AI Is Moving Fast—And the Winners Might Not Be Who You Expect

AI has moved beyond the hype cycle, and so has the conversation around investing in it.

Here we break down the evolution of AI infrastructure, emerging application-layer leaders, and how valuations are shifting.

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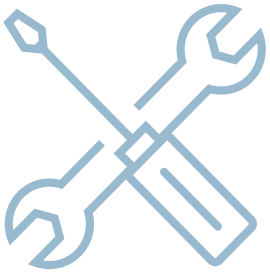
Dave Harrison Smith, CFA (Executive Vice President, Domestic Equities, Bailard, Inc.) examines the three fundamental elements of AI investing and how small and mid-cap companies are emerging as key players in capturing long-term AI value.

Artificial intelligence (AI) has captured the market's attention, driving unprecedented capital flows into both infrastructure and applications. Yet daily market swings dominate headlines, making it harder for investors to focus on the structural trends that will shape AI's long-term trajectory. Identifying where some of the best opportunities lie in an increasingly volatile environment requires prioritizing enduring investment themes rather than short-term disruptions.

This white paper explores three fundamental elements of AI investing—AI infrastructure buildout and transition, the monetization of real-world applications, and the shifting valuation landscape shaping investor opportunity. In particular, we examine why small and mid-cap technology firms represent a compelling, though selective, opportunity as the market transitions from a concentration on dominant megacap players to a broader set of innovative companies leading the next phase of AI adoption.

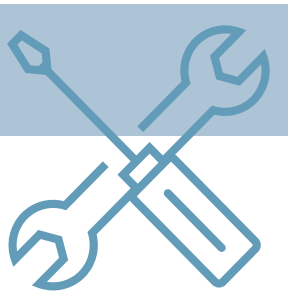
1. INFRASTRUCTURE BUILDOUT & TRANSITION



2. MONETIZATION OF REAL-WORLD APPLICATIONS

3. A SHIFTING VALUATION LANDSCAPE & INVESTOR OPPORTUNITIES

1. Laying the Groundwork: How AI Infrastructure Is Evolving



The development of AI mirrors past technological revolutions. Just as the internet required significant investment in networking, data storage, and computing power before unlocking its full potential, AI is undergoing a similar foundational buildout. Cloud providers and chip manufacturers are scaling AI-specific data centers, fueling record capital expenditures (capex). However, AI-related spending tends to follow distinct investment cycles, transitioning from infrastructure expansion to efficiency optimization and, ultimately, monetization.

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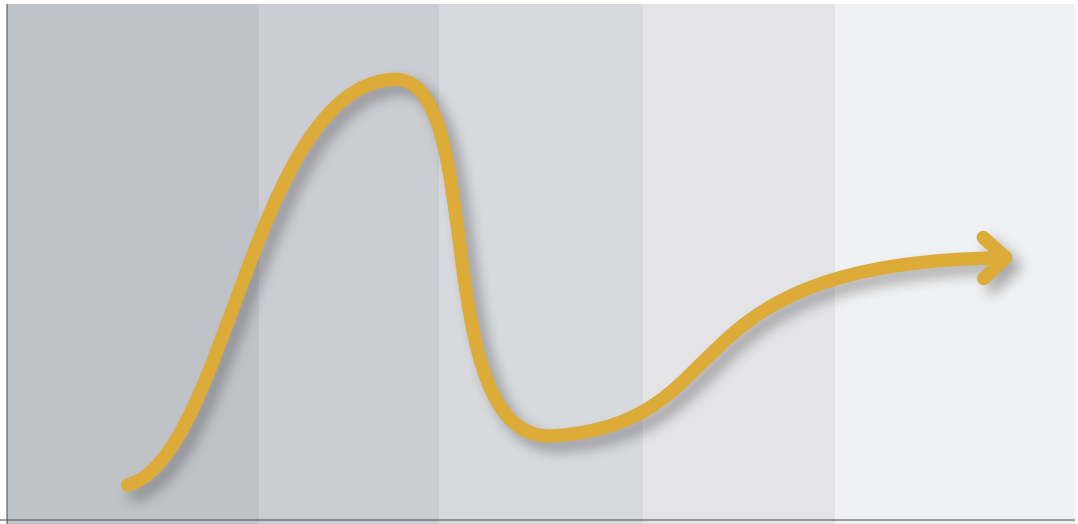
To better understand where AI investing stands today, it's useful to consider how emerging technologies frequently evolve. The Gartner Hype Cycle[1] provides a structured way to think about how sentiment, and investment stages, can shift over time. The chart and table that follow adapt this framework to the AI investment landscape.

AI infrastructure investment is evolving from training massive AI models to deploying them efficiently at scale—a shift from training to inference computing. While training requires immense raw processing power, inference computing focuses on optimizing cost, energy use, and response time to streamline production AI applications for deployment in real-world settings.

1 *https://www.gartner.com/en/research/methodologies/gartner-hype-cycle*

ADAPTING THE GARTNER HYPE CYCLE FOR AI INVESTMENT TRENDS

Connecting each hype cycle stage to corresponding AI investment phases and the core activities driving value creation at each point in the cycle.



GARTNER HYPE CYCLE STAGE	Innovation Trigger	Peak of Inflated Expectations	Trough of Disillusionment	Slope of Enlightenment	Plateau of Productivity
AI INVESTMENT PHASE	Infrastructure Buildout	Early Applications & Hype	Optimization & Efficiency	Early Monetization	Full Monetization & Integration
KEY INVESTMENT ACTIVITY	Large-scale investments in data centers, semiconductor technology, and foundational AI models.	Investors pour capital into AI ventures with high expectations, often leading to overvaluation.	Companies shift focus from raw infrastructure expansion to cost efficiency, model refinement, and sustainable AI adoption. Non-viable business models falter.	Successful AI applications emerge, distinguishing long-term winners from short-term speculative plays.	AI is embedded into business operations, driving sustained revenue growth and profitability.

Sources: Bailard, Inc., Gartner.
https://www.gartner.com/en/research/methodologies/gartner-hype-cycle.

For investors, the key consideration is whether these spending patterns are sustainable as the use cases shift toward inference computing. In 2025, Meta, Microsoft, Amazon, and Alphabet are projected to collectively spend $325 billion on capex,[2] largely driven by AI infrastructure needs. For now, major players insist that the return on investment is strong, and they are continuing to invest to meet heightened demand. Market volatility and economic conditions will determine whether this level of investment is repeatable.

Nvidia remains the dominant player within AI compute, but competition is intensifying. Cloud providers like Amazon (AWS Trainium), Google (TPUs), and Microsoft (Azure AI Chips) are developing custom silicon, while alternative chipmakers are gaining traction in cost-efficient AI processing.[3] While competition is heating up, we expect the inference market to be vast and that there will be room for multiple winners.

Jevons Paradox may provide a useful framework for understanding the long-term impact of the rapid progression of cost-efficient compute. First observed in the 19th century with coal consumption and highly efficient steam engine technology, the paradox predicts that greater efficiency can unexpectedly lead to more usage of the underlying resource as costs plummet and new, more profitable use cases emerge. As AI tools become more powerful and accessible, adoption will multiply across industries, reinforcing the need for sustained infrastructure investment.

"Short-term market shocks are a natural part of long-term investment cycles."

AI infrastructure spending is not immune to external pressures. Recent policy changes—including semiconductor tariffs, reversals in AI-related funding incentives, and increased scrutiny of cloud computing contracts—have forced companies to reassess capital allocation. Investors must evaluate how regulatory headwinds may shape AI spending patterns in the years ahead. Short-term market shocks are a natural part of long-term investment cycles. Just as early cloud computing investments faced skepticism before transforming enterprise software, AI infrastructure spending will experience periodic corrections before reaching its full monetization potential. Investors should view these fluctuations as part of a broader cycle, rather than a reason to exit AI exposure altogether.

While dominant AI hardware and cloud firms continue to command attention, investors should consider overlooked infrastructure players specializing in data processing efficiency, AI middleware, and power optimization. These firms support AI deployment and may offer more attractive valuations without the concentration risks seen in megacap stocks. Given broader market volatility, however, a highly selective approach remains essential.

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2 https://finance.yahoo.com/news/big-tech-set-to-invest-325-billion-this-year-as-hefty-ai-bills-come-under-scrutiny-182329236.html.

3 Amazon (https://www.wsj.com/articles/amazon-announces-supercomputer-new-server-powered-by-homegrown-ai-chips-18c196fc), Google (https://www.ft.com/content/3a3f8c9f-90fd-4e2f-94c4-b9977438e911), Microsoft (https://www.ft.com/content/e85e43d1-5ce4-4531-94f1-9e9c1c5b4ff1).

Mention of specific companies is for illustrative purposes only and does not constitute a recommendation or endorsement.

2. From Experimentation to Monetization: Where AI Drives Real Revenue

AI is undergoing a transition from an era of experimentation and foundational research to one of real monetization. However, most discussions of AI investing remain skewed toward megacap technology firms, overlooking smaller companies integrating AI into business models to drive sustainable revenue growth. Emerging small and mid-cap AI-focused companies are developing solutions across business process automation, cybersecurity, and ad tech. These firms—typically ranging from a few hundred million to tens of billions of dollars in market capitalization—are demonstrating that AI can generate significant, recurring revenue when embedded into mission-critical workflows.

One such example is software firms integrating AI-powered automation tools into their existing products. HubSpot, for instance, released 'Breeze' in 2024, an AI engine introduced to automate tasks and enhance customer engagement. This strategic AI adoption contributed to a 21% year-over-year increase in sales for Q4 2024, helping to demonstrate AI's real-world business impact.[4]

The Gartner Hype Cycle framework suggests that many AI applications are currently moving from the Optimization & Efficiency phase into the Early Monetization phase. Over the coming year, revenue from AI will begin to meaningfully scale for the winners and lesser competitors will fade. This divergence in fates, coupled with what we see as attractive valuations within small and mid-cap software, suggest a rich opportunity set for investors.

We also believe this will provide investors an opportunity to move beyond crowded megacap trades. Small and mid-cap AI application providers offer exposure to AI's expansion and can help offset concentration risk seen in the most popular AI stocks.

> *"AI is undergoing a transition from an era of experimentation and foundational research to one of real monetization."*

4 https://www.investors.com/stock-lists/sector-leaders/ai-stock-hubspot-hubs-earnings/.
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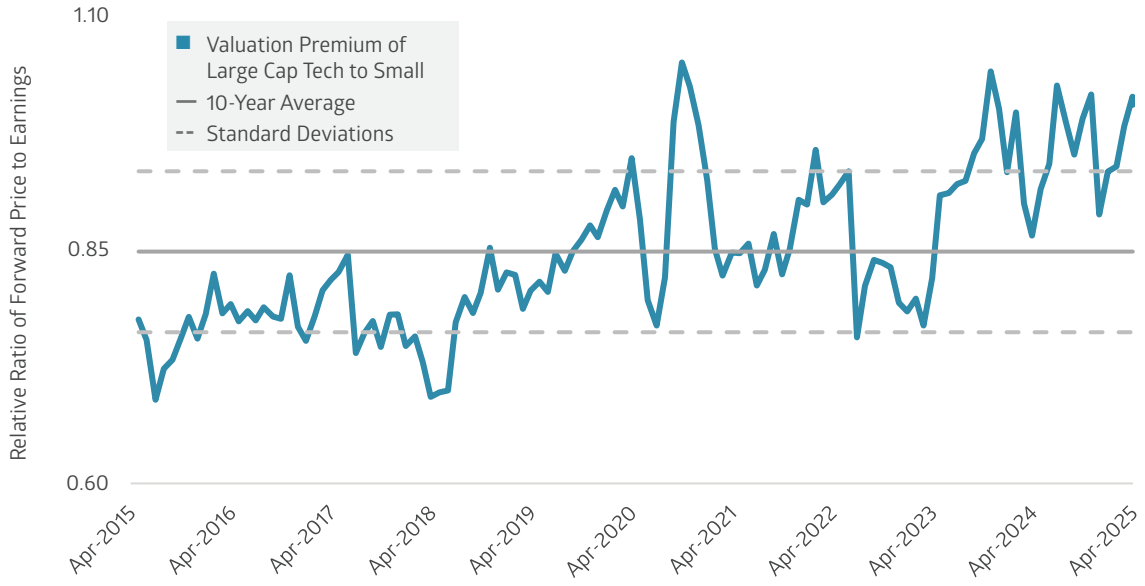
3. Valuation Shifts and Selective Opportunities in AI Investing

AI is no longer the exclusive domain of megacap technology firms. While dominant players have captured market attention, recent market dynamics suggest that stretched valuations and slowing earnings growth are putting pressure on large-cap AI companies. Investors must assess whether current valuations remain justified given rising capital expenditures, shifting competitive dynamics, and the uncertain timeline for full monetization.

The Magnificent 7 megacap stocks—including AI leaders such as Nvidia, Microsoft, and Alphabet—have driven much of the market's recent gains, significantly outpacing the broader S&P 500. Much of this has been driven by divergent growth in fundamental earnings. However, in recent quarters, valuation dispersion has been widening. This comes despite an expectation of slower earnings growth over the next several years. For the first time in several years,

STRETCHED AGAIN: MEGA CAPS TRADE NEAR DECADE-HIGH PREMIUMS

The forward price to earnings (P/E) multiple of large-cap tech stocks remains elevated related to the multiple of small-cap peers, signaling a persistent valuation premium.



Sources: Bailard, Inc., Bloomberg. Ten-year data ending 4/1/2025. Large cap tech represented by the Russell 1000 Technology Index and small cap tech by the Russell 2000 Technology Index. Megacap stocks generally refer to the largest publicly traded companies by market capitalization—typically those exceeding $200 billion. This category includes, but is not limited to, the "Magnificent Seven" (Apple, Microsoft, Alphabet, Amazon, Nvidia, Meta, and Tesla).

the bottom-up consensus estimates suggest that smaller tech stocks are expected to deliver faster earnings growth than large-cap tech stocks.

This divergence suggests that there is significant opportunity for investors to capture the next generation of AI leaders at a discount to future value. However, we note that these smaller firms can be more volatile, as their business models are more nascent, execution less consistent, and valuations subject to wider swings. Investors must be increasingly selective, distinguishing between companies with sustainable revenue models and those still reliant on speculative narratives.

At the same time, investors need to be cognizant that underlying technologies can transition and undergo fundamental shifts. The current transition in AI hardware is a case study of fluctuations created by these developments. The evolution towards AI inference computing—prioritizing AI deployment over raw model training—is having a massive impact on companies across the datacenter. Nvidia continues to dominate training spend, and with its sizeable and leading-edge research team can make a strong case for use of its products in inference compute as well. But as enterprise needs shift, that leadership may not translate into the same dominance seen in the training market, creating massive opportunities for alternative chipmakers.[5] We are seeing similar opportunities in storage, networking, and software-driven AI solutions. This shift marks the start of a broader dispersion of AI investment opportunities beyond the biggest names in hardware.

These structural changes present both risks and opportunities. Investors who focus solely on mega-cap AI firms may face elevated valuations and slowing growth, while those who look beyond the obvious plays may find compelling value in smaller companies driving AI adoption at the application layer.

"The most compelling opportunities lie with companies that successfully bridge the gap between innovation and monetization"

Conclusion: Navigating AI's next phase

To navigate this shift, investors must balance long-term vision with adaptability, recognizing where AI infrastructure, applications, and monetization trends fit within this cycle. AI investment trends follow recognizable patterns of adoption and refinement, and while frameworks such as the Gartner Hype Cycle help illustrate the broader progression, investors should remain focused on companies that can translate AI innovation into profitable, real-world applications.

AI investment is already shifting beyond large-cap firms dominating infrastructure. Some of the most compelling opportunities lie with companies that successfully bridge the gap between innovation and monetization—turning AI from a technological breakthrough into a meaningful edge in the marketplace. Investors who focus on businesses embedding AI into real-world workflows, rather than chasing early-stage hype, will likely be best positioned to capture AI's long-term value.

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5 https://www.ft.com/content/d5c638ad-8d34-4884-a08c-a551588a9a28.
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