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May 13, 2026

The Next Decade Is Bigger Than You Think

Christopher Gannatti
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WisdomTree

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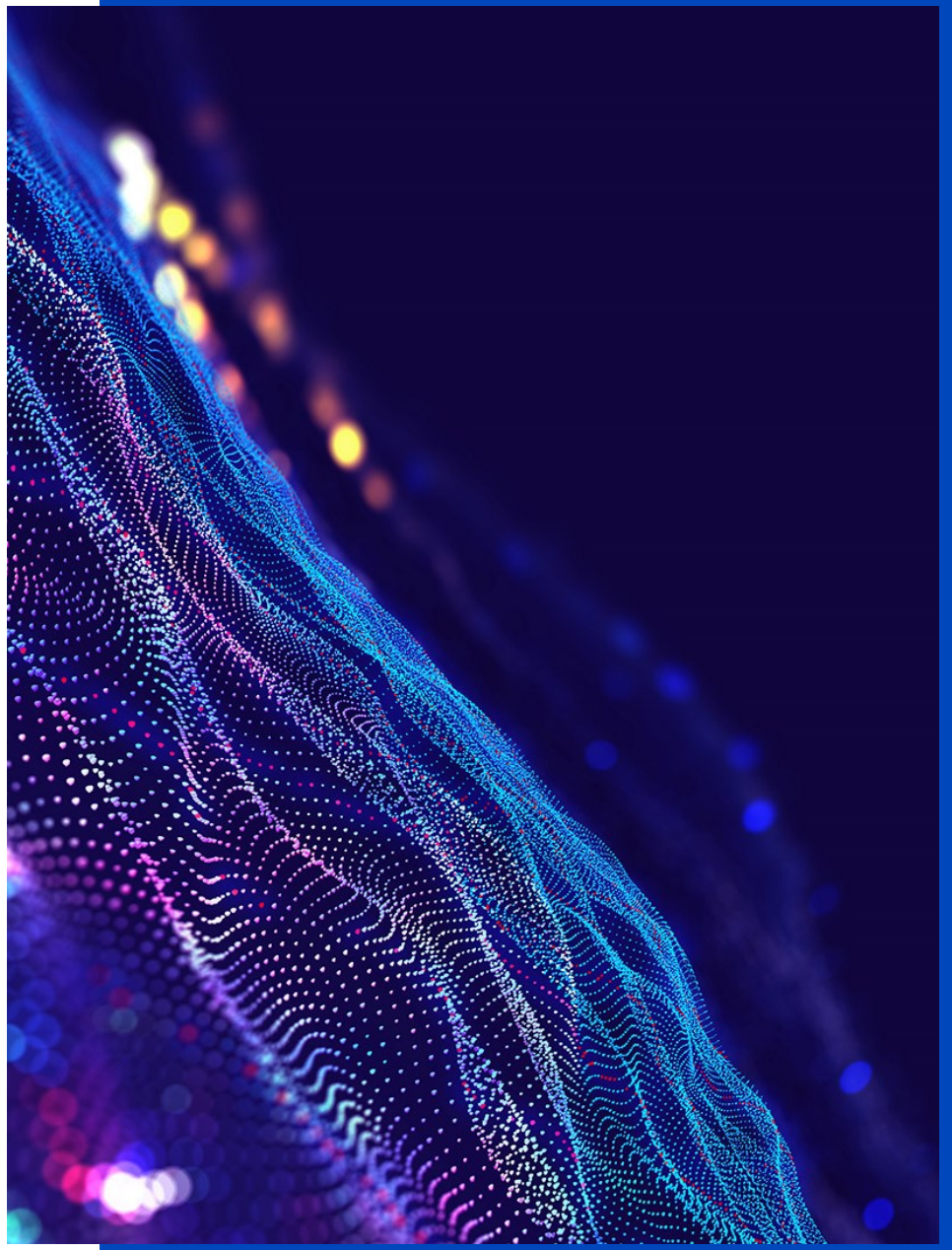
WisdomTree®

May 2026

The Next Decade Is Bigger Than You Think

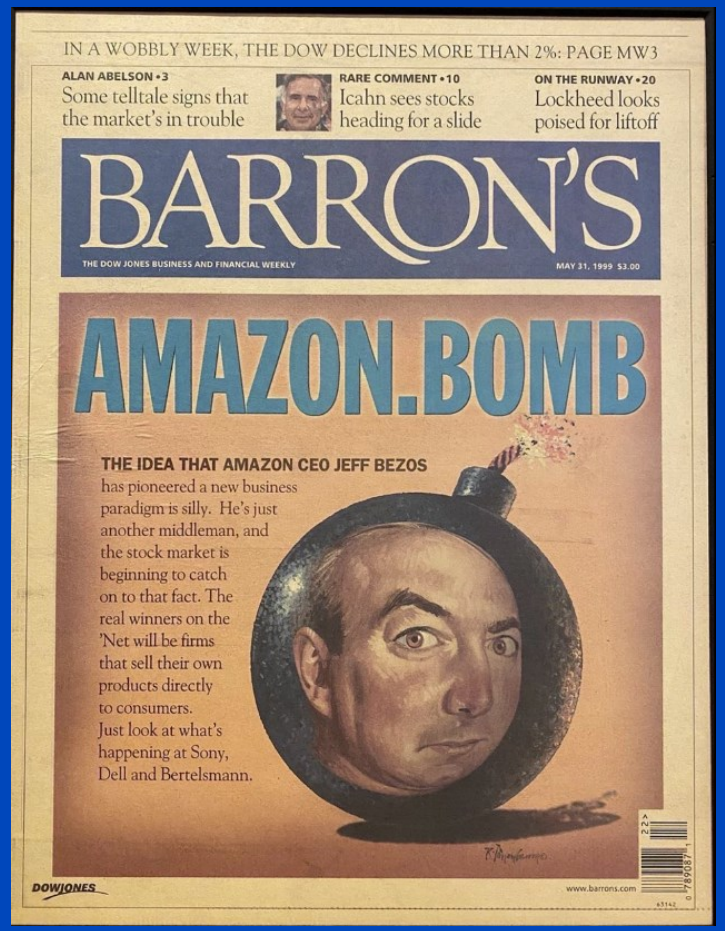


“We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run.”

Roy Amara
Former president of the Institute for the Future

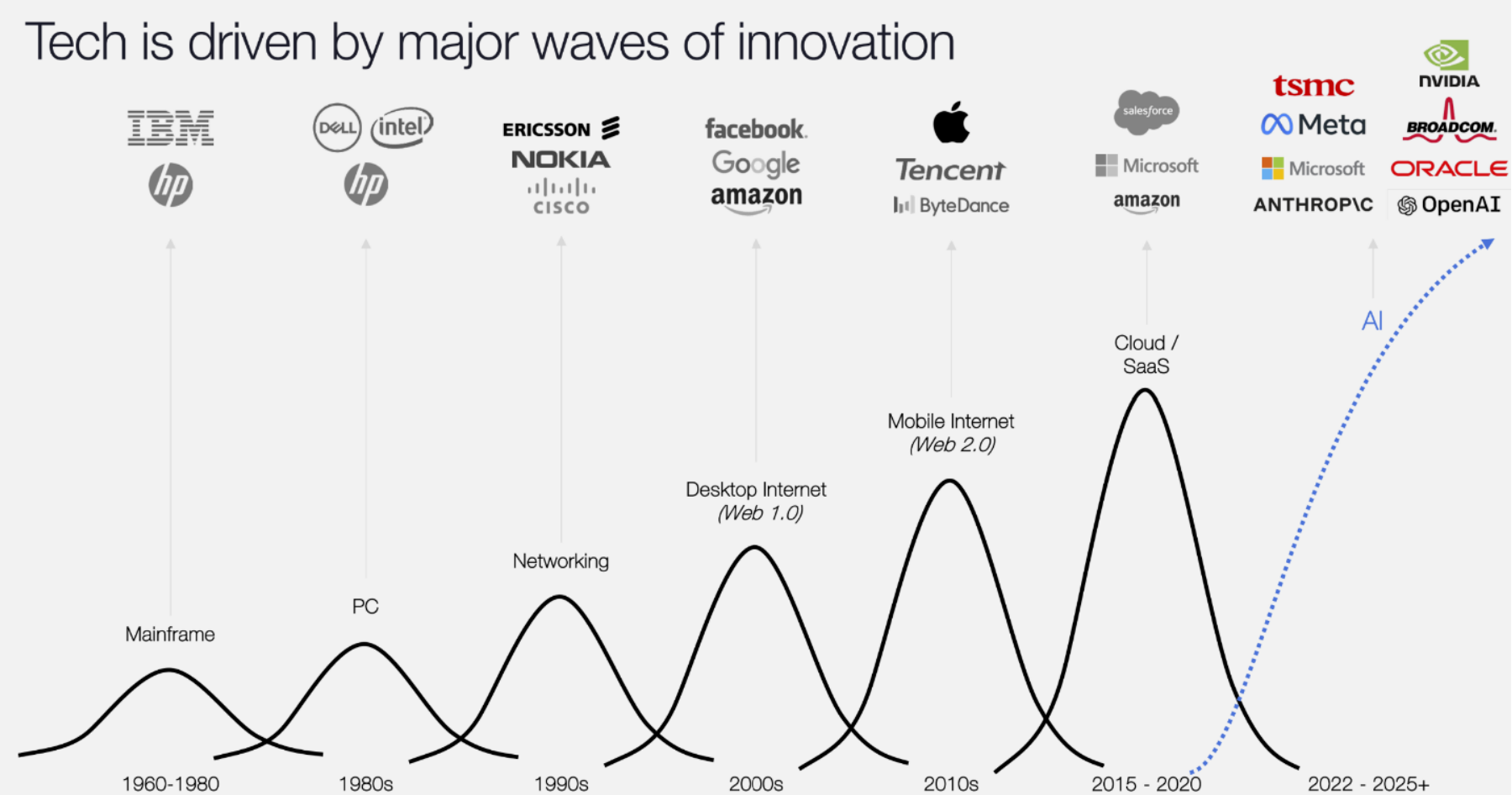
What Are We Discussing in ‘AI Conversations’?

From Mocked to Monumental



Sources: Santoli, M. (2012, September 24). *Facebook is worth $15* [Magazine cover]. *Barron's: The Dow Jones Business and Financial Weekly;* Reingold, J. (1999, May 31). *Amazon.bomb* [Magazine cover]. *Barron's: The Dow Jones Business and Financial Weekly.*

Riding the Waves: How Innovation Cycles Create the Next Tech Titans



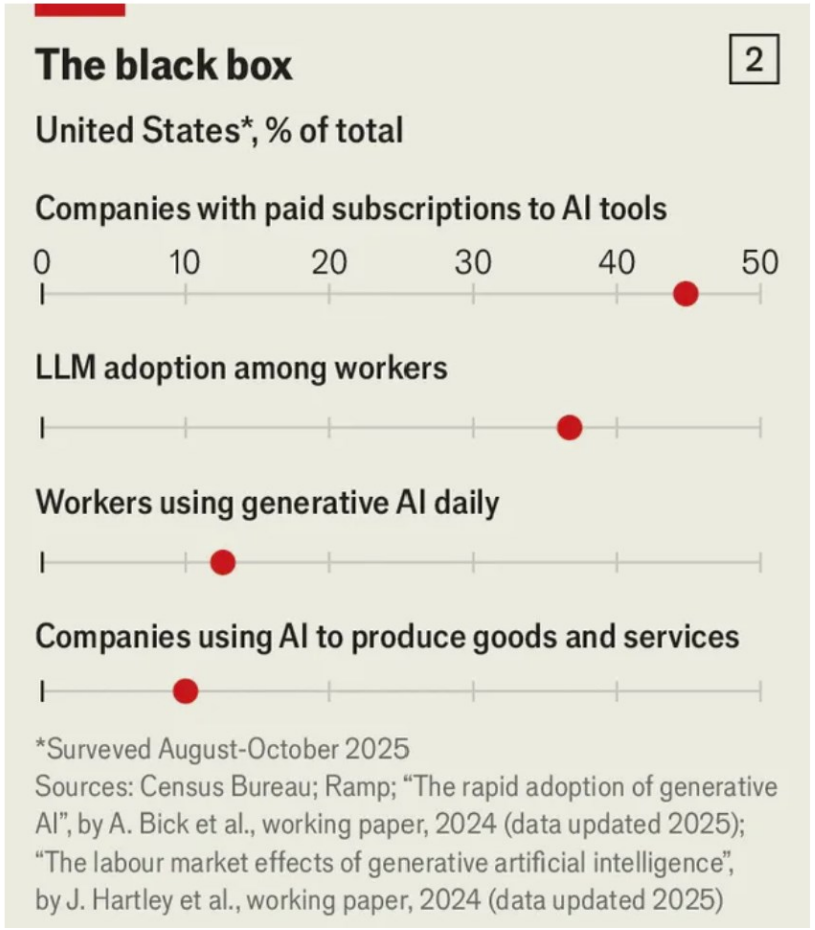
Source: Coatue, East Meets West Keynote from June 2025. https://www.coatue.com/blog/company-update/coatues-2025-emw-conference
Historical performance is not an indication of future performance and any investments may go down in value.

The AI Gap: Expectations Are Exploding. Adoption Isn't. (This is a specific Narrative we see in Different Places)

Finance & economics | Generally Paused Technology

Investors expect AI use to soar. That's not happening

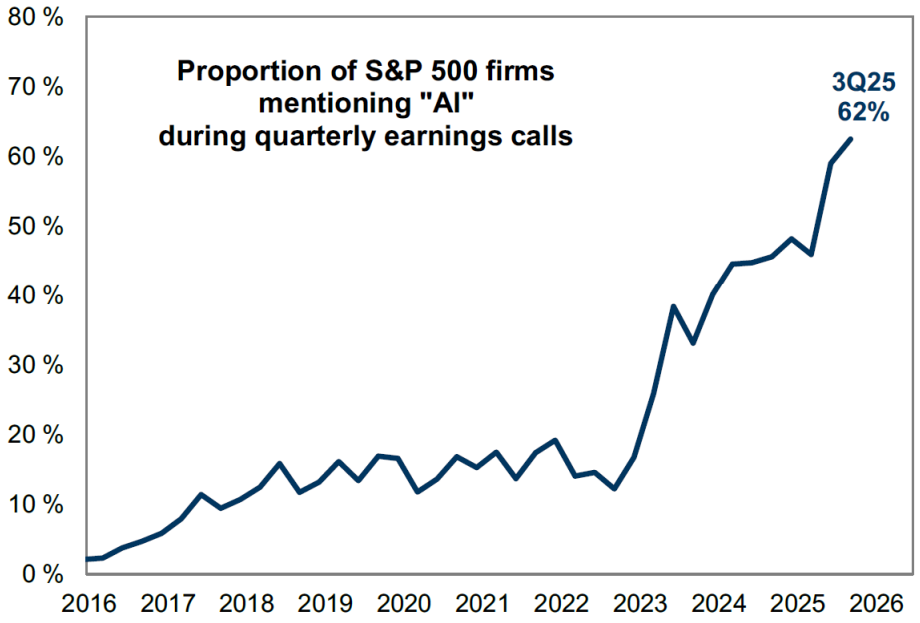
Recent surveys point to flatlining business adoption



Source: The Economist. (2025, November 26). *Investors expect AI use to soar. That's not happening.*

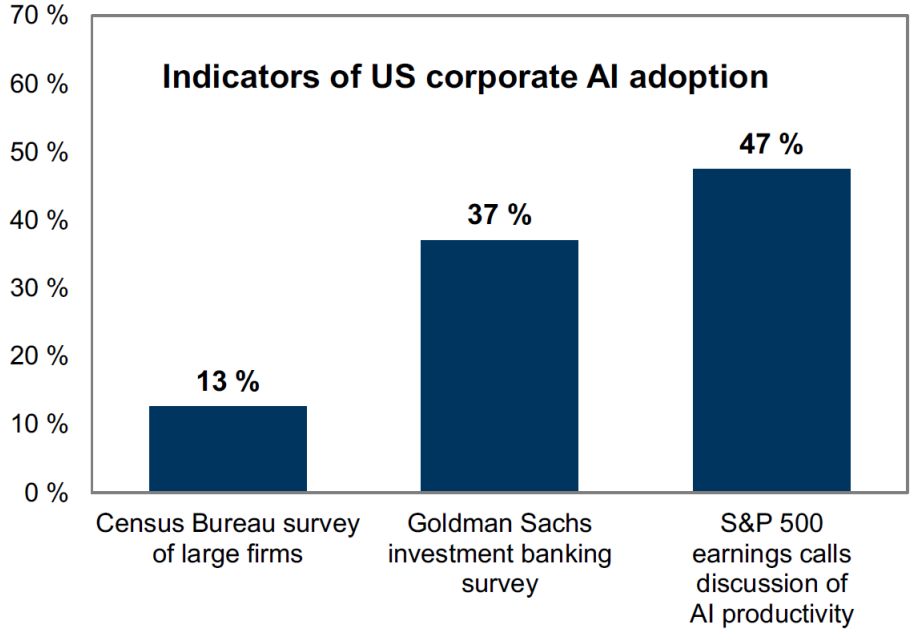
AI Has Reached Boardrooms Faster Than Workflows

Exhibit 1: The share of companies discussing AI on earnings calls continues to grow



Source: FactSet, Goldman Sachs Global Investment Research

Exhibit 2: Estimates of US corporate AI adoption
definitions of adoption vary by survey

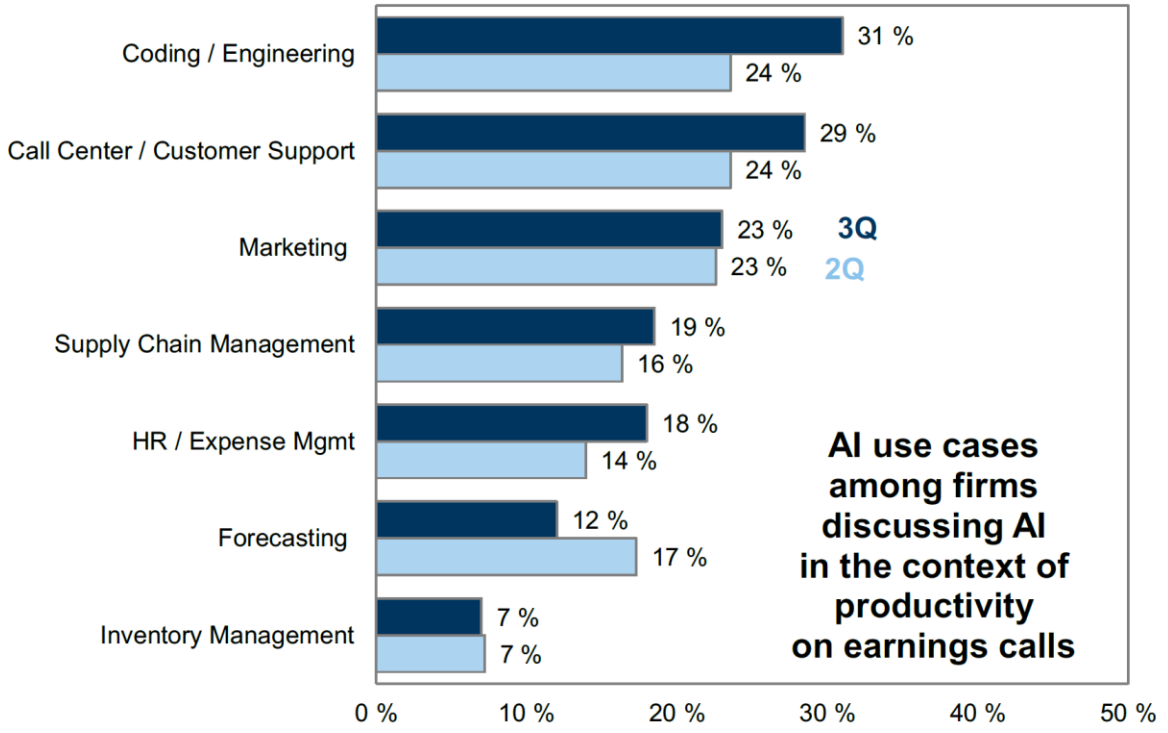


Source: Census Bureau, Goldman Sachs Global Investment Research

Kostin, D. J., Snider, B., Hammond, R., Ma, J., Chavez, D., Jayachandran, K., & Sung, C. (2025, November 14). *US Weekly Kickstart: What S&P 500 companies have said about AI adoption during the 3Q earnings season* (Portfolio Strategy Research). Goldman Sachs & Co. LLC.

Early AI Productivity Is Task-Level, Not Enterprise-Wide

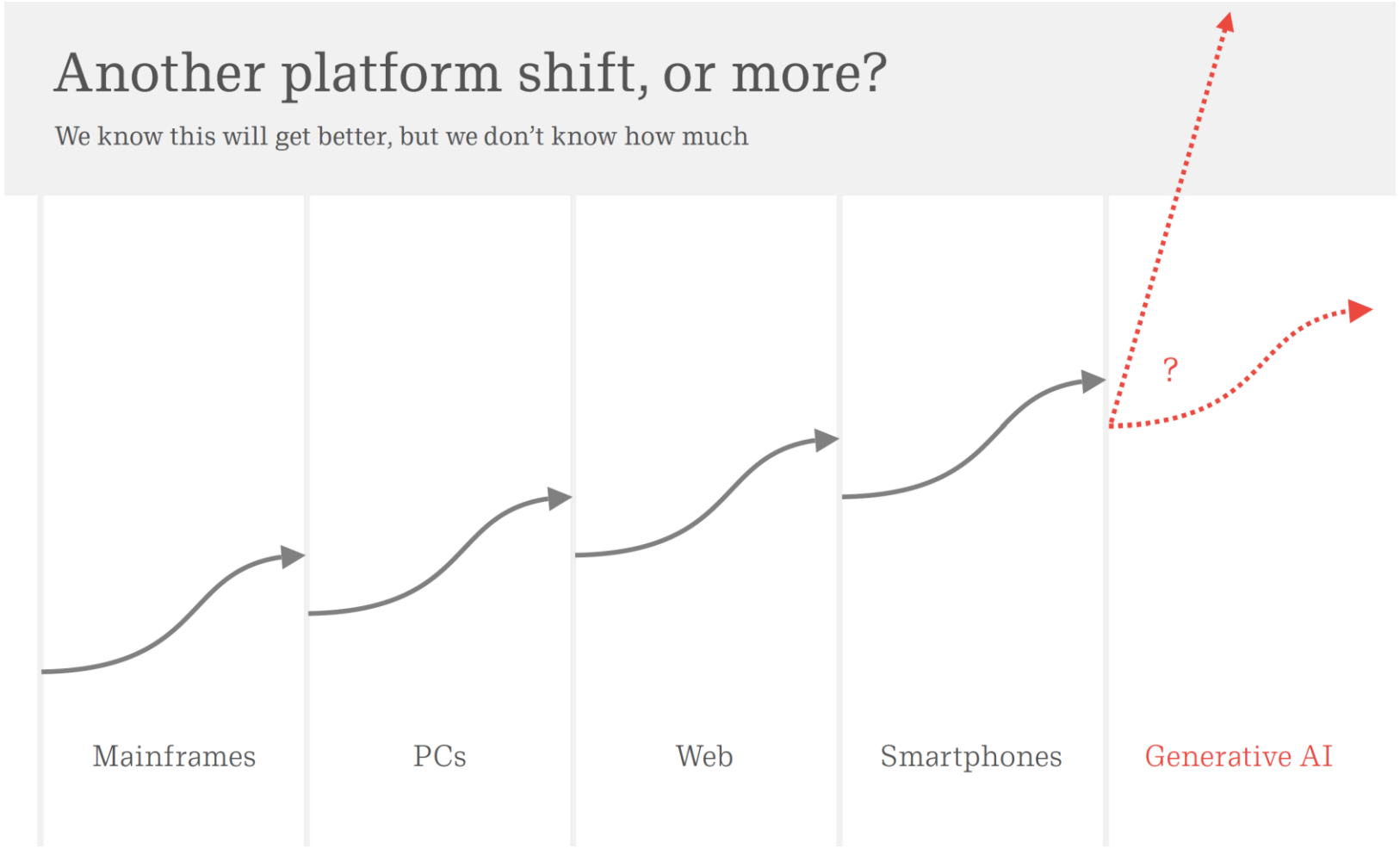
Exhibit 4: Productivity-related AI use cases



Source: Goldman Sachs Global Investment Research

Kostin, D. J., Snider, B., Hammond, R., Ma, J., Chavez, D., Jayachandran, K., & Sung, C. (2025, November 14). *US Weekly Kickstart: What S&P 500 companies have said about AI adoption during the 3Q earnings season* (Portfolio Strategy Research). Goldman Sachs & Co. LLC.

The First Platform Shift Where Outcomes May be Non-Linear



Source: Evans, B. (2025). *AI eats the world* (Autumn 2025).

No Consensus on How Far This Goes

One way this platform shift *is* different, though

For PCs, the web or smartphones, we knew the physical limits of what could happen next year

With LLMs, we don't know how much better this could get

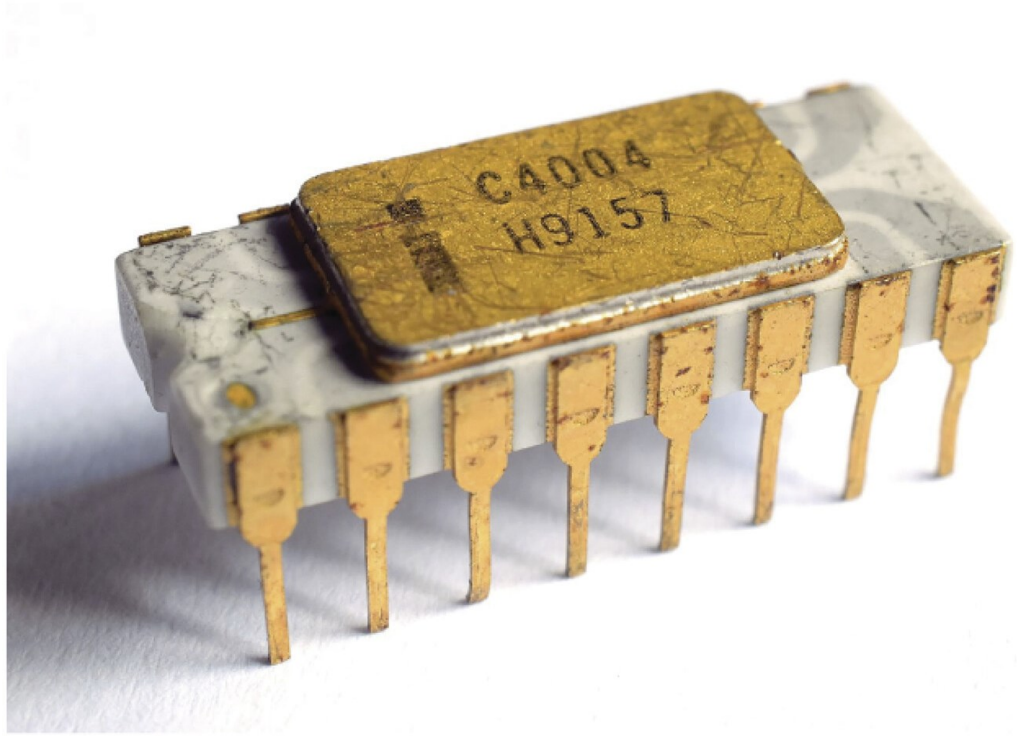
"The race to AGI is afoot"
Sergey Brin

"AGI needs multiple further breakthroughs"
Demis Hassabis

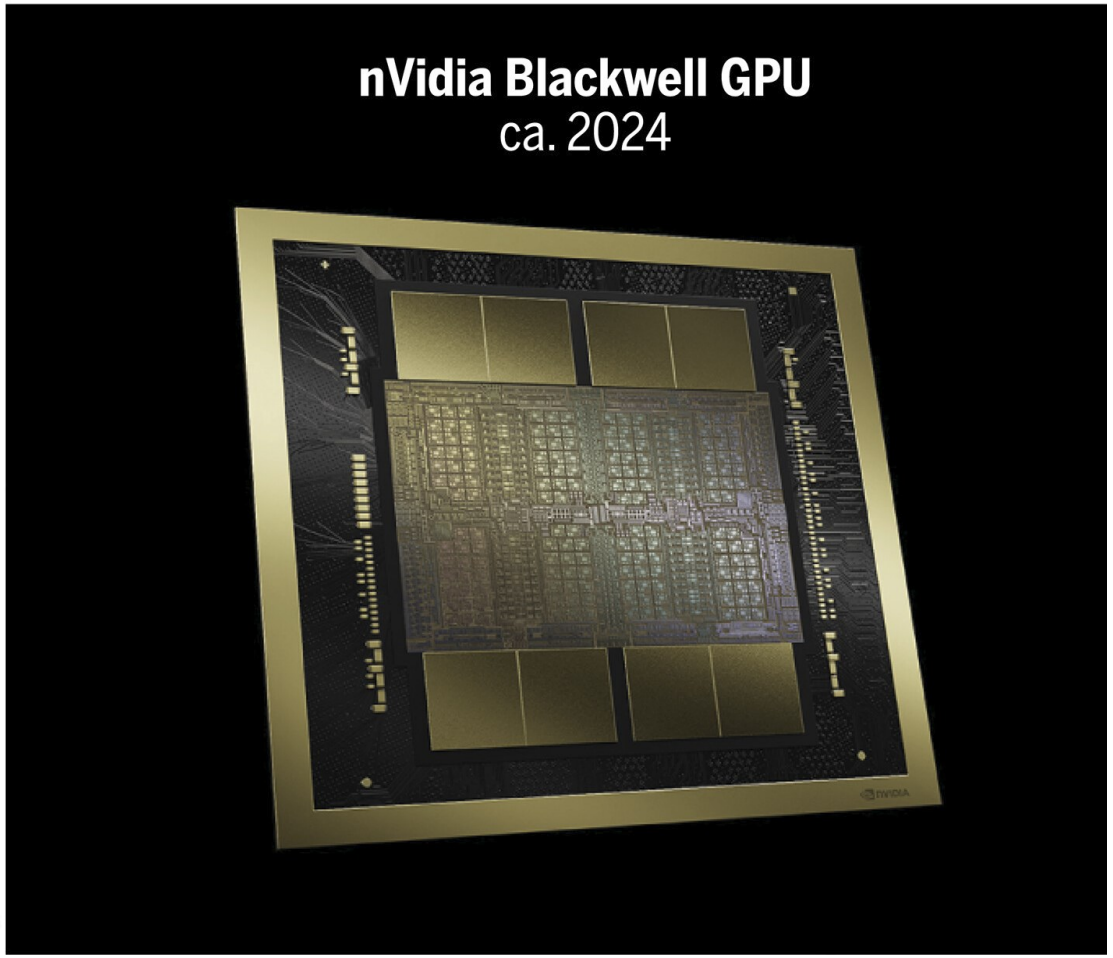
Source: Evans, B. (2025). *AI eats the world* (Autumn 2025).

Fifty Years of Compute Evolution

Intel 4004 processor
ca. 1971



nVidia Blackwell GPU
ca. 2024

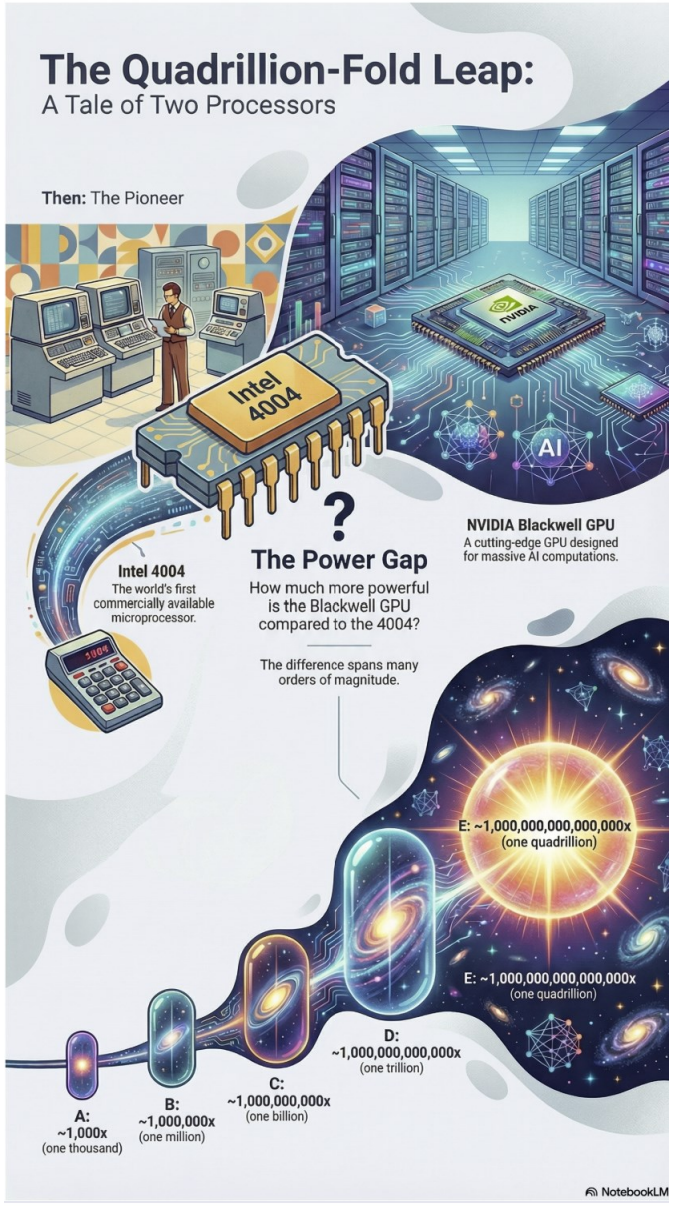


Source: Awschalom, D. D., Bernien, H., Hanson, R., Oliver, W. D., & Vučković, J. (2025). Challenges and opportunities for quantum information hardware. *Science, 390*(6777), 1004–1010.

How can we think of ‘Quadrillion’?

Assume you can try one idea per day:

+ 1,000× (10^3)→ 3 years of ideas per day
  + You get better — but still linear.
+ 1,000,000× (10^6)→ ~2,700 years of ideas per day
  + You stop choosing carefully; you explore freely.
+ 1,000,000,000× (10^9)→ ~2.7 million years of ideas per day
  + You brute-force entire possibility spaces.
+ 1,000,000,000,000,000× (10^{15})** ✅ → ~2.7 billion years of ideas per day
  + “At that scale, intelligence stops thinking and starts evolving.”

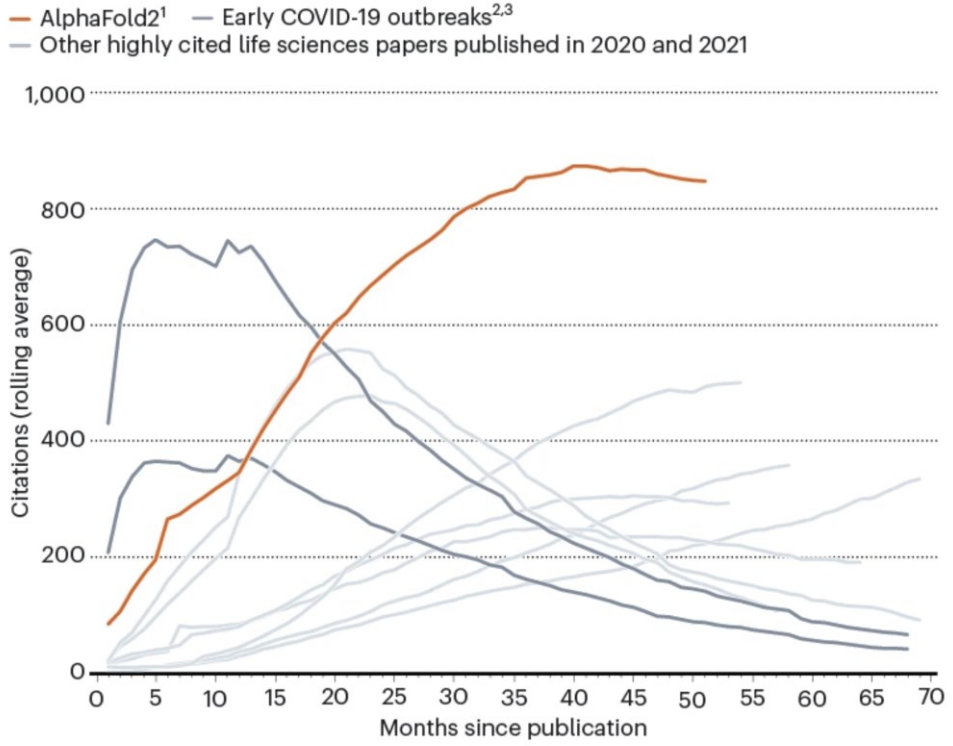


Sources: WisdomTree & ChatGPT (Numerical illustrations), Alphabet’s NotebookLM for the infographic based on the question and choices.

AlphaFold Shows What AI Looks Like When It Truly Works

PEAK CITATIONS

The 2021 *Nature* paper describing AlphaFold2 has been cited nearly 40,000 times by other studies. Unlike some other highly cited biomedical studies from 2020–21, including key COVID-19 papers, citations of the AlphaFold2 paper aren't dropping off.

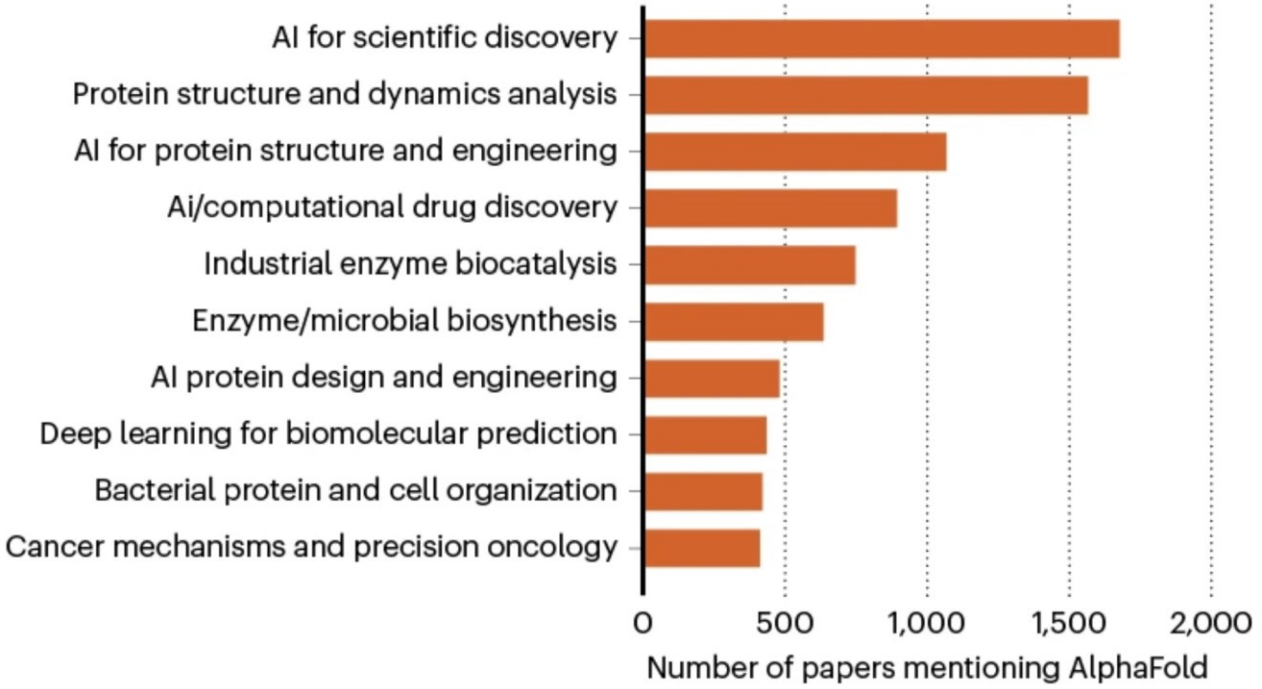


*1. Jumper, J. et al. *Nature* **596**, 583–589 (2021).
2. Zhou, P. et al. *Nature* **579**, 270–273 (2020).
3. Wu, F. et al. *Nature* **579**, 265–269 (2020).

©nature

BROAD APPLICATIONS

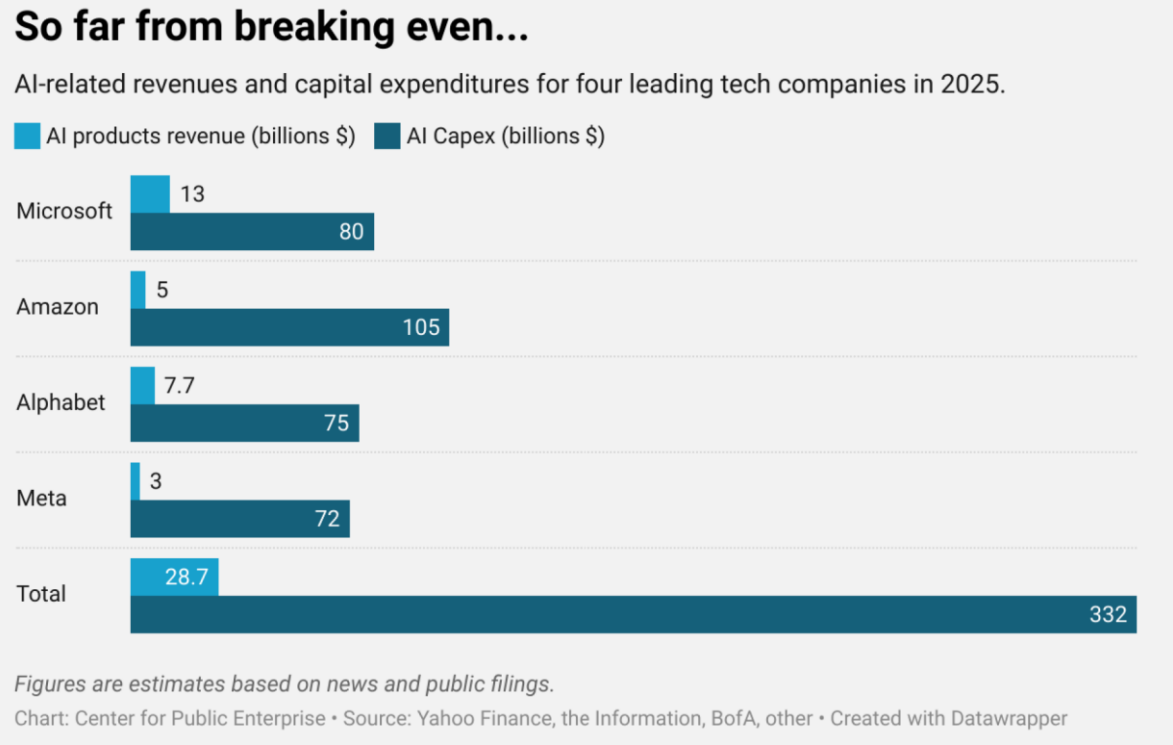
Papers citing AlphaFold cover a diverse range of topics. The most common involve research in machine learning and computation-heavy life-sciences applications such as AI for protein design and drug discovery, according to an analysis of citation data.



©nature

Source: Callaway, E. (2025, November 26). *AlphaFold is five years old — these charts show how it revolutionized science. Nature.*

How do we define ‘AI Revenue’?



META	
Family of Apps	AI recommendation systems delivering 5%/10% more time spent on FB/Threads in 3Q
	Video time spent on IG up 30%+ since last year, with Reels run rate now $50bn+
	Improvements to products and recommendations drove global time spent acceleration on both FB and IG
	Time spent on FB and IG in the US grew double-digits Y/Y driven by strength in video and healthy growth in non-video time on FB
	Improvements to recommendation systems will become even better as volume of AI created content grows
	ARR for end-to-end AI-powered ad tools passed $60bn
	Since launching Vibes within Meta AI in Sept., media generation in the app has increased 10x+
Reality Labs	New Ray-Ban Meta glasses and Oakley Meta Vanguards selling well. People love improved battery, camera, new AI capabilities, and design

Arun, A. (2025). *Bubble or nothing: Data center project finance.* Center for Public Enterprise; Nowak, B., Castagno, T., Bombassei, M., Chintala, N. R., Cost, M., Herrera, J., & Javeri, N. (2025, October 30). *GOOGL and META: Revisions vs. narratives and the road to ’26*. Morgan Stanley Research.

Hundreds of Millions of Users, Billions of Tokens—Google's AI Flywheel Is Turning

Exhibit 1: GOOGL's AI-based products are continuing to see growing adoption

Product	1Q:25 and Google I/O	2Q:25
Search		
AI Overviews	1.5bn+ MAUs across 140 countries and 15 languages	2bn+ MAUs across 200 countries and 40 languages
Queries	Volume of commercial queries has increased	Overall queries and commercial queries on Search continue to grow YoY
AI Mode		100mn+ MAUs in the US and India
Google Lens	Monthly Lens visual searches have grown by 5bn since Oct. (mostly incremental), and the number of people shopping on Lens grew by 10%+. At I/O, GOOGL announced Lens grew 65% YoY to 100bn+ visual searches this year already, with 1.5bn+ MAUs.	Google Lens searches are one of the fastest growing query types on search and grew 70% since this time last year (majority are incremental)
Circle to Search	Now on 250mn+ Android devices with usage increasing 40% this quarter	Now on 300mn+ Android devices
Gemini / AI		
Gemini Developer Adoption		9mn developers have built with Gemini
Veo 3		70mn+ videos have been generated using Veo 3
Tokens Processed	480tln monthly	980tln monthly
Gemini App MAUs	More than 400mn+ MAUs with usage up 45% among those using Gemini 2.5	More than 450mn MAUs with daily requests growing over 50%
Google Vids (Short Video Product in Workspace Powered by Veo 3)		Nearly 1mn MAUs
Enterprise Adoption of Gemini		85,000+ enterprises now build with Gemini, driving a 35x lift in Gemini usage YoY
Gemma	140mn+ model downloads	
AlphaFold	Used by over 2.5mn researchers	
Advertiser Tools		
AI Max for Search		Advertisers that activate AI Max for Search typically see 14% more conversions
Smart Bidding Exploration		Smart Bidding Exploration leading to a 19% increase in conversions on average
Ad Creative Tools		2mn+ advertisers use AI-powered asset generation tools to run ads (+50% YoY)
Demand Gen	Businesses using Demand Gen see an avg 26% YoY lift in conversions per dollar spent for goals like purchases/leads. When using Demand Gen with product feed, they see 2x+ the conversion per dollar spent YoY	

Berkshire Hathaway Inc + Add to myFT

Berkshire Hathaway reveals $4.3bn stake in Alphabet as it trims Apple holdings

Position in Google's parent company could be one of the conglomerate's final new investments under Warren Buffett

Warren Buffett, 95, is retiring as chief executive and will step back from day-to-day management of Berkshire Hathaway by the end of the year © Reuters

Source: Nowak, B., Bombassei, M., Chintala, N. R., Cost, M., & Herrera, J. (2025, July 24). *Alphabet Inc. (GOOGL.O): AI driven acceleration; remain OW* [Equity research report]. Morgan Stanley & Co. LLC: Pollard, A., & Bradshaw, T. (2025, November 14). *Berkshire Hathaway reveals $4.3bn stake in Alphabet as it trims Apple holdings*. Financial Times.

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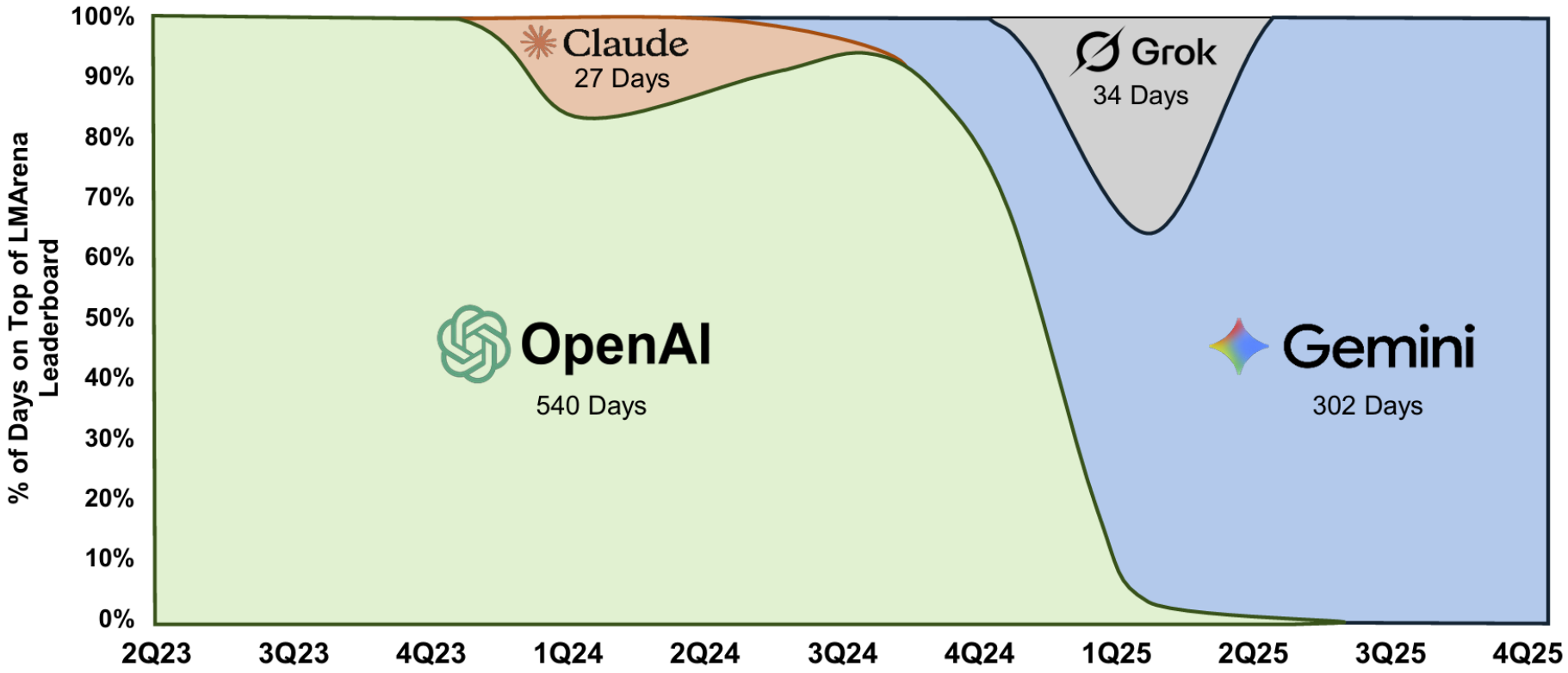
Public Opinion Follows Sustained AI Leadership

Exhibit 6: Days spent at the top of the LMArena scores by model developer



Source: chneider, J., Makkar, A., Kress, C., Balaban, D., Kablan, L., & You, L. (2025, December 15). *2026 outlook: The next phase of the AI trade; continued momentum in WFE and cyclical improvement in analog; ratings re-stack* (Equity research report). Goldman Sachs Global Investment Research.

Tesla’s Bet: Inference at Planetary Scale

Tesla’s Distributed Inference ‘Brain’

Distributed Inference Cloud Connecting Tesla’s ‘Robots’

- Theorized by CEO Elon Musk using Tesla AI5 chip and ongoing designs, reducing need for datacenters.

2,500 TFLOPS Each

x

50% Avg Available Utilization

x

100 Million Robots

=

125,000 ExaFLOPS
~7 Million B200 GPU Equivalents
Power & Cooling Already On Device

Note: Calculation is MS assumptions for visual purposes, not an explicit projection. Based on B200 FP4 Tensor Core at 18 PetaFLOPS.
Source: xAI/Tesla, Morgan Stanley Research

Source: Morgan Stanley Global Embodied AI Team. (2025, December). *The robot almanac* (Vol. 2: *How to train your robot; geopolitics; rare earths; Sagan’s prophecy*). Morgan Stanley Research.

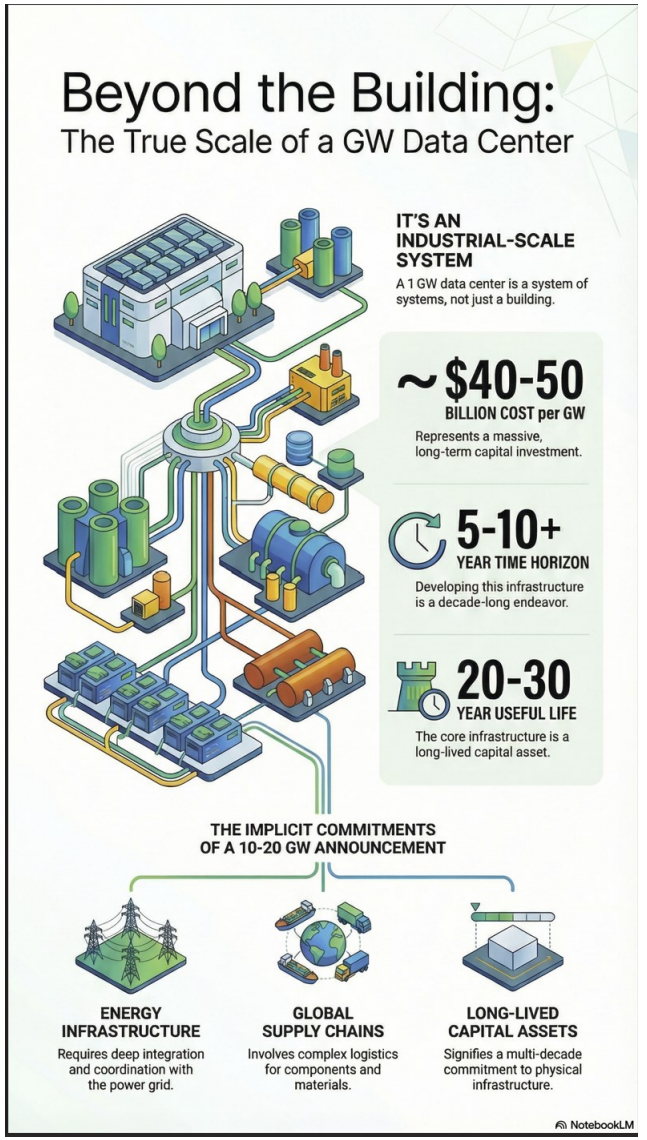
Placing a Gigawatt Scale System in Context

What Does 1 GW of Data Centers Actually Mean?

- **A 1 GW data center is not a building—it's an industrial-scale system of systems**
  - **Cost: ~$40–50 billion per GW**
  - **Time horizon: 5–10+ years**
  - **Useful life of infrastructure: 20–30 years**

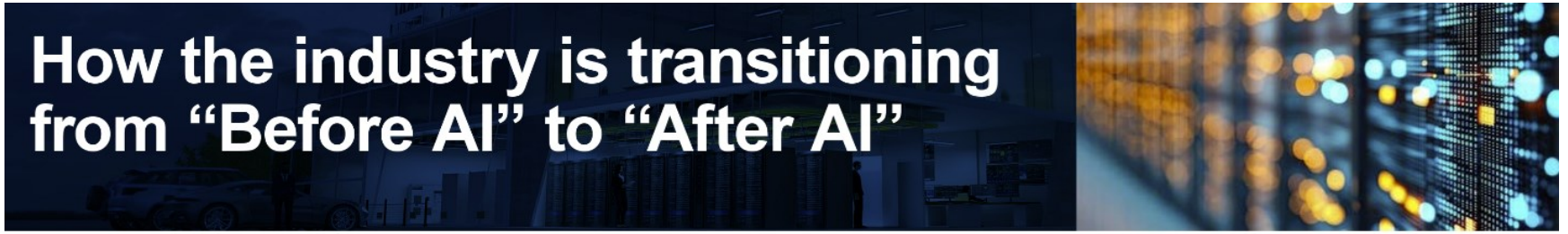
  - **When companies announce 10–20 GW, they are implicitly committing to:**
    - **Energy infrastructure**
    - **Grid coordination**
    - **Global supply chains**
    - **Long-lived capital assets**

- **Understanding what goes into the stack helps investors interpret scale, bottlenecks, and beneficiaries**



Source: International Energy Agency. (2024). *Electricity 2024: Analysis and forecast to 2026*. IEA.

From Growth to Gridlock: Why Power is the #1 Constraint in the AI Era



Theme #1: Barriers to build-out

44% of respondents indicate their average quoted utility wait times are longer than **4 years.**

48% of respondents report the size of a single new data center project averages over **100 megawatts.**

6 IN 10 are building more than **10 data centers** over the next five years, with **25% building at least 30.**

Theme #2: Tradeoffs and timelines

#1 ranked barrier slowing down data center projects is **grid constraints**, with 92% seeing it as an obstacle.

#1 ranked barrier in getting more electrical capacity is overly **long quoted wait times** from utilities.

35% reported their **carbon emissions accelerated** over past two years, since the AI race began.

Theme #3: Assessing the alternative

6 IN 10 report they would deploy **on-site power** generation systems if they ran into concerns about power availability — the top-ranked option.

#1 region for "**Plan B**" power availability if the first choice couldn't provide timely power was the Midwest.

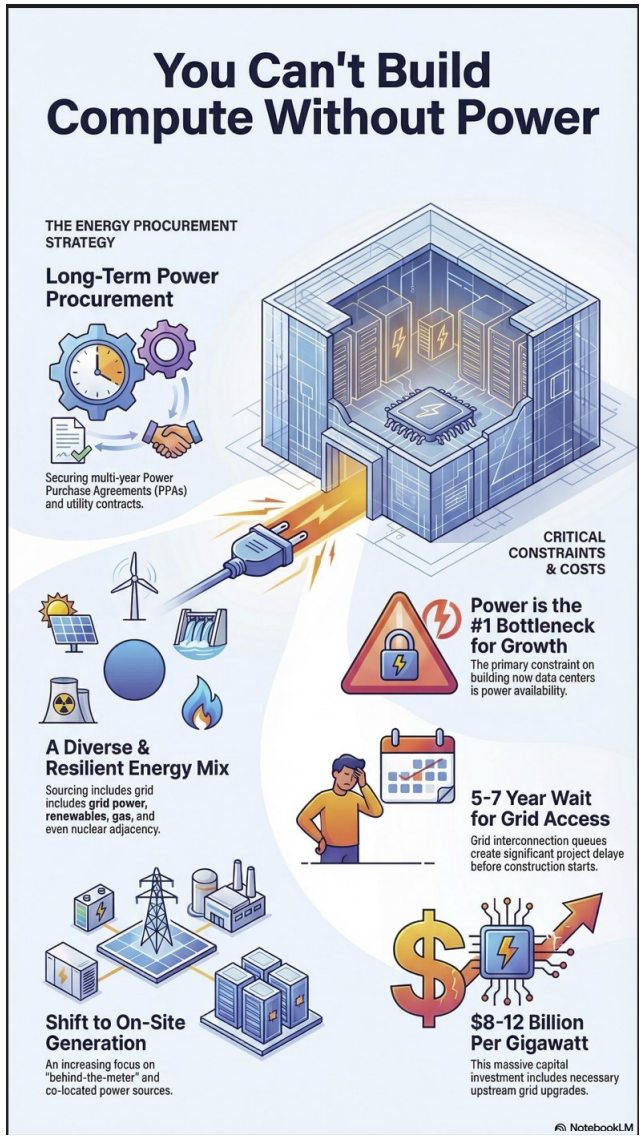
#1 & #2 ranked on-site power generation solutions were **solar and battery storage.**

Source: AlphaStruxure, Schneider Electric, & Data Center Frontier. (2025). *Before AI, after AI: Surveying the data center industry as it enters a new age of constrained energy supply*. AlphaStruxure; Schneider Electric; Data Center Frontier.

Power Origination & Energy Strategy

You Can’t Build Compute Without Power

- What this is
  - Long-term power procurement (PPAs, utility contracts)
  - Mix of grid power, renewables, gas, nuclear adjacency
  - Increasing focus on behind-the-meter and co-located generation
- Why it’s critical
  - Power availability is the primary constraint on data center growth
  - Grid interconnection queues can run 5–7 years
  - Energy strategy decisions precede physical construction
  - Capital intensity~$8–12B per GW (including upstream grid upgrades)
- Company examples
  - Utilities: NextEra Energy, Duke Energy, Dominion
  - IPPs: Brookfield Renewable, Constellation Energy
  - Grid equipment: GE Vernova, Siemens Energy



Source: U.S. Department of Energy. (2024). *United States data center energy usage report*. Office of Energy Efficiency and Renewable Energy.

Trump has signed executive orders to quadruple US nuclear capacity by 2050

Executive Orders Signed on 23rd May 2025 include:

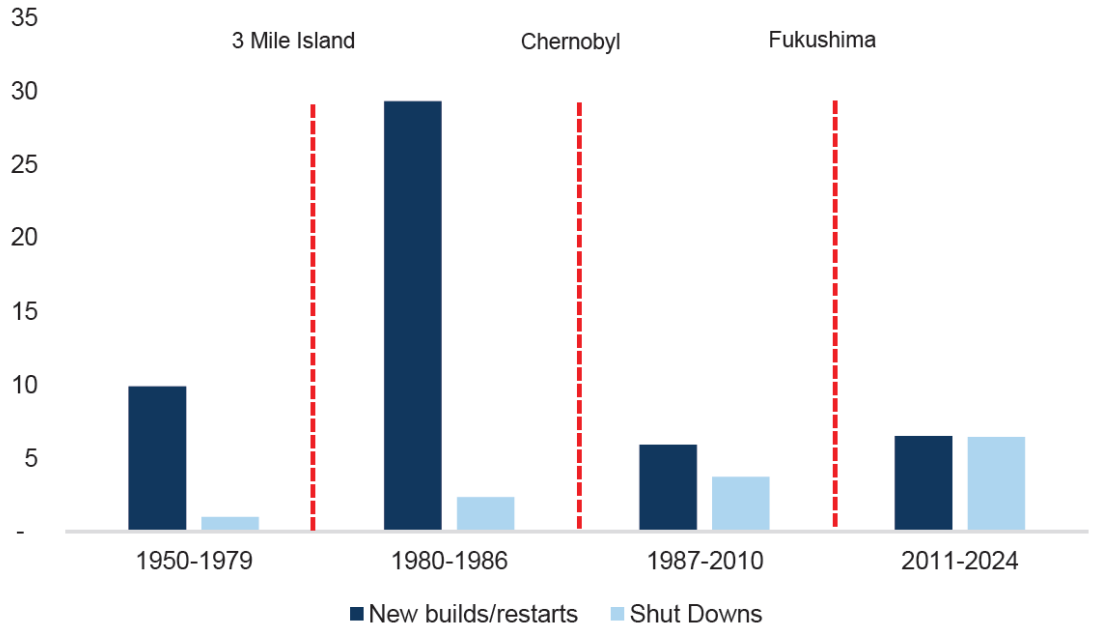
+ Quadrupling of US nuclear capacity from 100GW to 400GW by 2050
+ Fast-tracking 10 large new reactors by 2030
+ Prioritising advanced reactor deployment (SMRs, microreactors, generation IV technologies)

Source: World Nuclear News, White House, June 2025. SMRs are small modular reactors.

The Rise and Stall of Global Nuclear Development

Exhibit 9: After a period of rapid growth, new nuclear reactors have been offset by shutdowns over the past decade

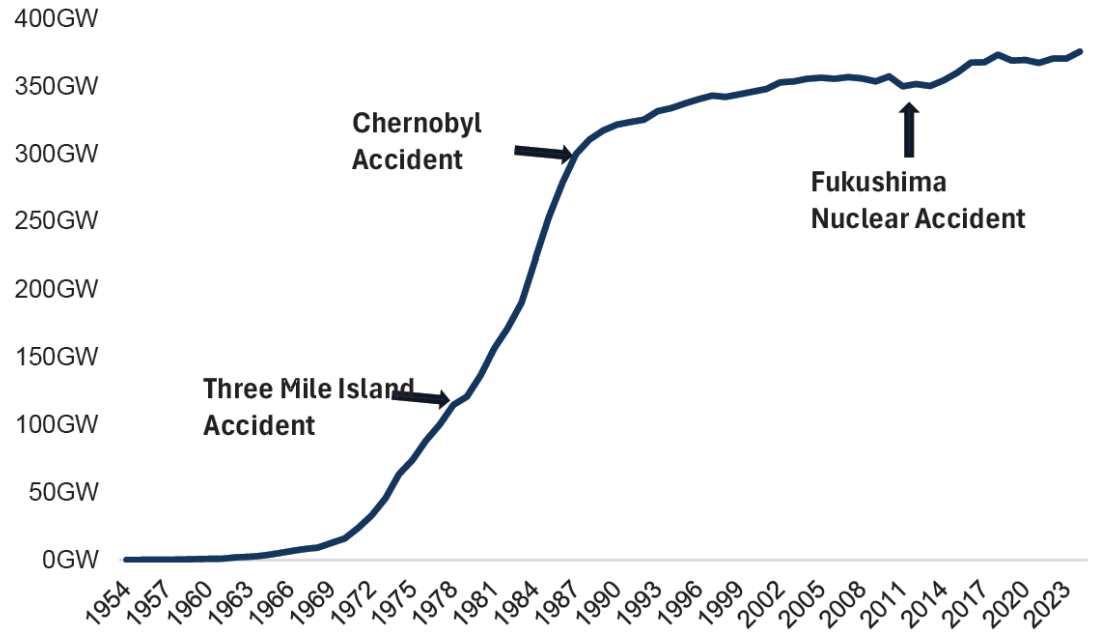
Average annual new reactor builds vs. shutdowns annually



Source: PRIS, Data compiled by Goldman Sachs Global Investment Research

Exhibit 10: The buildout of nuclear power plants started in the 1950s but stagnated in the 2000s

Historical cumulative GW of nuclear power globally

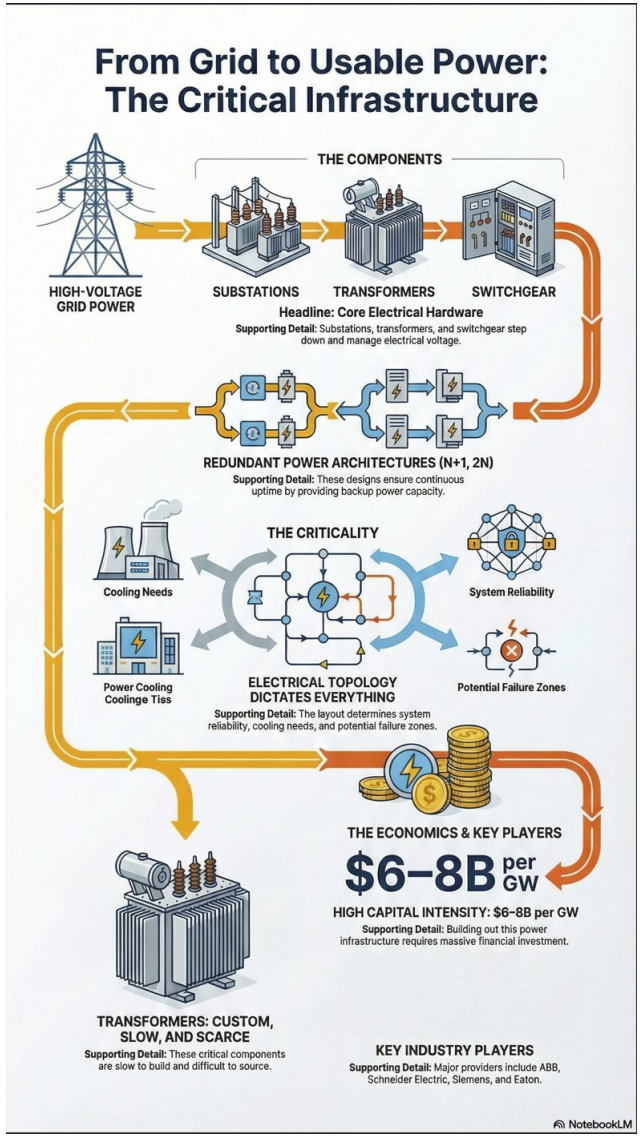


Source: PRIS, Goldman Sachs Global Investment Research

Source: Adams, S., Pickering, L., Walker, L., & Serre, A. (2024, March 12). *The nuclear playbook for energy transition* [Industry report]. Clean Energy. Historical performance is not an indication of future performance and any investments may go down in value.

Turning Grid Power into Usable Compute Power

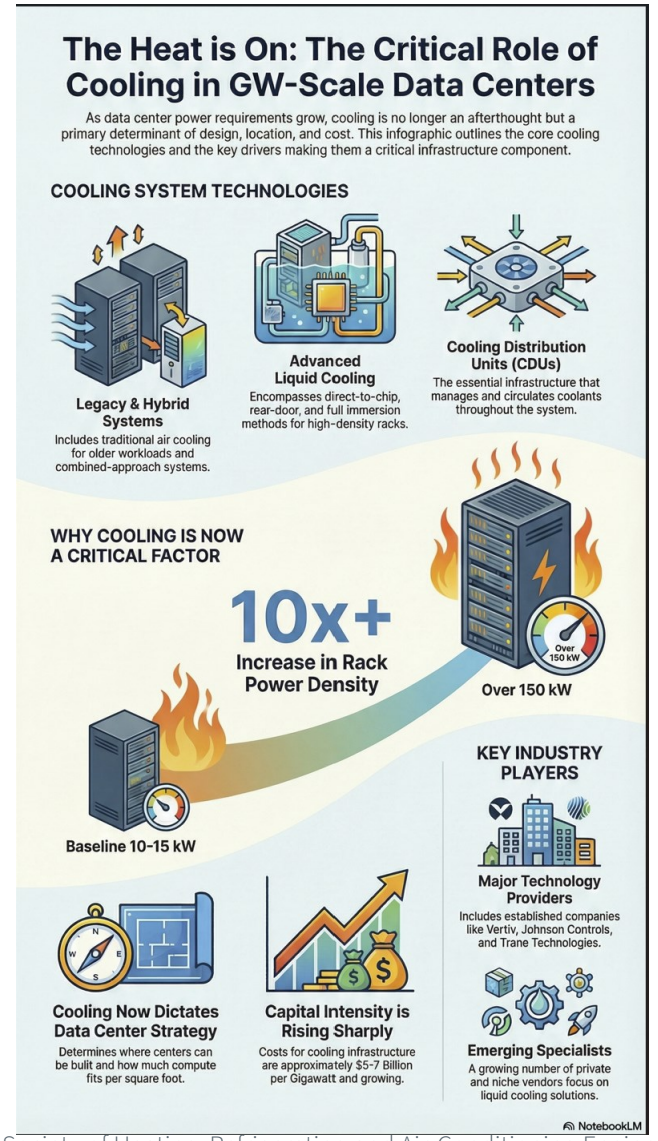
- What this is
  - Substations (on-site and off-site)
  - Transformers (high-voltage → medium → low)
  - Switchgear, breakers, busways
  - Redundant power architectures (N+1, 2N)
- Why it's critical
  - Electrical topology dictates:
    - Reliability
    - Cooling layout
    - Failure domains
  - Transformers are custom, slow-to-build, and scarc
- Capital intensity~$6–8B per GW
- Company examples
  - ABB
  - Schneider Electric
  - Siemens
  - Eaton



Source: U.S. Department of Energy. (2023). *Data center energy efficiency and infrastructure requirements*. Office of Energy Efficiency and Renewable Energy.

AI Turned Cooling into a First-Class Constraint

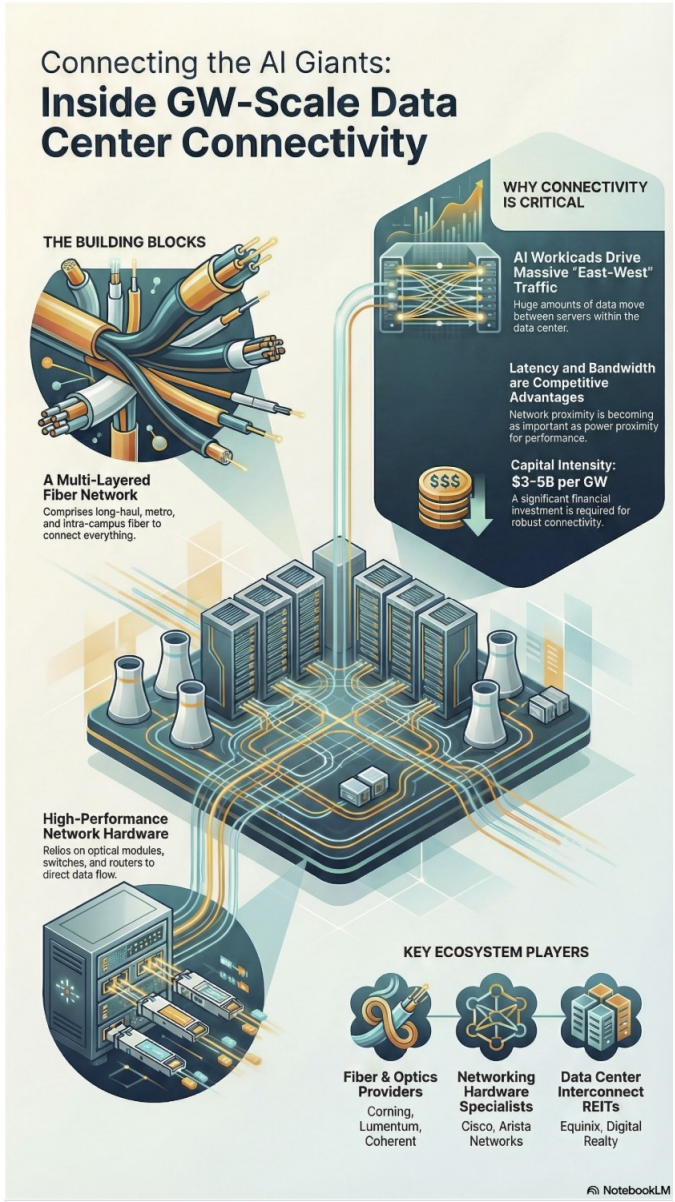
- What this is
  - Air cooling (legacy workloads)
  - Hybrid systems
  - Liquid cooling (direct-to-chip, rear-door, immersion)
  - Cooling distribution units (CDUs)
- Why it's critical
  - Rack densities rising from:~10–15 kW → 80–150+ kW
- Cooling now determines:
  - Where data centers can be built
  - How much compute fits per square foot
- Capital intensity~$5–7B per GW (and rising)
- Company examples
  - Vertiv
  - Johnson Controls
  - Trane Technologies
  - Niche liquid cooling vendors (private + emerging)



Sources: ASHRAE Technical Committee 9.9. (2023). *Thermal guidelines for data processing environments* (5th ed.). American Society of Heating, Refrigerating and Air-Conditioning Engineers; Uptime Institute. (2024). *Global data center survey 2024*. Uptime Institute Intelligence; NVIDIA. (2023). *Data center cooling solutions for accelerated computing*. NVIDIA Corporation.

Compute Without Connectivity Is a Stranded Asset

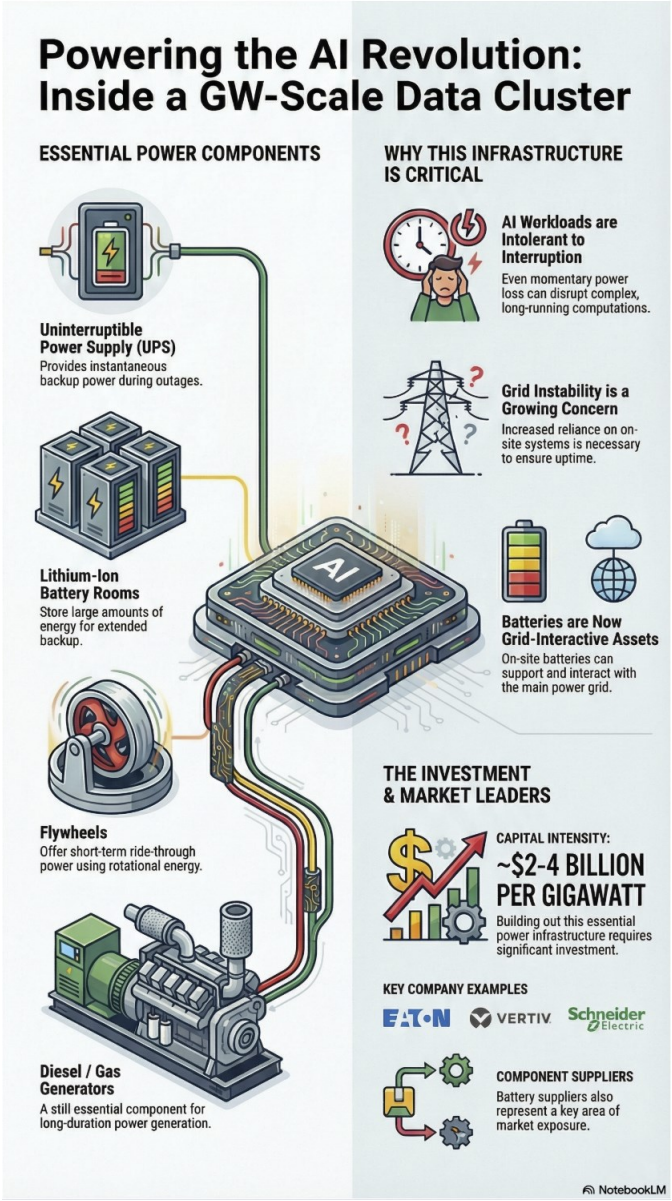
- What this is
  - Long-haul fiber
  - Metro fiber
  - Intra-campus fiber
  - Optical modules, switches, routers
- Why it's critical
  - AI workloads drive massive east–west traffic
  - Latency and bandwidth are competitive advantages
  - Network proximity increasingly rivals power proximity
- Capital intensity~$3–5B per GW
- Company examples
  - Fiber & optics: Corning, Lumentum, Coherent
  - Networking: Cisco, Arista Networks
  - Data center REITs with dense interconnect: Equinix, Digital Realty



Sources: Cisco Systems, Inc. (2023). *Cisco global cloud index: Forecast and methodology, 2018–2023*. Cisco; Uptime Institute. (2024). *Global data center survey 2024*. Uptime Institute Intelligence; NVIDIA. (2024). *Scaling AI with high-performance networking*. NVIDIA Corporation.

Uptime Is Non-Negotiable

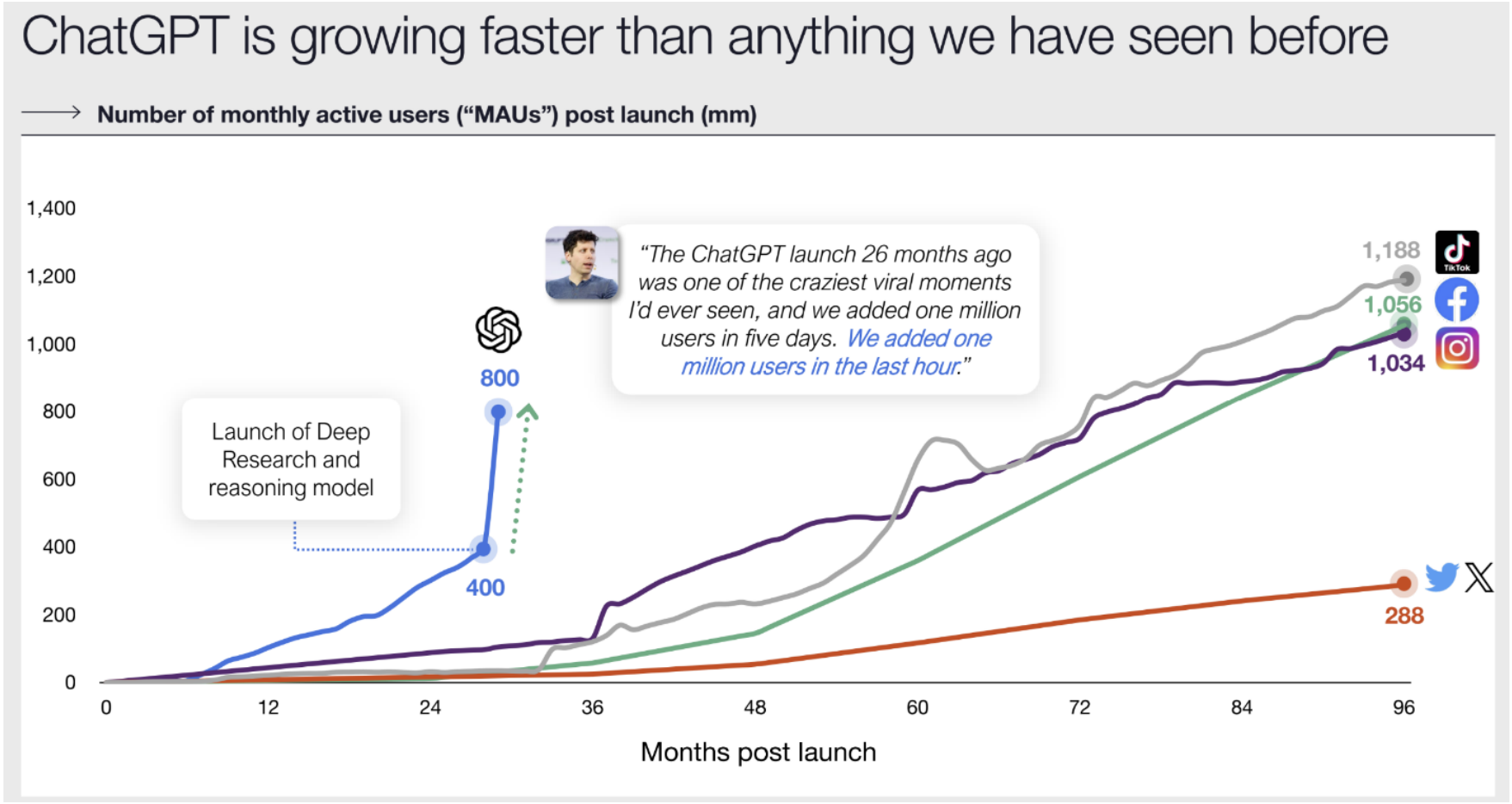
- What this is
  - UPS systems
  - Lithium-ion battery rooms
  - Flywheels
  - Diesel / gas generators (still essential)
- Why it's critical
  - AI workloads are intolerant to interruption
  - Grid instability increases reliance on on-site systems
  - Batteries increasingly viewed as grid-interactive assets
- Capital intensity~$2–4B per GW
- Company examples
  - Eaton
  - Vertiv
  - Schneider Electric
  - Battery suppliers (select exposure)



Sources: U.S. Department of Energy. (2023). *Grid-interactive efficient buildings and data centers*. Office of Energy Efficiency and Renewable Energy; IEEE Standards Association. (2022). *IEEE Std 3007.7-2022: Recommended practice for uninterruptible power systems*. IEEE; McKinsey & Company. (2024). *Powering resilience: The rising cost of data center uptime*. McKinsey Global Institute.

OpenAI: A New Paradigm or Cautionary Tale?

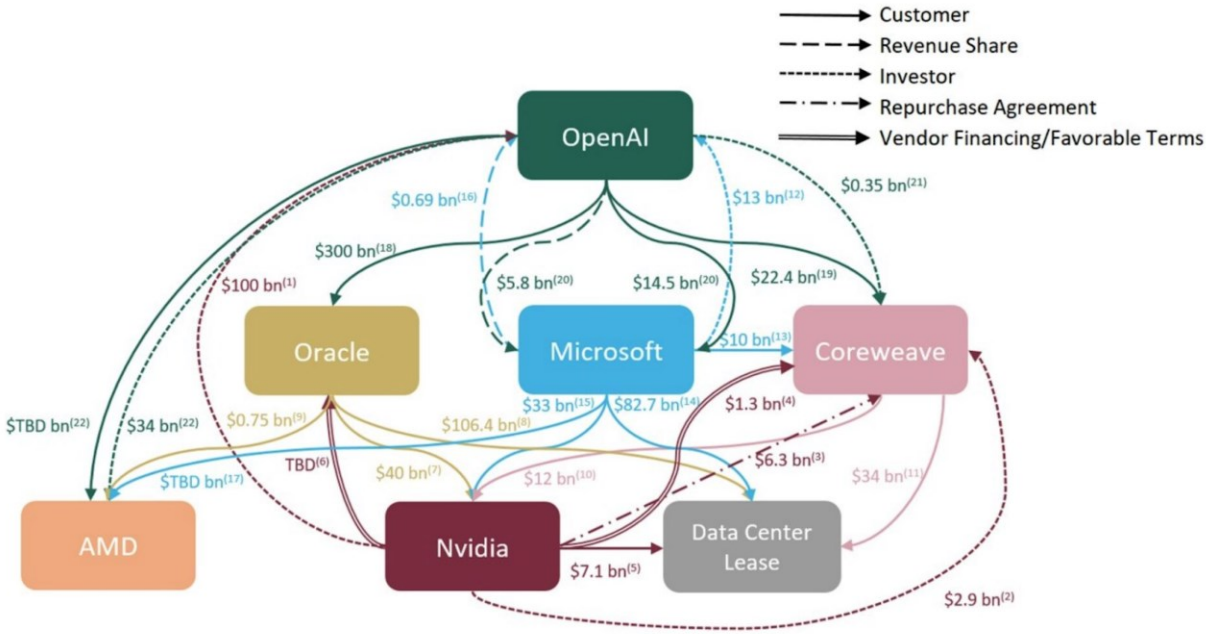
This Isn’t a Curve. It’s a Rocket.



Source: Coatue, East Meets West Keynote from June 2025. https://www.coatue.com/blog/company-update/coatues-2025-emw-conference
Historical performance is not an indication of future performance and any investments may go down in value.

When Suppliers, Customers, and Investors Are the Same

Web of Circular AI Deals



Source: Morgan Stanley, Sparkline.

Billions of dollars, back and forth.

A stylized list of recent deals between leading AI companies.

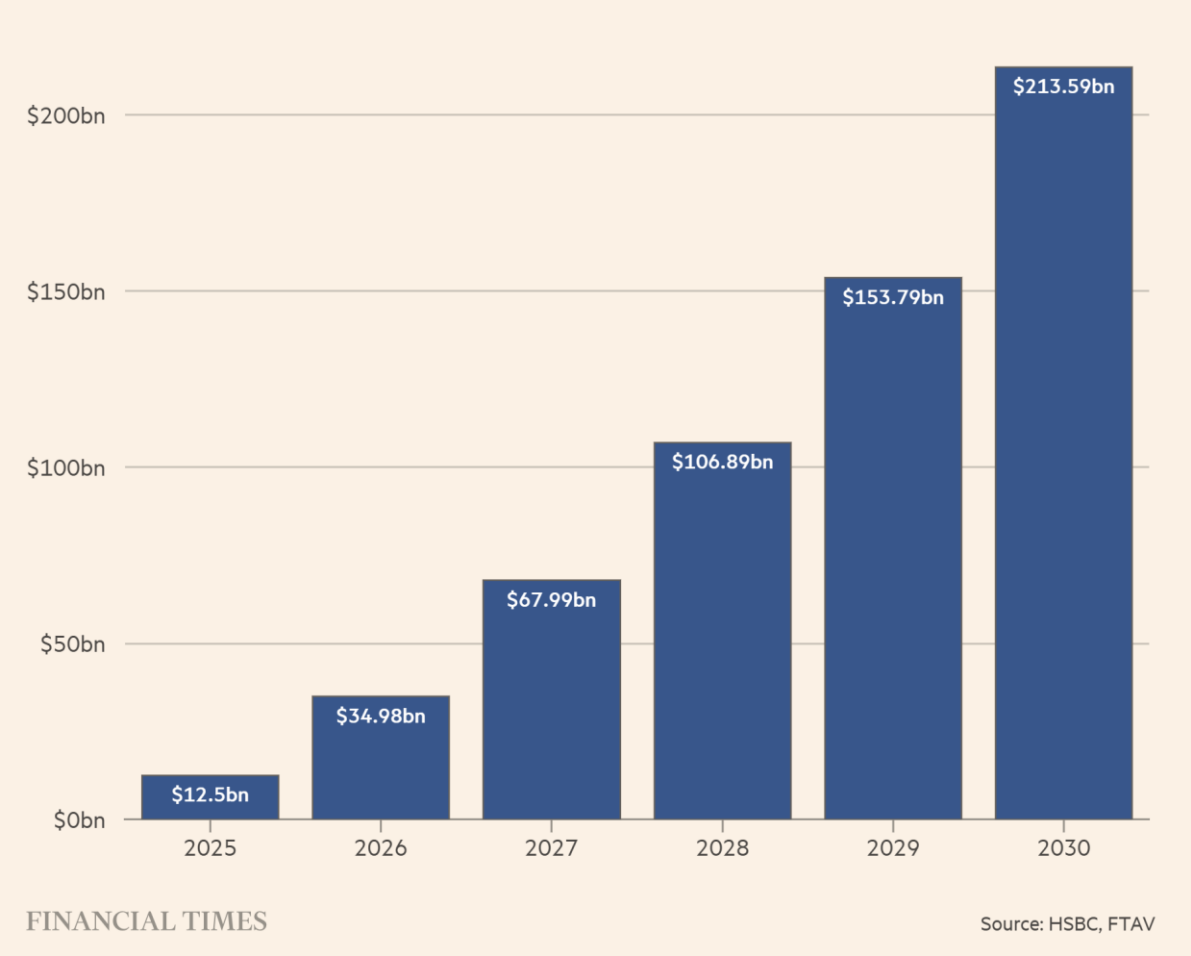
Relationship	Description
Nvidia and OpenAI	Nvidia agrees to invest up to $100 billion in OpenAI.
OpenAI and Oracle	OpenAI inks a $300 billion cloud deal with Oracle.
Nvidia and CoreWeave	Nvidia buys $6.3 billion of cloud services from CoreWeave.
OpenAI and CoreWeave	OpenAI to pay CoreWeave as much as $22.4 billion.
OpenAI and AMD	OpenAI agrees to deploy billions of dollars worth of AMD chips.
Oracle and Nvidia	Oracle is spending $40 billion on Nvidia chips.
Nvidia and Intel	Nvidia invests $5 billion in Intel and plans to co-develop chips.

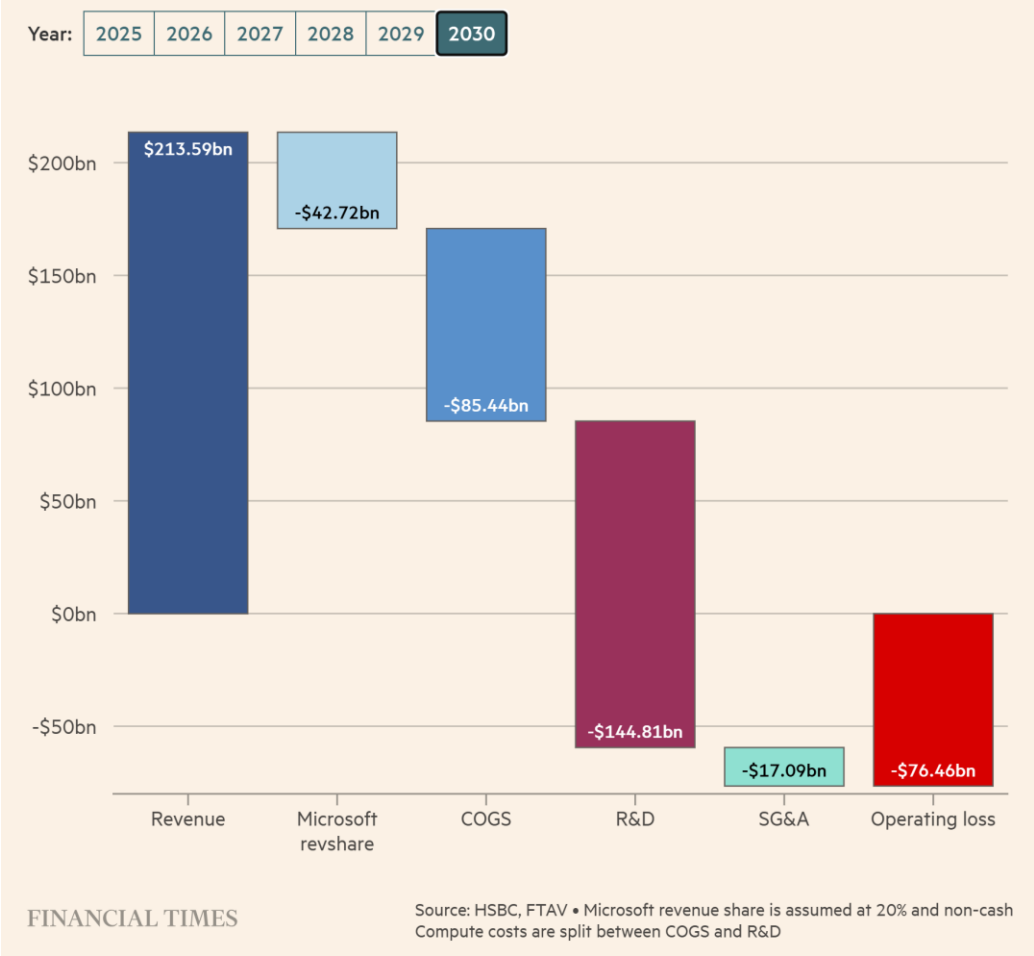
These deals represent a selection of the relationships between some of the most prominent AI players.

Table: Center for Public Enterprise • Source: Bloomberg, author's additions • Created with Datawrapper

Wu, K. (2025, October). *Surviving the AI capex boom*. Sparkline Capital; Arun, A. (2025). *Bubble or nothing: Data center project finance*. Center for Public Enterprise.

OpenAI in 2030: Massive Scale, Uncertain Profitability





Source: Elder, B. (2025, November 25). *OpenAI needs to raise at least $207bn by 2030 so it can continue to lose money, HSBC estimates. FT Alphaville*. Financial Times.

AI Infrastructure Has a Longer Useful Life Than Critics Assume

Network/Compute Depreciation Useful Life (Years)

Company	2020	2021	2022	2023	2024	2025
META	3	4	4½	4½	4½	5½
GOOG	3	4	4	6	6	6
ORCL	5	5	5	5	6	6
MSFT	3	4	6	6	6	6
AMZN	4	4	5	5	6	5

Source: Company SEC Filings

- **Hyperscalers aren't gaming earnings—hardware is simply lasting longer.** Burry's critique hinges on a 2–3 year GPU cycle, but real-world datacenter operations show that servers, networking gear, and storage consistently run well beyond 5 years when properly serviced.

- **Reliability improvements have structurally extended asset life.** Since 2020, better cooling, sturdier OEM warranties (5–7 years), and mature parts-replacement ecosystems have pushed practical server lifetimes beyond pre-AI norms.

- **Operational incentives strongly favor longer use cycles.** CAPEX-heavy hyperscalers benefit massively from stretching depreciation schedules—especially in the "After Da Launch of ChatGPT" era where AI spend has exploded.

- **HPC and supercomputers prove the durability case.** Flagship systems like IBM Summit (6.5 years), Sierra (7+ years), Fugaku (5+ years), and Sunway TaihuLight (9+ years) demonstrate that the world's most thermally demanding compute can run reliably for far longer than 3–5 years.

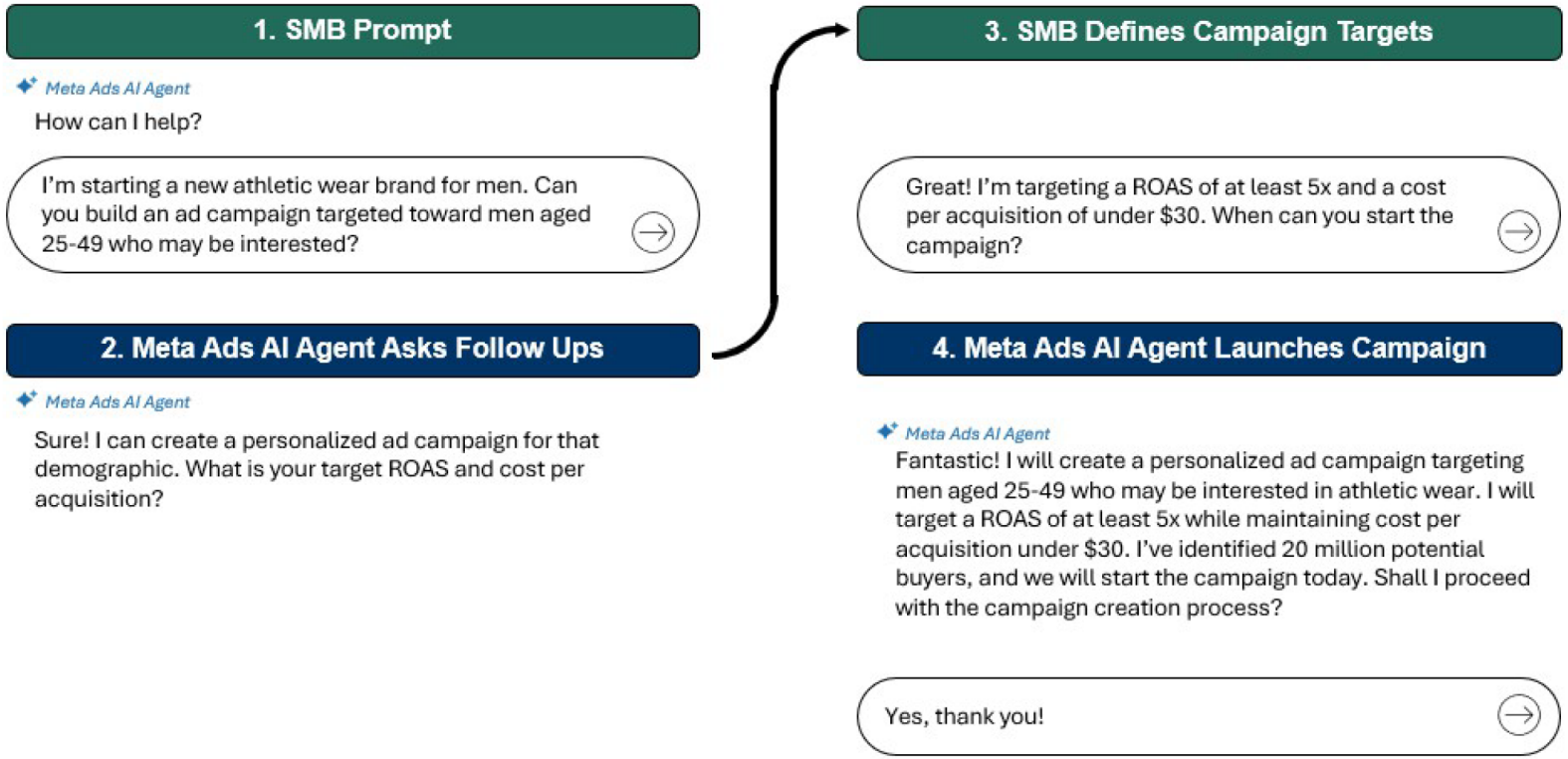
- **Even cutting-edge AI clusters behave like long-lived infrastructure.** Microsoft's Eagle (14,400 H100s, installed 2023) and the newest exascale machines are expected to operate into the late 2020s and early 2030s—showing that depreciation horizons of 5–6 years are not only reasonable, but conservative.

Patel, D., Eliahou Ontiveros, J., Xie, M., et al. (2025, November 12). *Microsoft's AI strategy deconstructed – From energy to tokens*. SemiAnalysis.

Forward-Looking Uses

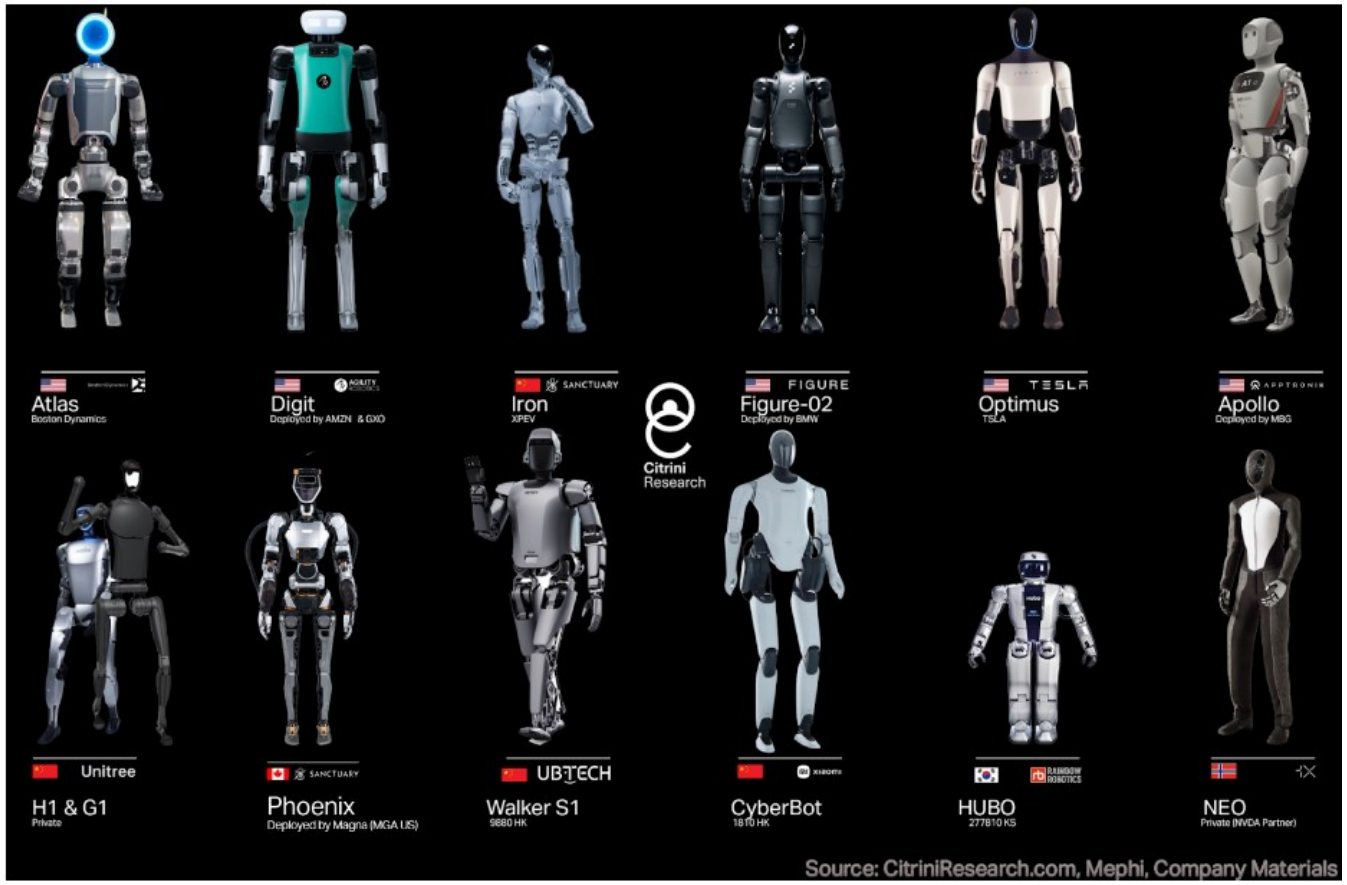
The Next Interface Is an Agent

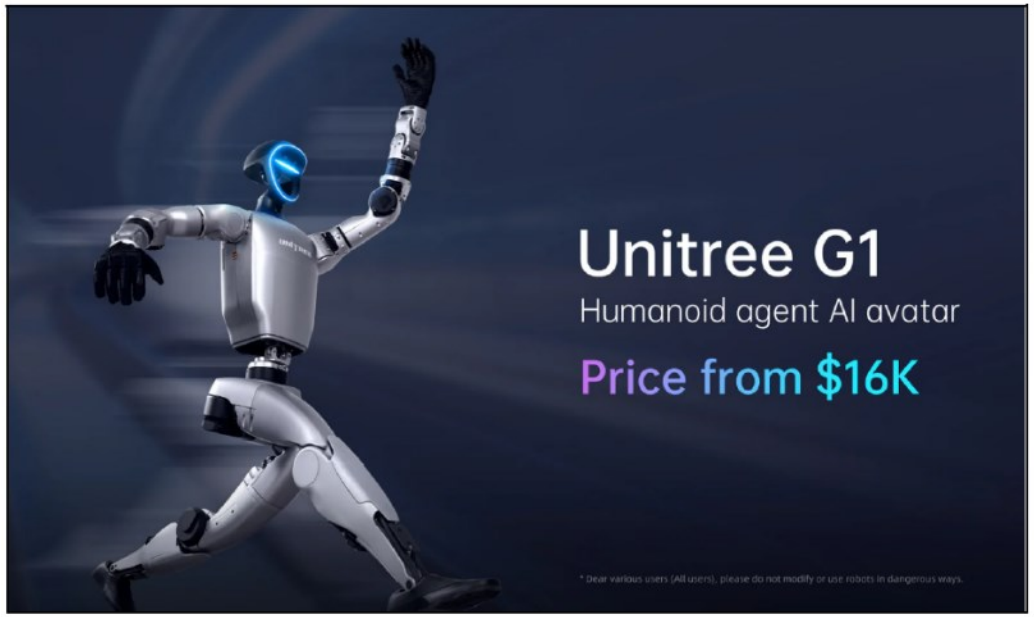
Exhibit 15: SMBs will be able to leverage agents within leading platforms to design personalized ad campaigns



Source: Feather, N., Nowak, B., Gutman, S., Weiss, K., Straton, A., Cost, M., Gil, P., Bombassei, M., Narayanan, K. A., Delahunt, K., Keyser, K. A., Herrera, J., Chintala, N. R., Javeri, N., & VanLieshout, C. (2025, November 17). *Agentic shoppers are coming… Who could win or lose?* Morgan Stanley Research.

When Robots Become Affordable, Everything Changes



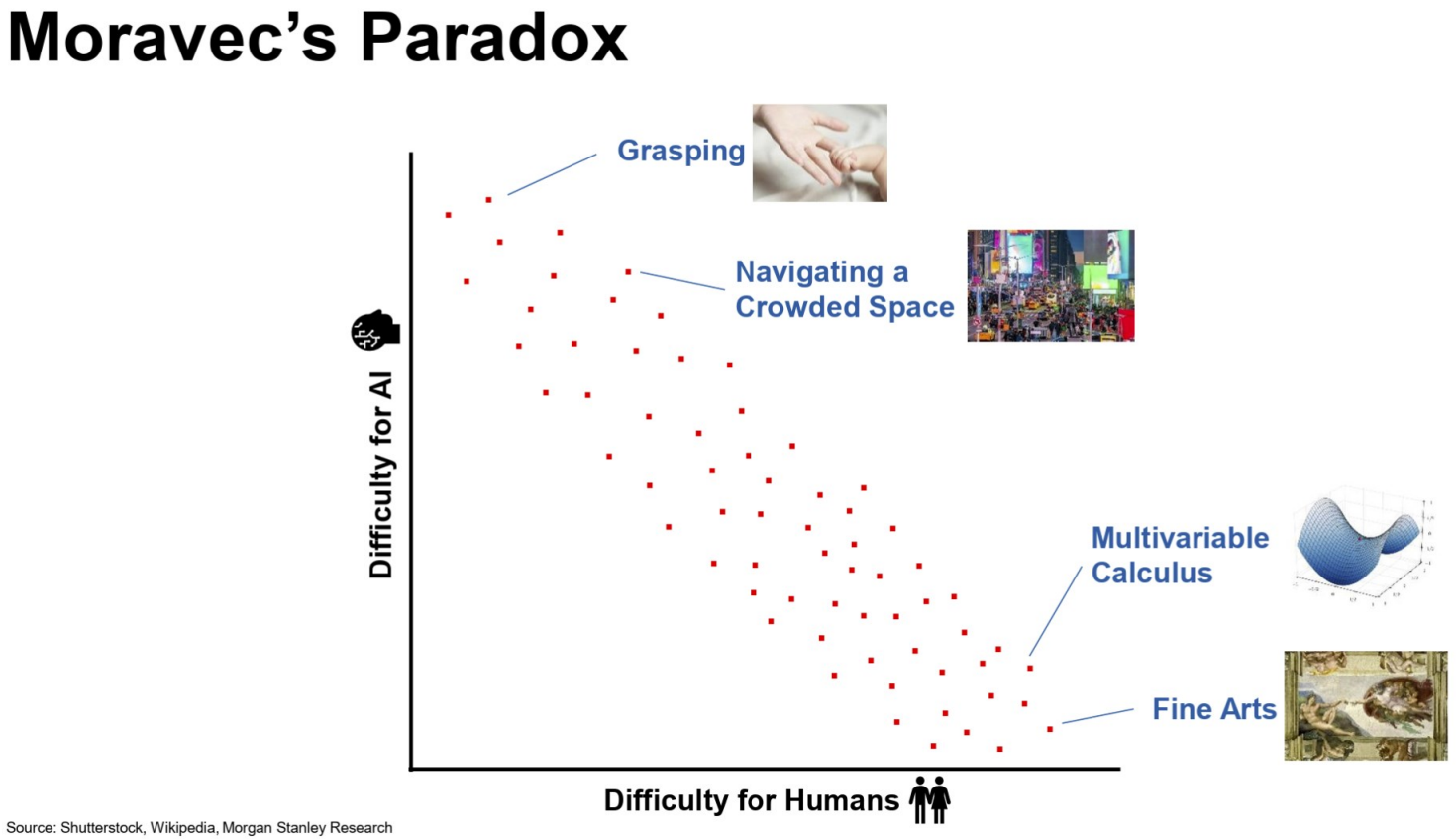


Why Now? The Cost Curve

Picture a Roomba with opposable thumbs and an offshore pilot's license for the price of a used Honda Civic. We might not be quite there yet, but Unitree's G-1 humanoid, sticker-priced at $16k represents a 97% slide from the $500k industrial mannequins of 2023.

Source: Citrinitas Capital Management. (2025, May 16). *Thematic primer: Humanoid robots – A secular story at a cyclical price. Citrini Research.*

Why Robots Can Do Calculus—but Not Tie Their Shoes



Source: Morgan Stanley Global Embodied AI Team. (2025, December). *The robot almanac* (Vol. 2: *How to train your robot; geopolitics; rare earths; Sagan's prophecy*). Morgan Stanley Research.

What a Robotics Boom Really Requires

Content Needed to Support 1.4 Bn Robots Sold in 2050

5.7 Billion Cameras

2025: 61mn Units
95x Increase

700 Million Lidar

2025: 2.3mn Units
300x Increase

600 Million Radar

2025: 2.3mn Units
260x Increase

Content Needed to Support 1.4 Bn Robots Sold in 2050

27 Billion Motors

2025: 100mn Units
260x Increase

41 Billion Bearings

2025: 200mn Units
200x Increase

14 Billion Reducers

2025: 25mn Units
590x Increase

Content Needed to Support 1.4 Bn Robots Sold in 2050

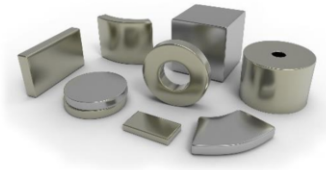
$330 Billion of Analog Semis & MCU's

2025: $1.6bn
210x Increase

12.5mn ExaFLOPS Edge Compute

2025: 320 ExaFLOPS
40,000x Increase

Critical Materials Needed to Support 1.4 Bn Robots Sold in 2050



1.7 Million Tonnes RE Magnets

2025: 3.5 Thousand Tonnes
480x Increase

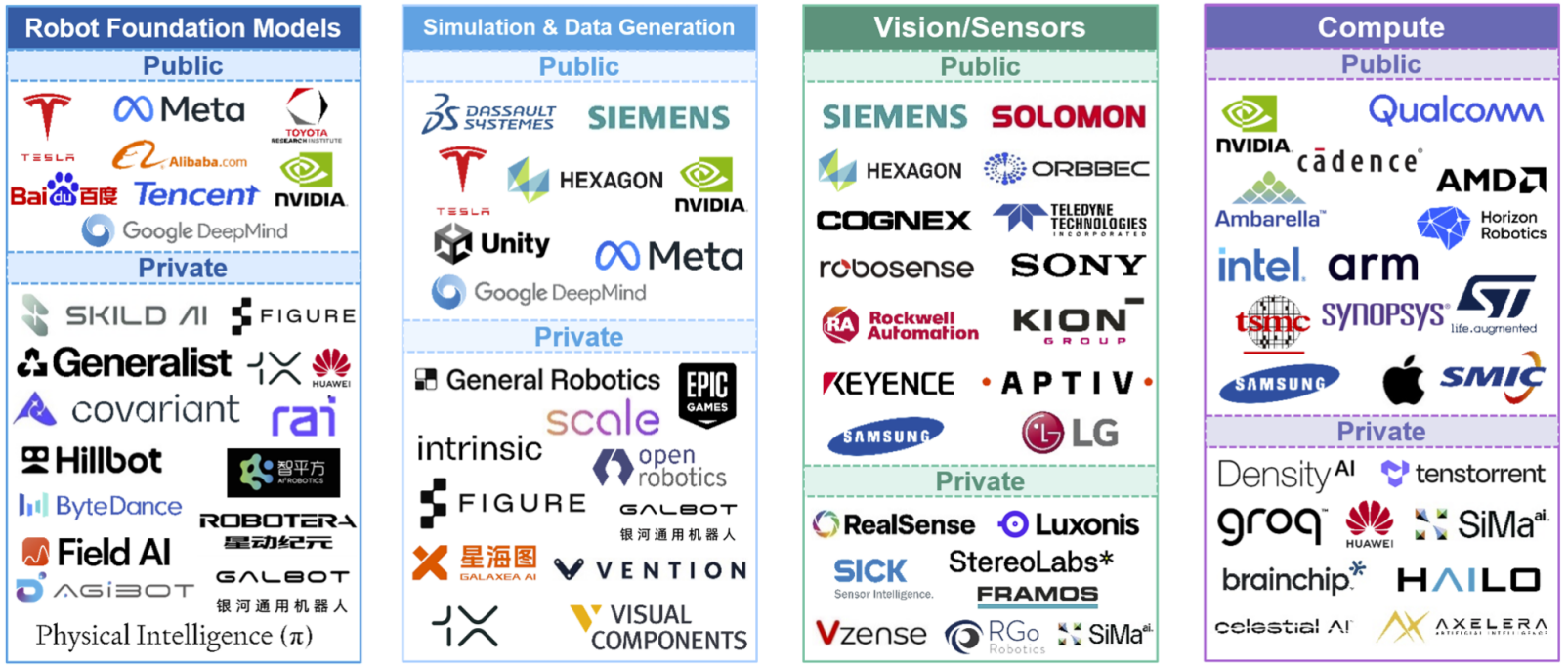
26 Terawatt Hours Batteries

2025: 18 GWh
1,450x Increase

Source: Morgan Stanley Global Embodied AI Team. (2025). *The robot almanac: Vol. 1: AI gets physical; Cambrian explosion of bots*. Morgan Stanley Research.

The Ecosystem Enabling Embodied Intelligence

Global Robotics AI Enablers



Source: Source: Morgan Stanley Global Embodied AI Team. (2025, December). *The robot almanac* (Vol. 2: *How to train your robot; geopolitics; rare earths; Sagan's prophecy*). Morgan Stanley Research.

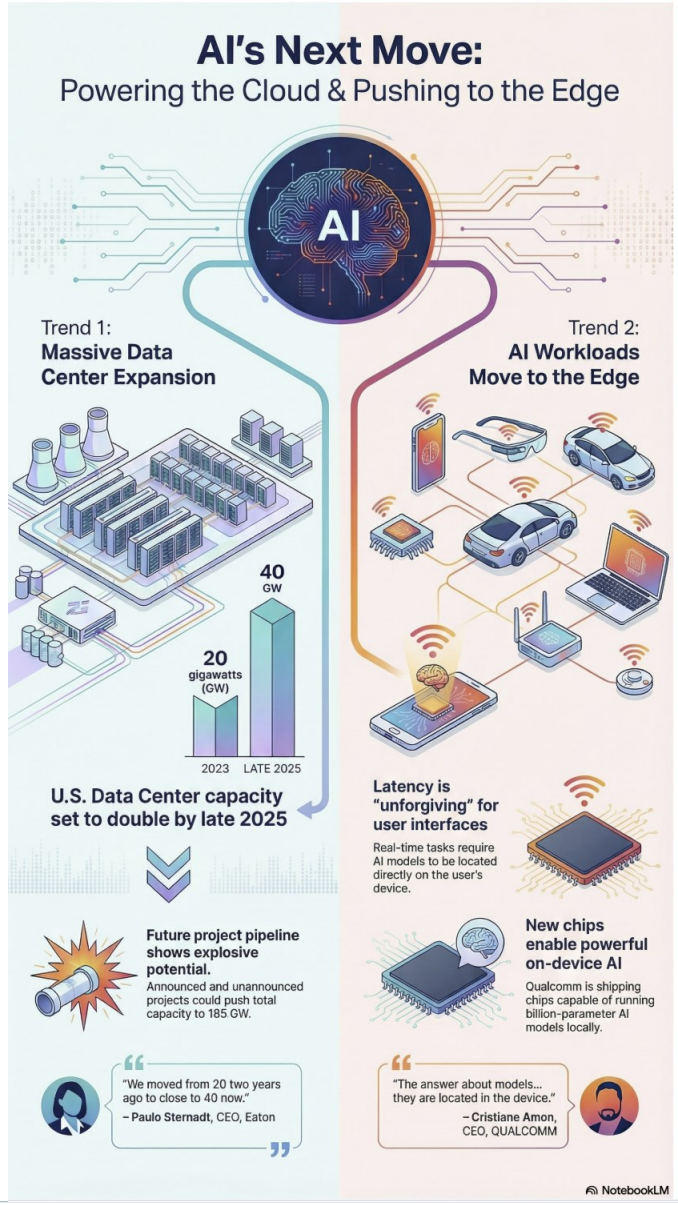
AI's Next Phase: Bigger Data Centers, Smarter Devices

Data center capacity is set to reach 40GW and could rise to 165GW

"Back then, 2023, the overall U.S. data center capacity was around 20 gigawatts. Approaching the end of the year, we are going to get much closer to 40 already by end of '25. So I would say there is upside and the backlog that our customers have in hands in terms of projects they announced, some started, some have not, is 165 gigawatts. So we moved from 20 2 years ago to close to 40 now in December." – Eaton (ETN 0.07%↑) CEO Paulo Sternadt

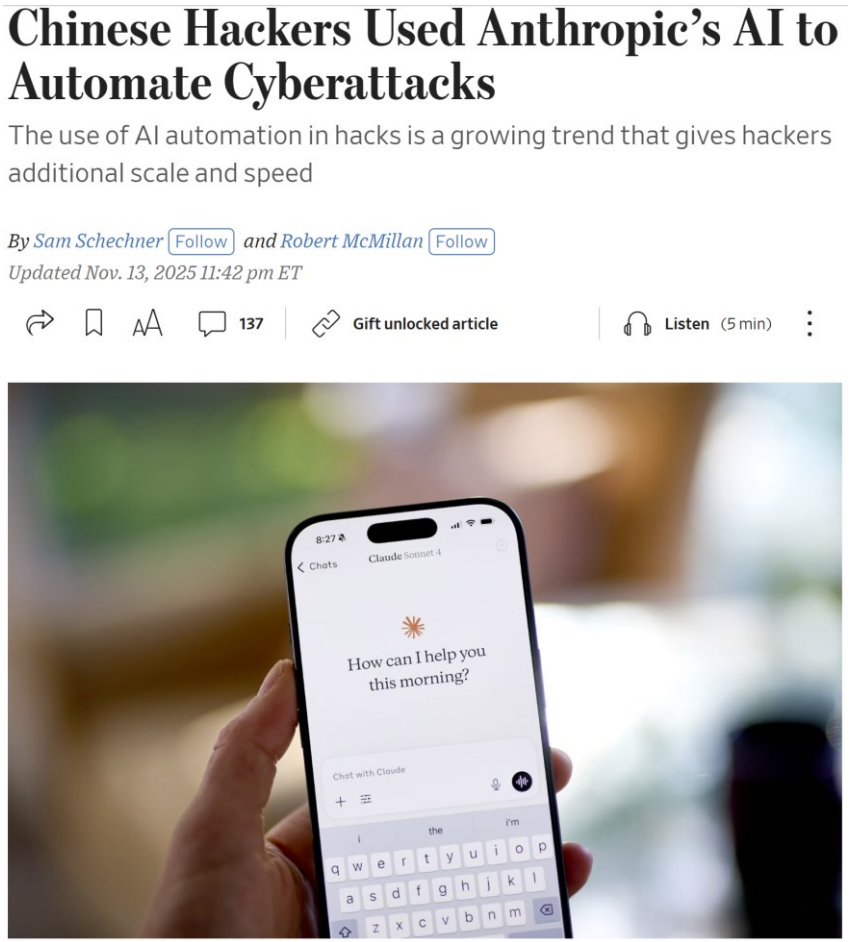
Ultimately AI workloads will likely get pushed to the edge

"The answer about models, where does the model understands what we see, what we hear and what we say are located. They are located in the device because latency is unforgiving. So anything that has to do with a user interface is located on the device. So we announced the first chip in a glass in a frame that does 1 billion parameter model. The next ship is going to do much more every company, things like voice to text, the ability to quickly annotate and image and do things, they're asking us, I needed to have that into the device." – QUALCOMM (QCOM 0.85%↑) CEO Cristiano Amon



Source: The Transcript. (2025, December 8). *Sticky inflation.*

AI as a Force Multiplier for Cyber Threat Actors



Chinese Hackers Used Anthropic's AI to Automate Cyberattacks

The use of AI automation in hacks is a growing trend that gives hackers additional scale and speed

By Sam Schechner Follow *and Robert McMillan* Follow

Updated Nov. 13, 2025 11:42 pm ET

137 | Gift unlocked article | Listen (5 min)

Sources: Roxan, C., Raimbaud, K., & Adair, S. (2025, October 8). *APT meets GPT: Targeted operations with untamed LLMs*. Volexity; Schechner, S., & McMillan, R. (2025, November 13). *Chinese hackers used Anthropic's AI to automate cyberattacks. The Wall Street Journal.*

- **LLMs have become operational amplifiers for state-aligned threat actors:** Volexity observed China-linked UTA0388 using large language models not as experiments but as *active workflow accelerators*—selecting targets, drafting multilingual phishing emails, and helping produce malware components with unprecedented iteration speed.
- **The campaign shows a shift from "AI-assisted" to "AI-structured" operations:** The phishing stages exhibited linguistic patterns, cross-language consistency, and message personalization that strongly suggest LLM-driven automation pipelines, not handcrafted social engineering.
- **AI collapsed the cost structure of sophisticated intrusion campaigns:** Tasks that once required skilled operators—content generation, reconnaissance triage, payload refinement—were partially offloaded to LLMs, meaning state-aligned groups can scale campaigns without scaling personnel.
- **Malware artifacts carried the signature of LLM involvement:** Volexity found anomalies—strange help-file remnants, odd compilation patterns, and inconsistent code comments—indicating that attackers were leaning on generative AI to scaffold or modify malicious binaries.
- **The strategic implication: AI is shifting the asymmetry further toward attackers:** UTA0388's use of LLMs demonstrates that the barrier to running highly tailored, global, multilingual phishing operations is falling fast. Defensive teams must now assume threat actors can mass-produce credible lures and iterate tooling at machine speed.

Conclusion

AI Isn’t a Theme—It’s a System-Level Transformation

+ **1. AI Scale Is Underestimated**
  Most investors anchor to current adoption and monetization, but history suggests the largest impact comes later, as technologies scale, costs fall, and use cases compound across industries.

+ **2. Infrastructure Is the Real Bottleneck**
  The limiting factor is no longer models—it’s power, compute, cooling, and connectivity. AI growth will be gated by physical infrastructure, not just software innovation or capital availability.

+ **3. Economics Are Complex—Not Broken**
  AI revenue is often embedded, not explicit, while costs are front-loaded. This creates near-term pressure, but long-term value may emerge as utilization rises and operating leverage improves.

+ **4. The Opportunity Extends Beyond Tech**
  AI is pulling industrials, energy, materials, and infrastructure into the value chain. Many of the biggest beneficiaries may sit outside traditional technology sectors entirely.

+ **5. The Next Phase Is Physical, Not Just Digital**
  From agents to robotics, AI is moving into the real world. The biggest opportunities—and challenges—will come from deploying intelligence in physical systems at scale.

Important Information

There are risks associated with investing, including possible loss of principal.

Statements concerning financial market trends are based on current market conditions, which will fluctuate. References to specific securities and their issuers are for illustrative purposes only and are not intended to be, and should not be interpreted as, recommendations to purchase or sell such securities.