BCG

Weekly Brief

November 04, 2026

Can the World Afford the AI Build-Out?

Only twice before has there been an infrastructure boom that compares to the scale of the AI build-out: the US railroads and the early internet. Both created massive value and destroyed plenty of investor capital along the way.

Alphabet, Amazon, Meta, Microsoft, and Oracle are the five hyperscalers accounting for most of the build-out. Together, they expect to commit about $4.6 trillion in capex to AI between 2022 and 2030. These investments are already contributing to GDP growth and stock market returns.

The authors of a new BCG Institute report have calculated what it will take to pay for this. They traced the costs from the data centers to the AI labs—the companies that build the models—and on to the businesses and consumers who use them. By 2030, the authors estimate, the AI ecosystem will need about $2.6 trillion in revenue per year to cover its costs and give investors a reasonable return.

That's a large bill, but it's not out of reach.

Who Will Pay—and How

The early build-out days of railroads and the internet saw losses because of underwhelming short-term demand and financing that was backed heavily by debt. Two features set this moment apart.

First, the hyperscalers have significant cash-flow businesses that have driven much of the funding for AI. Cash funding gives demand time to build.

Second, demand for AI is already broad. Claude, ChatGPT, and Gemini are one driver. Other drivers come from AI built into enterprise software, coding tools, advertising, and shopping agents. No single application needs to succeed on its own.

Enterprises will carry most of the burden, about $1.8 trillion, by 2030. That's equivalent to one-quarter of projected IT spending, excluding AI. Any reallocation of IT budgets toward AI will ease the burden of new AI spending.

Consumers could potentially contribute, mainly through two markets far larger than app subscriptions: advertising that AI makes more effective, and some form of fees on purchases made through AI shopping agents.

The remainder comes from the hyperscalers' own use and from new fields such as physical AI and drug discovery.

The price of using AI is also falling, as models become more efficient and each new generation of chips does more work for the same cost. As prices fall, usage should grow fast enough that total spending on AI rises.

None of this is guaranteed. If demand disappoints, price wars and losses for data center owners and AI labs would follow.

What to Watch

The report names nine indicators that need to remain true for the analysis to hold. Here are three that CEOs should track closely:

- **How the build-out is financed.** Cash flow has carried most of the cost so far, and the AI labs are moving toward public markets that will test their revenues and margins every quarter. Heavy borrowing by hyperscalers relative to

their overall cash investments, or ever-larger private funding rounds, would be early warnings signs.

- **Whether usage rises as prices fall.** If it does, total spending grows. Idle capacity in data centers would be an early warning that it is not.
- **If there's a greater spread to knowledge work.** Part of the $2.6 trillion depends on AI going well beyond coding. Broader knowledge worker use cases, AI shopping agents, and physical AI are the major new opportunities to look out for.

***

The infrastructure is being built. Whether it pays for itself depends on what companies and their people do with it. What share of the bill will you be willing to pay—and will that be money well spent?

Until next time,



Christoph Schweizer
Chief Executive Officer

Further Insights



Who Will Pay the $2.6 Trillion AI Infrastructure Bill?

AI infrastructure will need $2.6 trillion in annual revenue by 2030. BCG Institute analysis shows why that is feasible and who can pay as demand grows.

Run the Numbers on AI's Future



The 2027 Revenue Agenda: Moving the AI Focus from Productivity to Proof of Value

BCG's survey of nearly 400 revenue leaders reveals where CROs are placing their growth bets, where AI is delivering returns, and what leading CROs are doing differently.

Explore CRO Bets



How AI Is Reshaping the Economics of Technology

The question for CIOs is no longer just how much AI costs but how much business value the intelligence being purchased generates.

Review Your AI Costs

Boston Consulting Group

200 Pier Four Boulevard
Boston, Massachusetts 02210,
USA

Manage Communications
Privacy Policy
Unsubscribe