

CASE

Big Tech's \$650B bet

The largest US technology companies plan to spend far more on AI infrastructure than they generate in free cash flow. Value one data center the way a CFO would, then decide how to pay for it.

The situation

In February 2026, once Alphabet, Amazon, Meta and Microsoft had reported their results for 2025, Bloomberg put their combined planned capital expenditure for 2026 at about \$650 billion, much of it for AI infrastructure: data centers, chips and networking. Three of the four gave a full-year 2026 figure with their fourth-quarter results:

COMPANY	2026 CAPEX GUIDANCE (\$B)	2024 FREE CASH FLOW (\$B)
Amazon	about 200	38.2
Alphabet (Google)	175 to 185	72.8
Meta	115 to 135	52.1
Total	490 to 520	163.1

Capex guidance is as given with each company's fourth-quarter 2025 results, in late January and early February 2026; Alphabet raised its range to \$180 to \$190 billion in April 2026. Free cash flow is for 2024, as reported. Microsoft is left out of the table because its fiscal year ends in June, so its figures do not line up with the other three. Sources: company earnings releases and filings; Bloomberg, February 6, 2026.

The three plan to spend about three times what they generated in free cash flow in 2024. That money has to come from somewhere, and every dollar of it is a capital budgeting decision. This case asks two questions about one slice of it: should it be built, and if so, how should it be paid for?

NOTE

The project in Part 1 is hypothetical. Its numbers are set for this case to be of a plausible size; they are not Alphabet's. The company figures in the table above and in Part 2 are real, as reported, each with its date.

Part 1: A \$48 billion data center

Alphabet is weighing a \$48 billion data center complex that would sell AI cloud services. The whole investment is made today, and the equipment is depreciated straight-line to zero over the project's life.

INVESTMENT, YEAR 0	PROJECT LIFE	DEPRECIATION	TAX RATE	WACC
\$48.0B	8 years	straight-line, no salvage	21%	10%

Revenue is slow to start, because a data center takes time to fill with paying customers:

PERIOD	ANNUAL REVENUE (\$B)	ANNUAL OPERATING COSTS (\$B)
Years 1 to 3	4.0	1.5
Years 4 to 6	12.0	4.0
Years 7 and 8	18.0	6.0

Alphabet earns large taxable profits elsewhere, so a loss on this project lowers the company's total tax bill. When the project's EBIT is negative, treat its tax as negative: a cash saving, or tax shield.

Use operating cash flow in the form

$$OCF = (R - C - D)(1 - T) + D$$

where R is revenue, C operating costs, D depreciation and T the tax rate, all per year.

Questions

1. What is the annual depreciation?
2. Build a pro forma for each of the three periods: revenue, operating costs, depreciation, EBIT, taxes, net income and OCF.
3. Lay out the project's cash flows for Years 0 to 8 and compute the NPV at the 10% WACC.
4. Compute the IRR and compare it with the WACC.
5. Compute the payback period from cumulative cash flows. Does the project ever pay back on a discounted basis?
6. On these numbers, should Alphabet accept or reject the project?
7. Hold operating costs where they are and scale every revenue figure up by 1.5, then by 2. What is the NPV in each case? By roughly what factor must revenue beat the base case for NPV to reach zero?
8. In February 2026 Alphabet guided its 2026 capital expenditures to \$175 to \$185 billion. If your model says reject, why might a company build anyway? What does a standalone cash flow model of one project leave out?

Part 2: Paying for it

Suppose the board approves the \$48 billion. Here is Alphabet's position, as reported:

ITEM	FIGURE
Cash and marketable securities, Dec. 31, 2025	\$126.8B
Free cash flow, 2024	\$72.8B
Share buybacks, 2024	\$62.0B
Credit rating, S&P	AA+
US dollar bond issue, February 9, 2026	\$20.0B
Average coupon, weighted by tranche size	4.80%

The February 2026 issue came in seven tranches maturing from 2029 to 2066, with coupons from 3.70% to 5.75%. Sources: Alphabet's 2025 Form 10-K and 2024 results; S&P Global Ratings; the offering's announced terms.

The four ways to fund it:

- (A) Use cash on hand.
- (B) Issue bonds, as Alphabet did with its \$20 billion issue in February 2026.
- (C) Cut or suspend the buyback program.
- (D) Issue new shares.

Questions

9. Rank the four options from most to least preferred. For each, give your reasoning in terms of cost, signaling and risk.
10. What is Alphabet's after-tax cost of debt on the February 2026 issue, at its 4.80% average coupon? If the company borrowed \$100 billion or more to fund its AI program, what would you expect to happen to its cost of debt, and to its cost of equity?
11. Meta reported its 2025 results on January 28, 2026, with 2026 capex guidance of \$115 to \$135 billion, up from \$72 billion in 2025. Its shares rose more than 10% in after-hours trading that evening. It had also cut its buybacks sharply: about \$23 billion in the first half of 2025, about \$3 billion in the second half and none in the fourth quarter. On the same day, January 29, Microsoft's shares closed 10% lower after it reported record quarterly capital spending of \$37.5 billion. Amazon's shares closed more than 5% lower on February 6, the day after it guided about \$200 billion. Why might the market reward one company and punish others for what looks like the same decision?