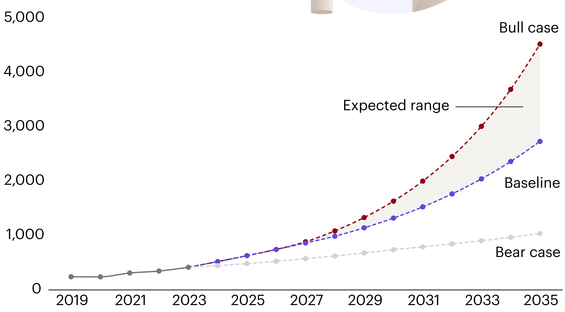
What DeepSeek Means for Data Center Investment Risk

Lighter models won't slow data center growth, but they do add uncertainty. Investors must asses demand shifts and readiness for AI's power and cooling needs.

Electricity demand will grow markedly

AI adoption and software advances such as DeepSeek create a range of potential outcomes; investors must plan accordingly

Global installed IT electricity demand forecast (terawatt-hours)

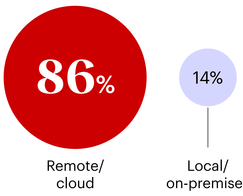


Most workloads will be in the cloud

Large cloud service providers will account for most of the demand growth, even for smaller models

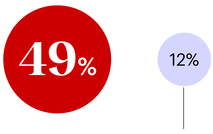
Executives expect a vast majority of AI workloads to be cloud based ...

Average allocation percentage across respondents



... and expect the shift toward the cloud to continue to accelerate

Percentage of respondents



Retrofits won't serve AI training demand

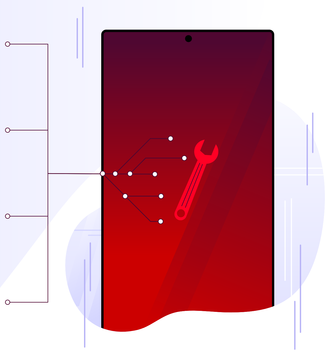
Older data centers may support AI inference, but the power demands of AI training will require new builds

Limited space
Space may not exist for upgraded power distribution or liquid cooling

Floor load limits
Floor plates may not support heavier weights for high-density racks

Infrastructure redesign
Networking infrastructure may require substantial redesign for large clusters of graphics processing units

Power gaps
Power access for massive workloads might fall short



How investors can manage higher risk

Planning for a range of data center evolution scenarios helps make smarter, risk-aware investment decisions

Prioritize investments that offer time-to-market advantages for customers' needs

Skew toward markets with low construction costs and ample power for AI hubs

Reduce exposure to retail colocation and subscale data centers

Use scenario planning for investment decisions to protect against downside risk

Note: 40% of respondents indicated they expect no effect to their cloud-based workloads
Sources: IDC; TD Cowen; Goldman Sachs; JPMorgan; Wells Fargo; S&P Capital IQ; Bain analysis; Bain Generative AI Survey, February 2024 (n=200)

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