

MARKET SIGHT LINES



Artificial Intelligence as a New Tailwind: Productivity, Power, and Profits

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As we've recently discussed, artificial intelligence (AI) is playing a key role in our [long-term investment themes](#) that help us understand how we might invest today to take advantage of the future. And last week we reviewed how [AI is and will be impacting the labor market](#), highlighting what will likely be a reallocation of labor over the next 5-10 years. In some ways, AI presents a long runway for improved productivity and profits. But in the near term, the focus must turn from promises and abstract concepts to clearly defined strategies and execution. In this Sight|Lines, we discuss AI investments and how these commitments of capital will be scrutinized to understand how they can improve profits and provide durable long-term returns.

THE TAKEAWAY: INVESTMENTS IN AI INFRASTRUCTURE AND DEPLOYMENT ARE EVERYWHERE, BUT THE KEY WILL BE EXECUTION.

AI investments are happening, and focus will soon turn to execution, from power to infrastructure to successful deployment, and how this translates to durable returns. In summary:

- The runway for productivity is real, but the timing depends on the speed of adoption.
- The computing workload mix is moving toward AI, increasing the demand for capacity.
- Rising power demand means new data center builds and selective retrofits, with aging power grids a possible constraint.
- While some firms are adopting AI, few consider their use "mature."
- Investors will prefer to see companies define key performance indicators (KPIs) as evidence of success of AI-related investments.
- Some metrics reflect great enthusiasm for the future, but companies must deliver.
- Geopolitics are rewiring supply chains, especially with semiconductors and equipment.
- The biggest risks relate to execution, including delivering results at a slower pace than expected and the potential for less durable results.

IN-DEPTH: WE SEE MEANINGFUL INVESTMENTS IN AI INFRASTRUCTURE AND DEPLOYMENT, AND FOCUS WILL BE TURNING TO EXECUTION AND PROFITS.

Investments in AI infrastructure and deployment are evident, and focus will soon turn to the effectiveness of execution and evidence of the success – and how this translates to durable returns. Going deeper:

- The speed of AI adoption, not hype, will define the pace of improved productivity, with studies estimating:
 - An increase of labor productivity of ~15% over 10 years.
 - A \$7 trillion increase in global GDP attributable to AI over the same period.
- AI deployment requires a greater share of data centers' workload, and the increase of both AI and more general cloud computing needs will increase power demand:
 - AI processing accounts for ~13% of current data center demand and is expected to grow to ~28% over the next few years.
 - U.S. data center occupancy is near record highs, even as power demand for global data centers is expected to increase ~50% in the coming years.
- Power availability and facility design will be key to successful execution.
 - Many existing data centers have outdated processors and will need to be retrofitted.
 - A new data center can draw the same amount of power as hundreds of thousands of homes.
 - Data centers are concentrated in places like Northern Virginia, Texas, Beijing, and Shanghai (among others), putting stress on power grids in those areas.
- While ~9% of firms are adopting some applications of AI, only ~1% consider their use of AI "mature":
 - 86% of employers expect AI to transform their business by 2030.
- Investors will prefer to see KPIs for AI initiatives around utilization, throughput, and monetization.
 - Possible metrics include AI "share" versus traditional processing, process cycle times, or number of documents processed, with progress expected over quarters, not years.
- Some market metrics show great enthusiasm for AI and our future, but companies must deliver:
 - Nvidia returned 1,093% from the beginning of 2023 through August 2025.
 - At launch, ChatGPT signed up 100 million users in just two months.
- Geopolitics are rewiring supply chains, especially with semiconductors and equipment.
 - The U.S, EU, and China have all passed subsidies aimed to boost their semiconductor industries.
- The biggest risks relate to execution, including a slower pace delivering results and less durable results.
 - Data center share of the power supply will more than double by 2030, straining power grids.

CONCLUSION

AI is playing a key role in our [long-term investment themes](#), helping us understand how we might invest today to take advantage of the future. [AI is and will be impacting the labor market](#), driving a dramatic reallocation of labor over the next 5-10 years. AI investment, execution, and results are coming into focus. We see a long runway for improved productivity and profits, and in the near term, we must look past promises and abstract concepts to gauge if strategies are clearly defined and can be well executed. AI provides the potential to contribute to a company's ability to provide long-term, durable returns.

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