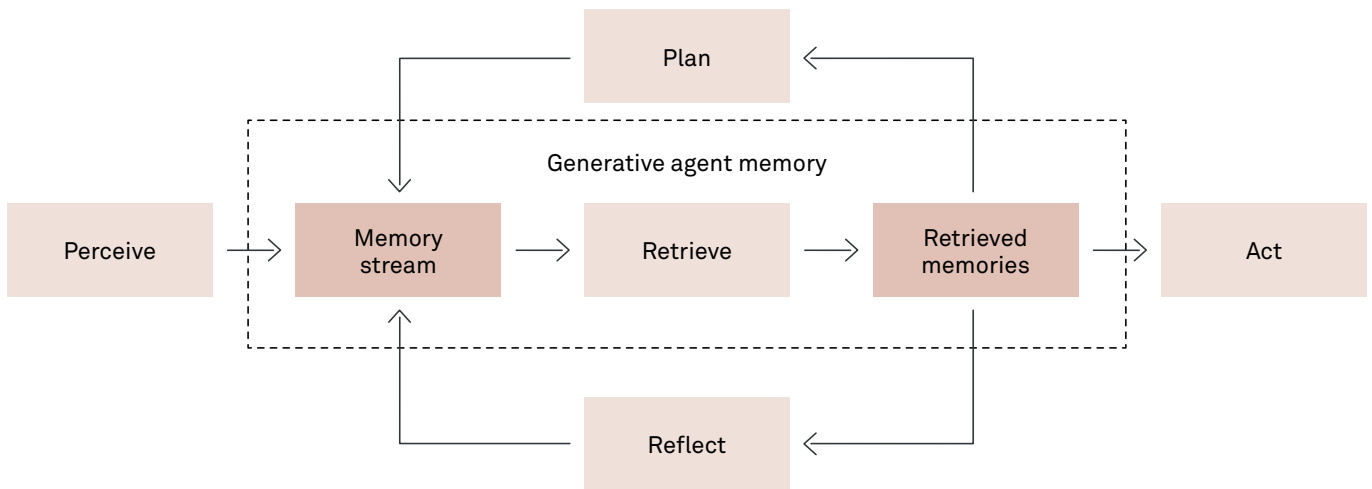
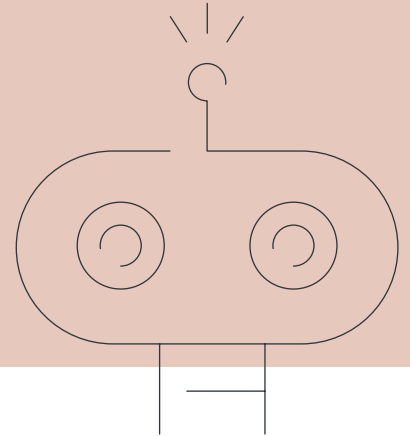


Source: Jeff Dean (X): <https://twitter.com/JeffDean/status/1732416667215606149>

Agents

AI agents are able to perform actions in the world – like sending an invoice and creating an order.

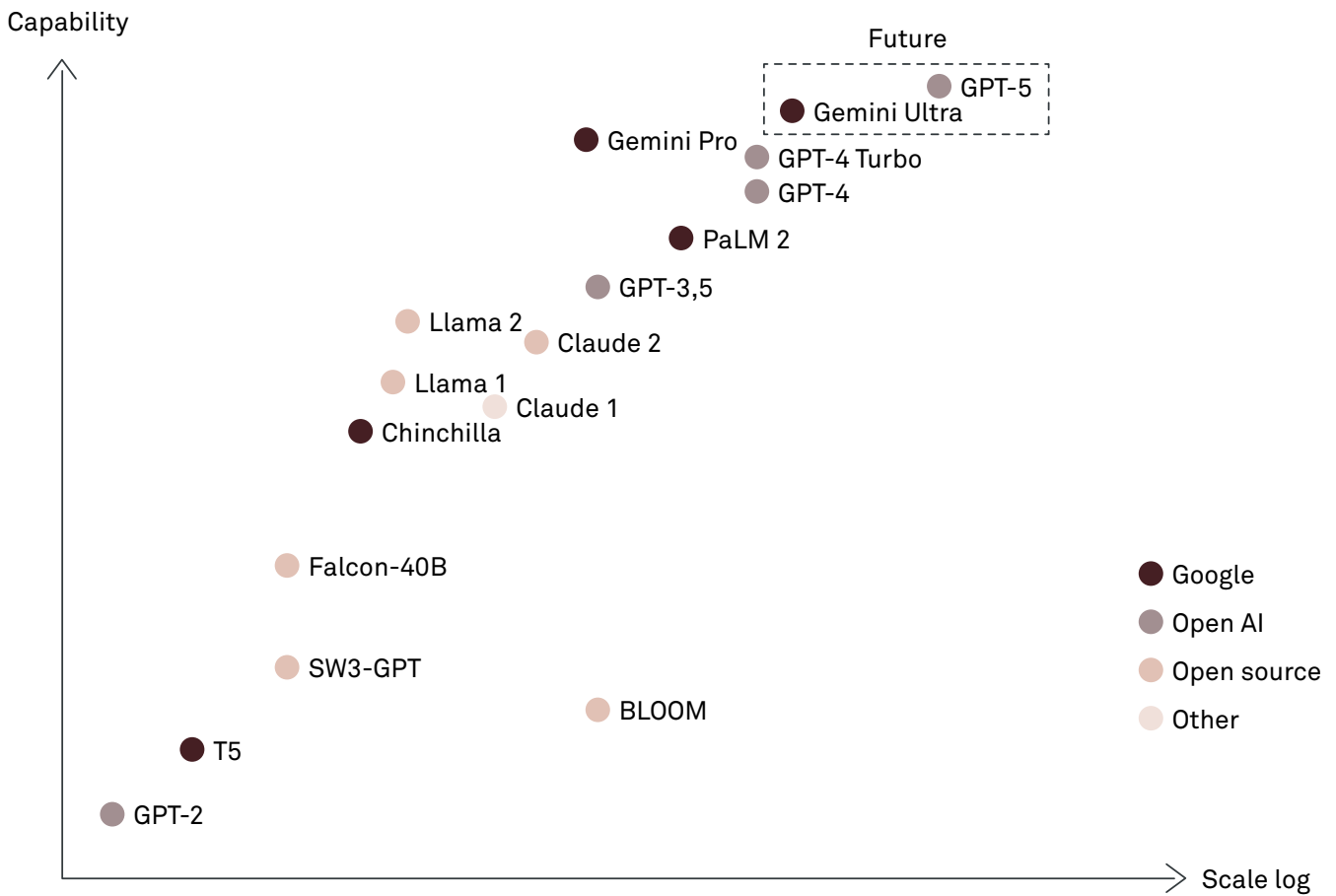
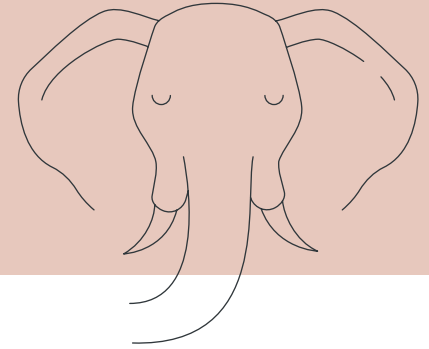
OpenAI's CustomGPTs and Microsoft Copilot Studio already enable some of this, but it is the tip of the iceberg.



Bigger and better

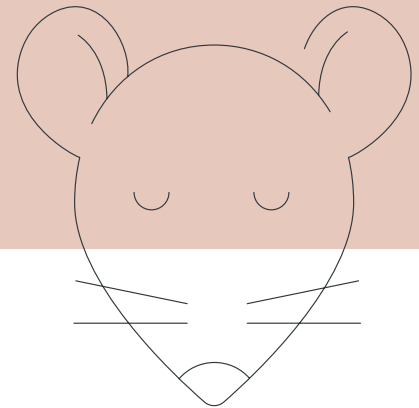
Bigger models have so far been better models, and we know from OpenAI that we are not done scaling yet.

We can expect a GPT-5 or similar in 2024, and we can expect another jump in quality.

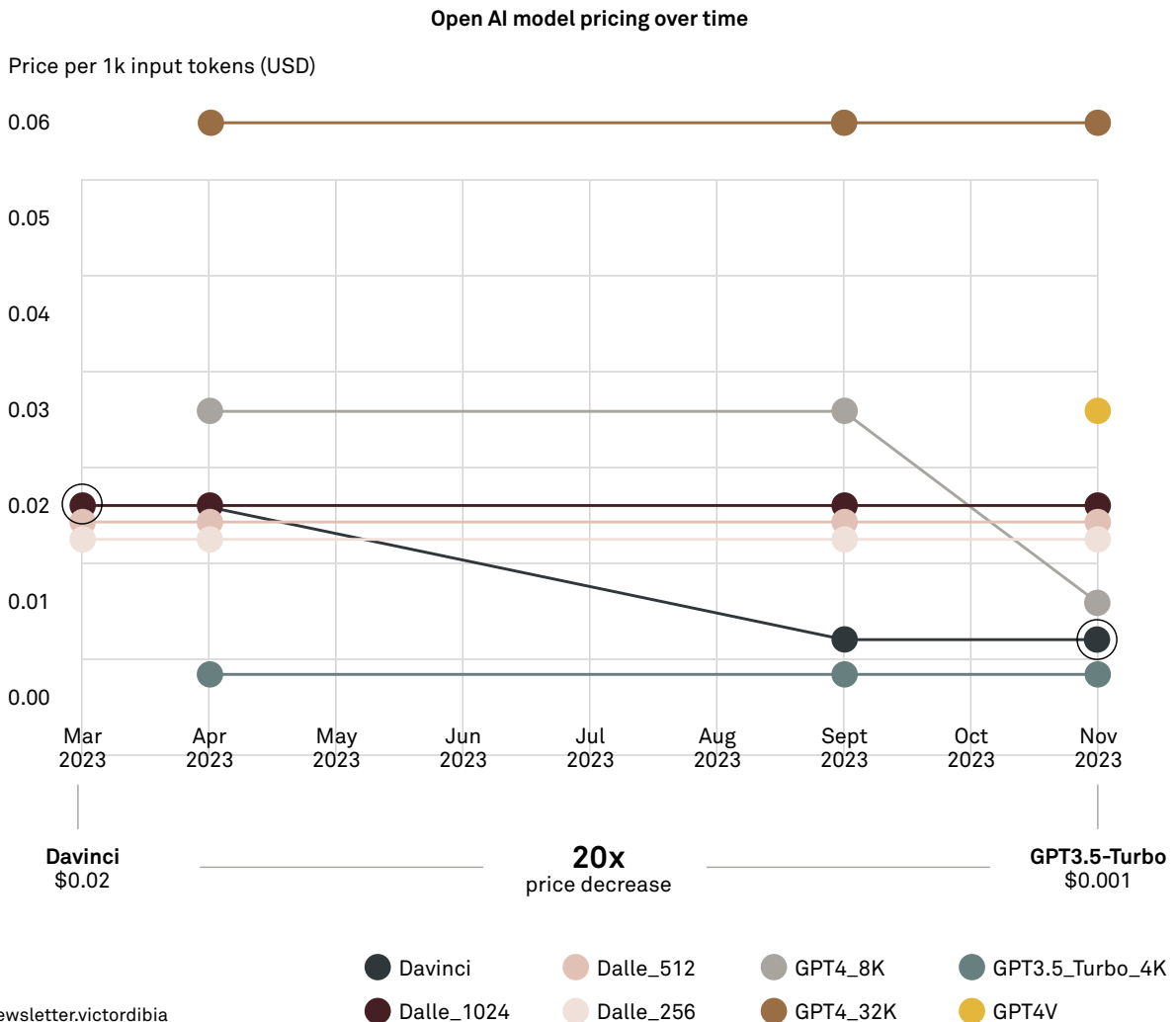


Smaller and cheaper

The price of a token has been dropping steadily through the year. Open-source models of very modest sizes and requirements are giving serious competition.



Cost reductions in LLMs over time



Compound effects

Cheaper, better, more widespread, better user adoption and more advanced implementations all lead to hard-to-predict outcomes for businesses.

Be aware of the compound effects of many of these trends, and how they might multiply.

