

212 EQUITY RESEARCH: TECHNOLOGY, MEDIA, AND TELECOMMUNICATIONS

# Data Centers Sector Report

212°

Daniel Rudin  
Samuel Angel  
Sawyer Targosz

4/24/2026

## Contents

- I. Industry Primer
- II. Sector Overview
- III. Business Model
- IV. Value Drivers
- V. Valuation
- VI. 212 Equity Strategy

## I. Industry Primer

Parent Industry: Technology / Digital Infrastructure

NAICS #: 518210

North America Supply: 6,922.6 MW at year-end 2024

North America Under Construction: 6,350.1 MW at year-end 2024

U.S. Data Center Vacancy: 1.9%

Global Development Pipeline: ~10 GW projected to break ground in 2025; ~7 GW projected to complete in 2025

Industry Growth: ~15% baseline CAGR through 2027, with potential to reach 20%

Data Center Power Demand: ~+175% by 2030 vs. 2023

Industry Structure: Oligopolistic at the hyperscaler demand level; fragmented across colocation, power, cooling, construction, and equipment providers

## II. Sector Overview

The data center industry continues to grow as artificial intelligence, cloud workloads, and broader digital activity increase demand for compute capacity. The industry is experiencing low vacancy rates, with U.S. primary-market vacancy at 1.9%, which indicates that demand for capacity is outpacing the rate at which new supply can be delivered. At year-end 2024, North America had 6,922.6 MW of supply and 6,350 MW under construction, while JLL estimates that roughly 10 GW will break ground globally in 2025 and 7 GW will reach completion. The constraint on the industry is no longer demand from customers, but rather the rate at which new capacity can be permitted, powered, and constructed. This supply constraint is contributing to the development of a more capacity-constrained infrastructure market.

## III. Business Model

The primary business model for data center providers is to generate revenue from the infrastructure they provide to customers. Colocation operators generate revenue by leasing power, cabinets, cooling, and interconnection capacity under multiyear agreements, while hyperscale-oriented facilities support infrastructure reserved for a single customer. Because this infrastructure is essential to customer operations, these companies typically have low customer attrition and high retention, but they are also highly capital intensive. The primary costs associated with these models are power, cooling, equipment, construction, and labor. As AI-oriented capacity expands, these cost pressures are shifting more heavily toward power and facility buildout. The IEA projects global data center electricity consumption will rise to around 945 TWh by 2030, while Goldman Sachs estimates power demand could increase roughly 175% versus 2023, making infrastructure access and speed of delivery increasingly important sources of competitive advantage.

## IV. Value Drivers

The main tailwind behind the data center industry is the increased need for energy and GPU intensity driven by AI. This stems from businesses wanting to implement AI, with over 92% looking to increase investment over the next three years (McKinsey, 2025). Meeting this demand requires purpose-built infrastructure, modern AI GPU racks consume up to 80kW of sustained power, roughly ten times that of a conventional server rack, and U.S. data center electricity demand is projected to grow 15–20% annually through 2030 (McKinsey, 2025). These data centers are a critical bottleneck, forming the physical bedrock of the entire AI industry. Cloud migration is an additional tailwind. Roughly 50% of enterprise workloads now run in public cloud environments, a figure Gartner projects will rise to 75% by 2028 which is leaving significant room for continued data center demand growth (Gartner, 2025).

However, the industry faces serious headwinds, the most pressing being physical constraints. Large data centers can consume up to 5 million gallons of water per day and electricity equivalent to 100,000 homes, and projected

water usage for cooling is expected to rise 870% as more facilities come online (Brookings Institution, 2025). These resource demands have triggered local government and community pushback, with an estimated \$64 billion in projects blocked or delayed due to permitting opposition in 2025 alone (Hanwha Data Centers, 2025), directly limiting growth potential and economies of scale. The industry is also deeply capex intensive. Data center construction costs have surged alongside AI demand, with a single hyperscale facility now routinely requiring \$1 billion or more to build, and GPU infrastructure alone accounting for 60–80% of total data center cost of ownership (Cerno Capital, 2025). Compounding this, the hardware depreciates rapidly. GPU product cycles turn over every 1–2 years, forcing continuous reinvestment to remain competitive, and Amazon explicitly shortened its own depreciation schedule in early 2025 citing the "accelerating pace of AI hardware development" (theCUBE Research, 2025). Finally, heavy customer concentration among a handful of hyperscalers gives colocation data center operators diminishing pricing power as these large cloud providers increasingly build and own their own infrastructure, the leverage they hold in lease negotiations with independent operators continues to grow.

## V. Valuation

We evaluated this industry by making a revenue build mapping out revenue from 2023–2029. Our main assumptions with this included: from 2026 to 2029 average YoY CapEx growth of ~31%, AI workload share within data centers growing from 25% to 45%, and average colocation pricing rising from \$196 to \$235/kW/mo we included them because major data center investors like Amazon, Alphabet, and Microsoft are investing billions of dollars into data center growth and are projecting themselves to continue. The growth numbers are extrapolated from their projections for general AI market growth and JLL projecting drops in growth rate percentage after 2026. For the colocation pricing, general demand increases in AI and MW price increases should push up colocation prices, although they shouldn't go up at the same rate as the AI market, because AI workload share in these data centers should still be under 50% by 2029. This gives us revenue projections of \$67.9 Billion, \$82.5 Billion, \$98.5 Billion, and \$115.1 Billion from 2026 to 2029 respectively.

Our findings imply a CAGR of 14.11%. We also found that revenue would grow to between \$88.1 Billion to \$145.6 Billion In 2029. The difference between our bear and bull case implies that this industry is growing but very risky.

## VI. 212 Equity Strategy

The data centers industry is one of the largest growing sectors in the TMT space, however the equity market has factored this into their pricing with the industry trading at around 50 times earnings. We see little room for error with these companies for growth but find the sector as whole appealing due to the rising demand and their role as a vital backbone of the AI sector. 212 recommends that investors proceed with caution when investing in individual companies as projects have been delayed or completely canceled recently. We instead advise that investors trade the sector as a whole.

To capture the most growth while isolating the risk of specific company price fluctuations we recommend investing in DTCR which holds REITs with large amounts of data centers and projects in the works. We mention in our value drivers that a risk to these companies is hyperscalers who have better pricing power and the ability to create these data centers on their own, so we also recommend that an investor take a stake in QQQ and Amazon to capture the largest current data center holder (AWS). We also recommend investing in AIPO, which holds companies involved in the construction of these data centers which will also hedge against the risk of hyperscalers dominating the industry as this captures profits from these projects alone.

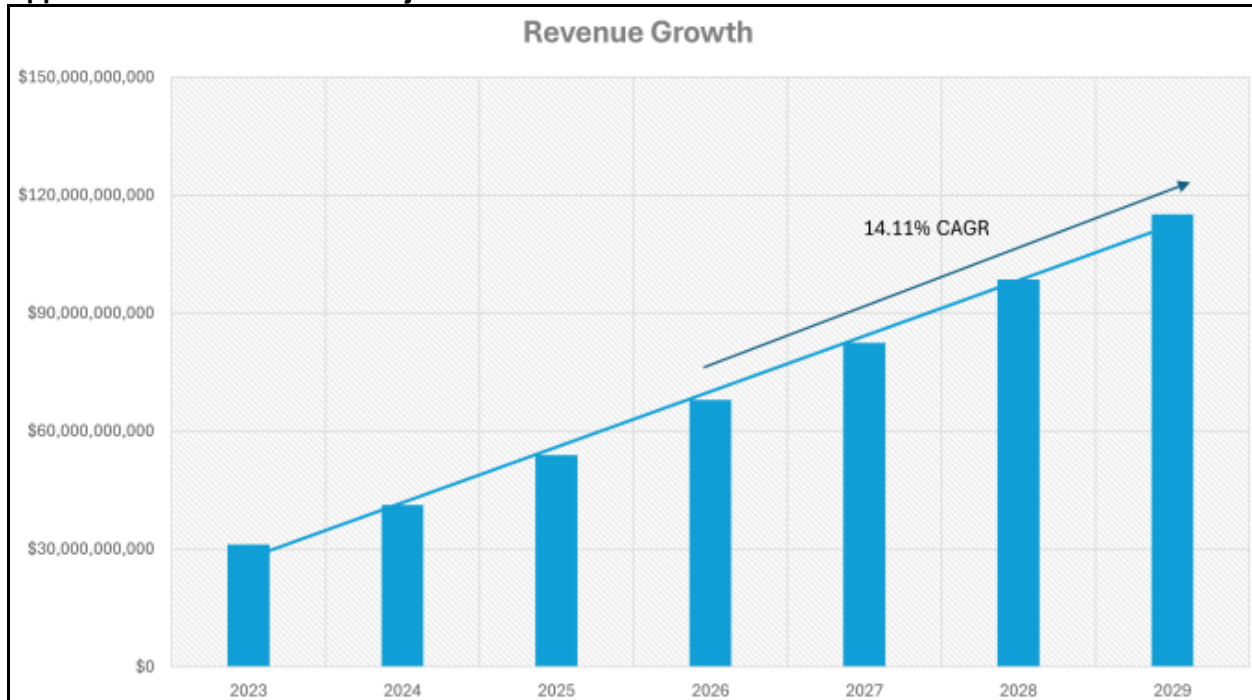
To capture the best amount of growth for this sector while diminishing risk we recommend this breakdown:

~50% DTCR  
~15% QQQ  
~15% AMZN  
~20% AIPO

## References:

McKinsey & Company (2025). Superagency in the Workplace.  
 Gartner (2025). Top Trends Shaping the Future of Cloud.  
 Brookings Institution (2025). AI, Data Centers, and Water.  
 Hanwha Data Centers (2025). Power Requirements for AI Data Centers.  
 CreditSights (2025). Hyperscaler Capex 2026 Estimates.  
 Cerno Capital (2025). Accounting for AI: Capital Deployment in the Hyperscaler Landscape.  
 theCUBE Research (2025). Resetting GPU Depreciation.  
 PwC (2024). Cloud and AI Business Survey.  
 CBRE (2025). North American Data Center Construction Hit New Heights in 2024 Amid Surging Demand.  
 Gartner (2024). Worldwide IaaS Public Cloud Services Revenue Grew 16.2% in 2023.  
 Gartner (2024). Forecasts Worldwide Public Cloud End-User Spending to Total \$723 Billion in 2025.  
 Goldman Sachs (2025). Data Center Power Demand: The 6 Ps Driving Growth and Constraints.  
 International Energy Agency (2025). Energy and AI.  
 JLL (2025). Global Data Center Demand Surges Despite Supply and Power Constraints.  
 Synergy Research Group (2025). Cloud Market Jumped to \$330 Billion in 2024 – GenAI Driving Half of Growth.

## Appendix A: Internal CAGR Projection Chart



## Appendix B: Valuation Model



Data\_Center\_Industry\_Forecast\_Model.pdf