# Nasdaq-100® AI CapEx Plans Accelerating as ROI on AI Technologies Comes into Focus

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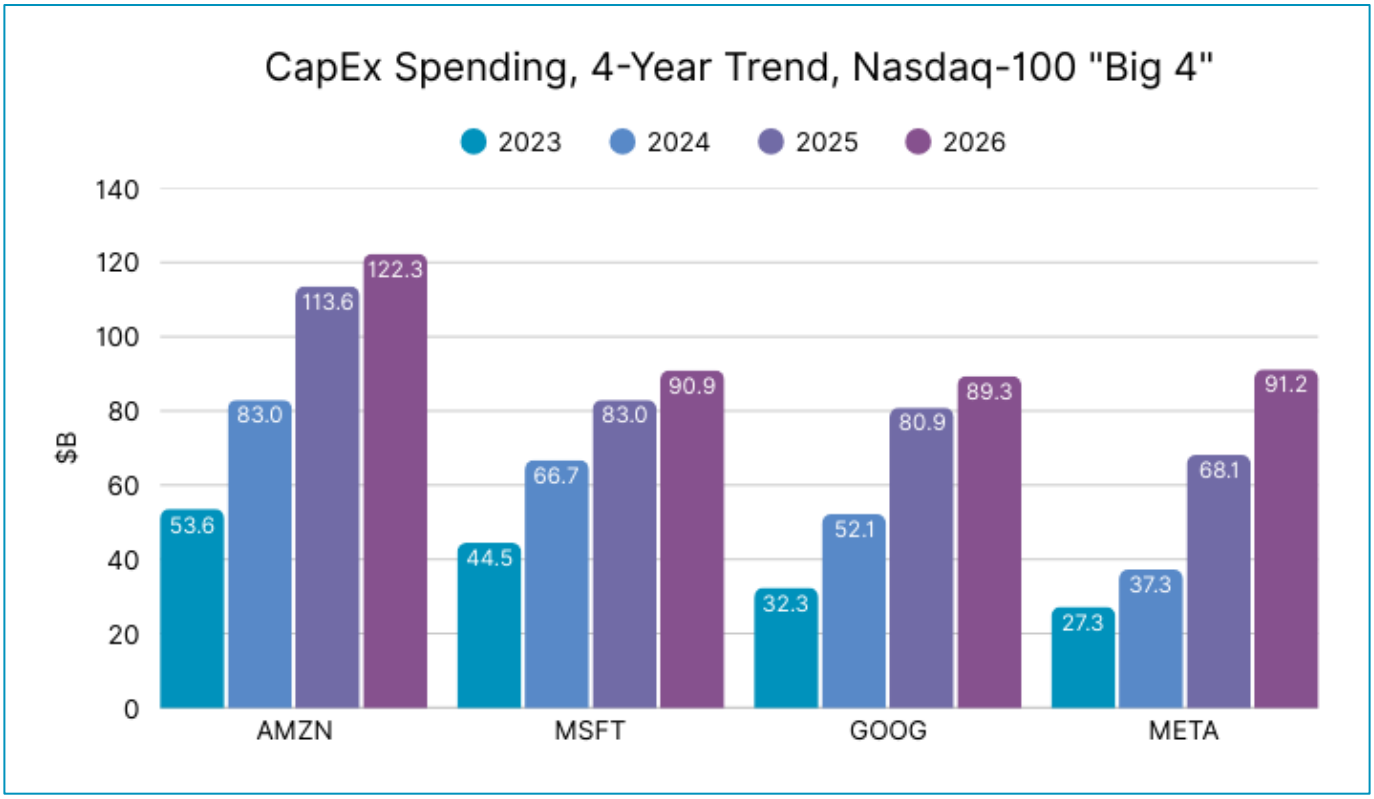
Throughout 2025, several of the Nasdaq-100's largest constituents have been raising their guidance around AI-driven revenues, earnings, and spending – including R&D and capital expenditures – as adoption continues to broaden, use cases multiply, and model performance accelerates. In the 2Q'25 earnings season, the "big 4" spenders on AI capex collectively upped their projected spending on AI capex to approximately $350 billion for the full calendar year and nearly $400 billion for 2026, vs. ~$150 billion in 2023. Microsoft (Nasdaq: MSFT), Amazon (Nasdaq: AMZN), Alphabet (Nasdaq: GOOG), and Meta Platforms (Nasdaq: META) collectively represent nearly one-quarter of the Nasdaq-100 by index weight, and each of them is investing heavily to solidify or establish leading positions in the AI tech stack, from semiconductor design & manufacturing, through datacenter construction and cloud compute expansion, all the way to AI model and application development.



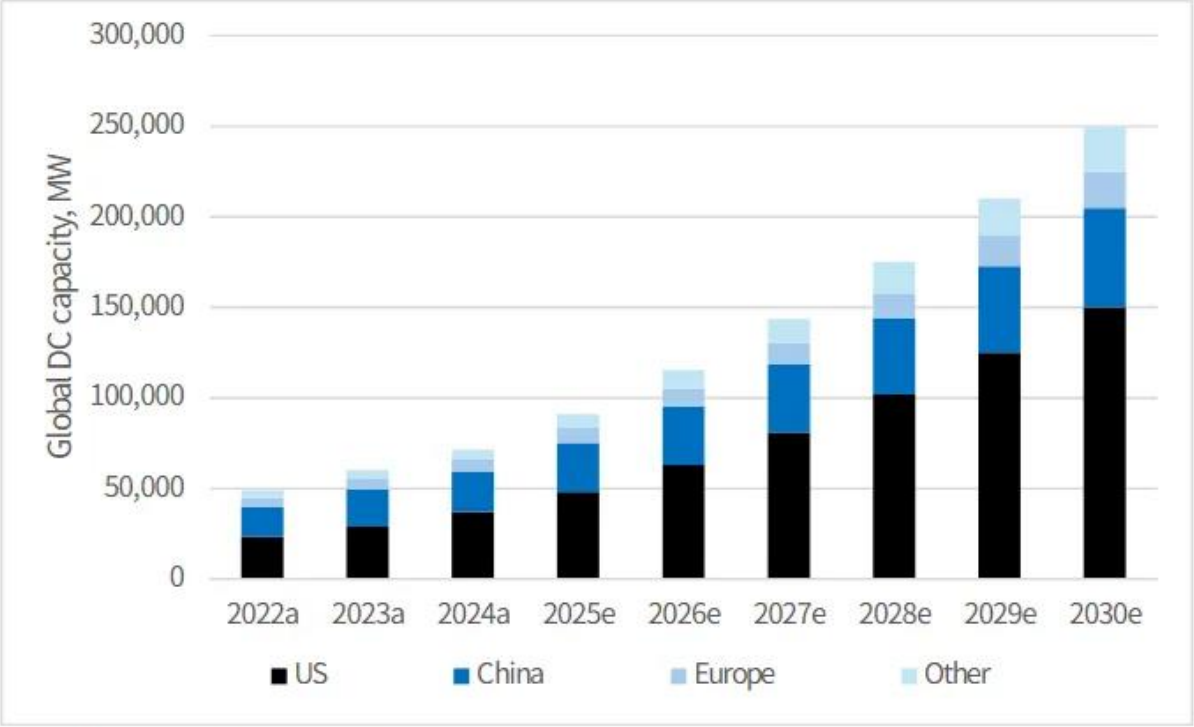

Source: Nasdaq Global Indexes, Factset. Data as of 8/4/25.

For Meta in particular, the acceleration in spending plans was staggering, as they guided 2026 capex to 48% growth YoY vs. consensus expectations for 10%. In addition to making numerous headlines around recruiting leading AI researchers with pay packages in the nine figures, Meta has revealed plans to construct the most powerful cluster of AI datacenters on the planet in order to fulfill its stated goal of delivering "personal superintelligence" on a global scale – which it has the unique ability to deliver via its Family of Apps that

includes Facebook, Instagram, WhatsApp, and Threads. The largest of these datacenters, named Hyperion, is slated to cover a footprint similar in size to the island of Manhattan and will consume an estimated five gigawatts' worth of computational power. For reference, a typical nuclear reactor produces around 1 GW of electricity, while the single largest nuclear power plant in the US generates 4.5 GW using four reactors. Relatedly, Meta recently signed a 1.1 GW nuclear power purchase agreement with fellow Nasdaq-100 constituent Constellation Energy, following a similar move by Microsoft last year.

Meta remains rather unique among the Big 4 in that it does not operate a traditional cloud computing business along the lines of Amazon's AWS, Microsoft's Azure, or Alphabet's Google Cloud Platform. Led by these three hyperscalers, which collectively control around two-thirds of global cloud computing market share, Morgan Stanley expects worldwide datacenter capacity growth of 23% annualized through 2030, nearly tripling from 2025 levels.

**Exhibit 9:** Global DC forecasts - we project worldwide capacity growth of +23% pa, until the end of the decade (with global DC capacity rising 6x by 2035e)




Source: Morgan Stanley Research estimates

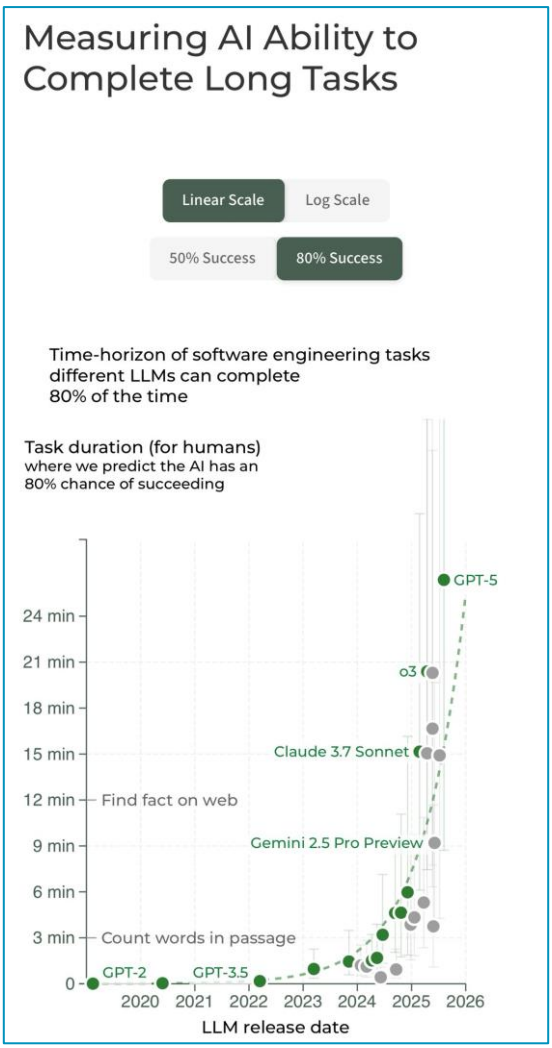
Overall, Microsoft's Azure showed the strongest growth last quarter with revenue up 39% YoY, which easily justified capex growth of 27%. Microsoft is now up to $368 billion of contracted backlog across Azure and the rest of the Microsoft Cloud business. Their CFO recently pushed back her forecast for cloud supply meeting demand by another six months until at least December 2025, saying that "even with accelerating spend, pulling leases forward, and getting CPUs and GPUs into the system as quickly as we can, we're still seeing demand continue to improve." Now an $86 billion annualized run-rate business, Azure has been driving historically strong earnings results for Microsoft, which reported YoY revenue growth of 18% overall and EPS growth of 24%, beating analyst estimates by more than 8%.

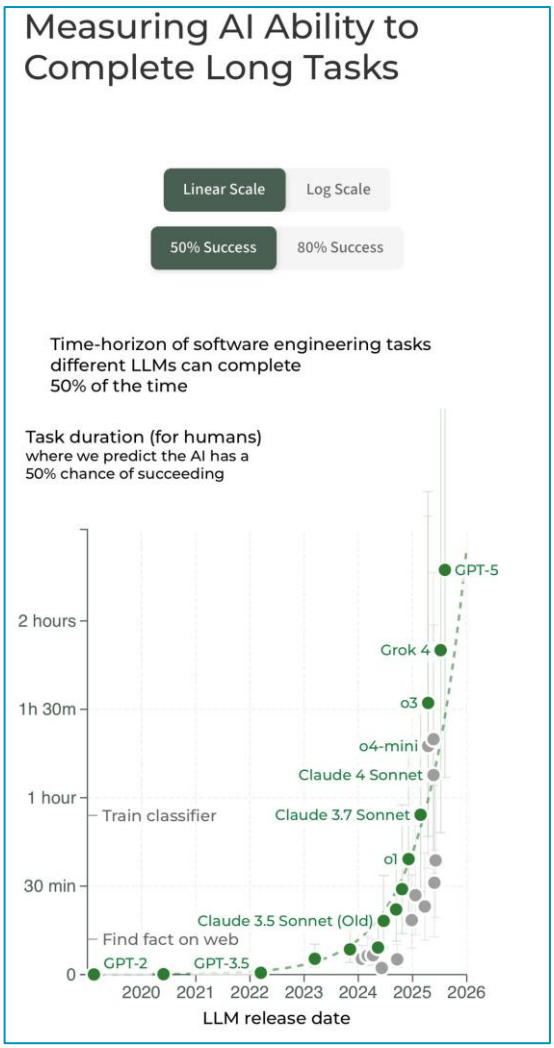
On the innovation front, Microsoft has been sharing some exciting and varied announcements, showcasing their deep commitment to AI across a range of diverse use cases. In May, they launched Microsoft Discovery to accelerate and transform the R&D process across multiple industries leveraging specialized AI agents developed internally, all built on top of Microsoft Azure. More recently, Microsoft rolled out a new medical AI framework; in a review of 300 rare medical cases featured in the New England Journal of Medicine, their AI

model correctly diagnosed the rare medical condition 85% of the time with minimal info about each patient, far outpacing the 20% accuracy of human doctors. Microsoft also recently unveiled GitHub Spark – a new tool that allows Copilot Pro+ users to build full-stack apps with natural language – as well as Copilot Mode in Edge, which "reinvents the browser for the AI age" with features like multi-tab RAG (Retrieval-Augmented Generation) to enable real-time analysis across dozens of open browser tabs simultaneously.

Of course, Microsoft continues to be OpenAI's most important investor and strategic partner, acting as an exclusive cloud computing provider up until now. Given OpenAI's staggering growth rates (and valuations climbing in excess of $500B as a result), the ChatGPT creator recently announced deals with other cloud providers including Google Cloud, reinforcing the theory that despite ongoing efficiency gains, accelerating AI adoption will continue growing the pie in numerous related areas of spending.

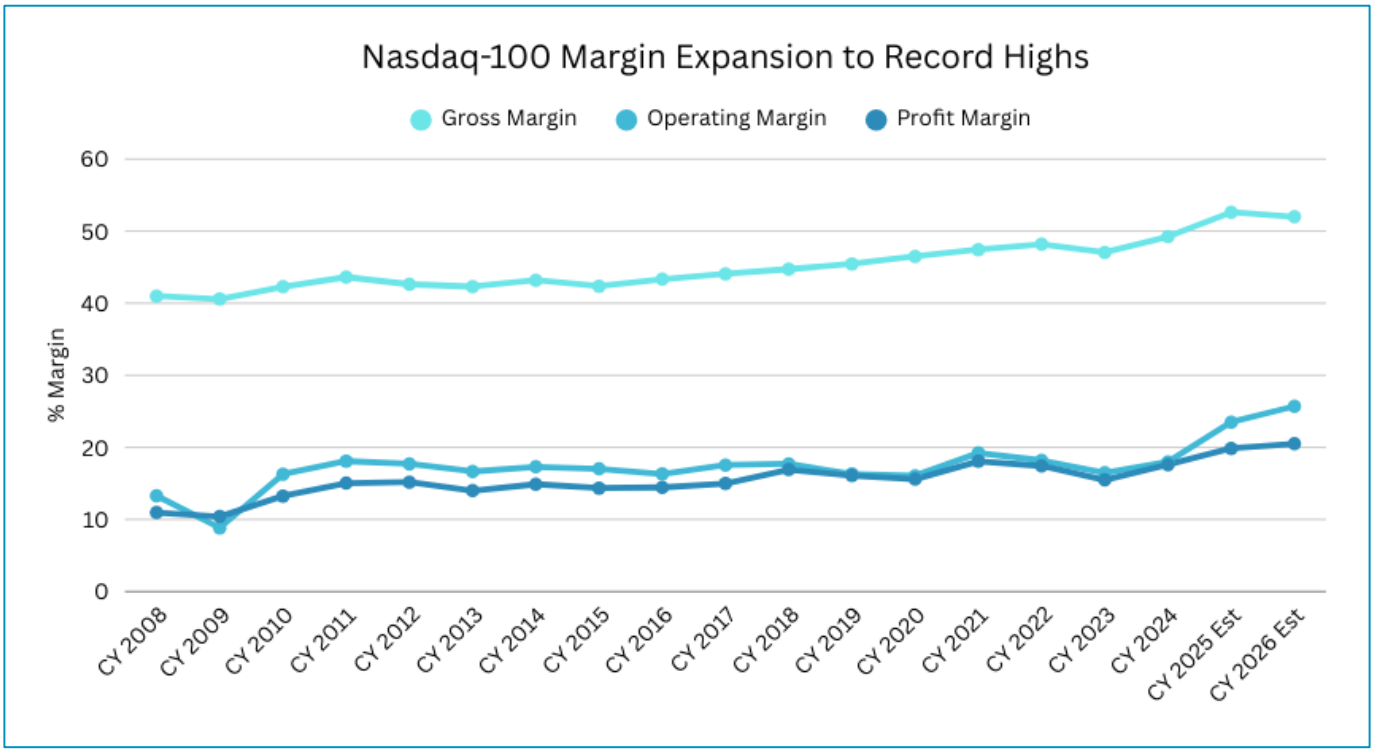
As for Google, an advanced version of their Gemini AI model with Deep Think officially achieved gold medal-level performance at the International Mathematical Olympiad in July, right on the heels of a similar achievement by OpenAI. More recently, Google's 'Self-improving' MLE-STAR framework was released, designed to automate ML (machine learning) engineering work and winning medals in two-thirds of benchmark Kaggle tasks. This continues the recent trend of Google, OpenAI and others releasing model enhancements, including agentic frameworks, that set new standards almost weekly for complicated knowledge work that can now be accomplished via AI technology. Exponential curves for knowledge work such as software engineering continue to advance steeper upward, with a rotating cast of model providers stepping into and out of the leadership ranks at any one point in time.




Source: Nasdaq Global Indexes, Ethan Mollick, METR. Data as of 8/9/25.

Beyond showcasing the growing capabilities of its most powerful Gemini versions in academic areas like math and software engineering, Google is also demonstrating how their AI investments are producing ROI by driving both top-line and bottom-line growth. Starting with Google Cloud, their most recent earnings report surprised with an acceleration in growth to 32% YoY from the prior quarter's already-high 28% rate. Now a $54B annualized run-rate business, Google Cloud is facing a backlog of $106B and growing. Perhaps most impressively, Google Cloud's operating margin has expanded from -47.4% in 2Q'20 to +20.7% in 2Q'25, helping fuel record-high operating margins for the company in the range of 31-34% for six consecutive quarters. Google is far from the anomaly in the Nasdaq-100 Index®, which has recently seen annual gross margins exceed 50% for the first time ever, and a nearly 50% increase in operating margins vs. 2023 arriving by 2026, if not a bit sooner.




Source: Nasdaq Global Indexes, Factset. Data as of 8/13/25.

Per Morgan Stanley, "Google's core businesses are accelerating across the board, with GenAI-driven product innovation permeating core product lines, cloud business growth momentum significantly strengthening, and capital expenditures substantially raised to support future development." Notably, Google Search delivered over $54 billion in revenue in the most recent quarter, growing 12% year-over-year and putting aside concerns (for now) about its core search business facing competitive erosion from OpenAI's ChatGPT. Among other recent enhancements, Google is now using AI to predict user needs across Google Search and match intent – not just keywords – leading to more relevant ads and better campaign outcomes across its massive advertising business.

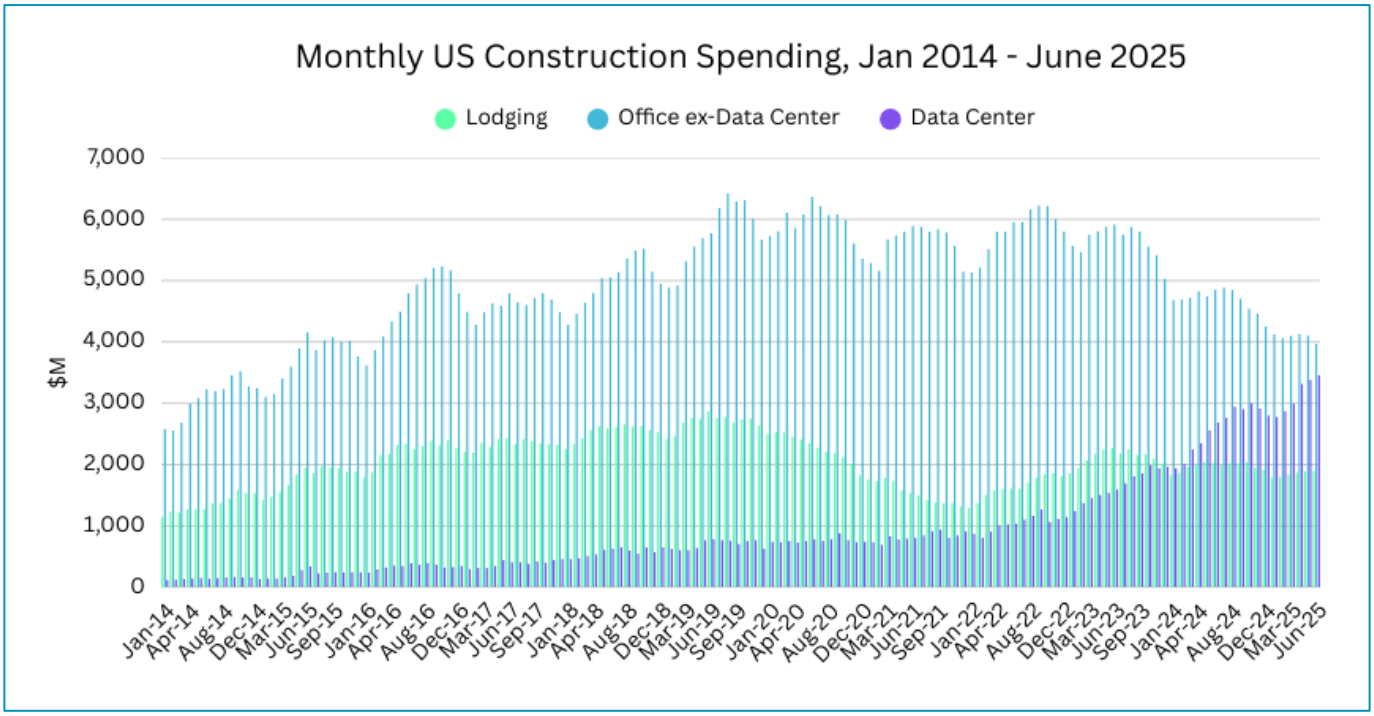
In its most recent earnings call, Google also explained how text customization and conversational ads are enabling advertisers to generate high-quality, creative ad content using Google's natural language chatbot within its Ads Manager product, guided by AI guardrails that optimize engagement. In the old model, about 80% of search queries were considered non-monetizable for Google and its advertising customers. Now with their Smart Bidding model that uses outcome-based automation, advertisers set campaign goals, and Google's AI adjusts bids in real time based on *user intent* – using signals like device, time, location, and behavior – to predict conversion likelihood, showing ads even on vague or non-commercial queries. This makes search more valuable, as a product, to both users and advertisers, and in turn, Google. This has all

taken place while seeing Google grow daily usage of its newer AI search products (such as AI Overviews, with 2 billion Monthly Active Users) by nearly 50% from 1Q'25.

Finally there's Amazon, whose AWS remains the world's biggest cloud computing platform with a $123B annualized run rate, growing 17% YoY in the most recent quarter. While not technically accelerating like its competitors, AWS is powering ahead with major investments like Project Rainier. This multi-site supercluster promises to be the largest of its kind (at least for a short time) when it comes online later in 2025. Notably, it will operate without any Nvidia GPUs, instead relying on Amazon's own Trainium2 accelerators that are optimized for highly efficient training workloads. It's part of a deepening trend among other megacap Nasdaq-100 names like Google, Meta, and Apple – all of whom are developing their own custom chips for more specific AI workloads – with an eye towards reducing dependence on Nvidia, which still commands the lion's share of AI-related capex spending on its leading edge GPU chips. Like Microsoft with OpenAI, Amazon has nurtured its own strategic partnership with another of the leading AI model developers; Anthropic has seen astounding growth in its business across the first half of the year, with ARR increasing 5x from $1B to $5B as of July. Anthropic's ability to stay in the race with OpenAI has led some Amazon analysts to speculate that AWS' growth will resume accelerating perhaps as soon as next quarter.

Separately, Amazon also recently introduced a new AI model called Deep Fleet that was specially designed to increase the efficiency of its fleet of more than one million plus robots that operate across their warehouses. Amazon's CEO described it as an "intelligent traffic management system" for Amazon's fulfillment centers, leveraging their deep expertise in robotics and combining the power of AWS tools like SageMaker, all to reduce robot travel time by 10% -- which is a massive savings when considering the scale that Amazon operates on as the world's largest retailer.

Beyond AI capex spending on semiconductors and other hardware like networking gear, physical data center construction spending (about one-fifth of total data center capex, per Morgan Stanley) is accelerating in tandem, so much so that the US Census Bureau decided to break out the amounts from the broader Office construction category for the first time in June 2025. Spending on data center construction is now almost on par with all other office construction in the US, and well above other major areas of construction such as lodging, increasing by more than 200% since the launch of ChatGPT in November 2022.




Source: Nasdaq Global Indexes, US Census Bureau. Data as of 6/30/25.

Until and unless megacap Nasdaq-100 companies like Meta, Microsoft, Alphabet and Amazon start reporting a deceleration in their AI capex spending – which could stem from demand for AI services slowing and/or the supply of compute capacity reaching excess – investors will likely continue to view the AI thematic trade as a historic opportunity with far-reaching impacts on economic growth.

Sources: Nasdaq Global Indexes, Bloomberg, Factset, Morgan Stanley Research, Meta Platforms, Alphabet, Amazon, Microsoft, OpenAI, Anthropic, US Census Bureau.