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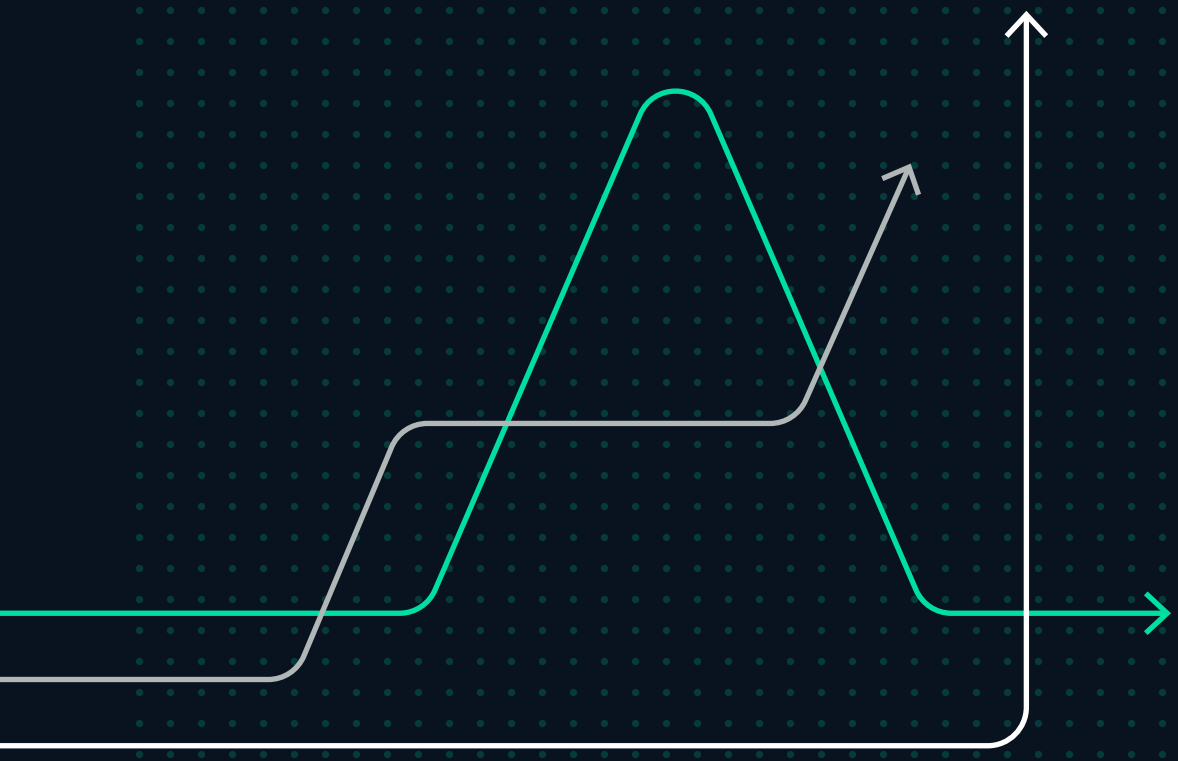
WHITEPAPER

The "Golden Age" of AI Investment



A Multibillion-Dollar Market Emerged in Less Than 4 Years. What Can Investors Expect and How Can They Benefit?

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Executive Summary

We are witnessing **the fastest wealth creation cycle in modern history**—and most family offices are **underinvested**.

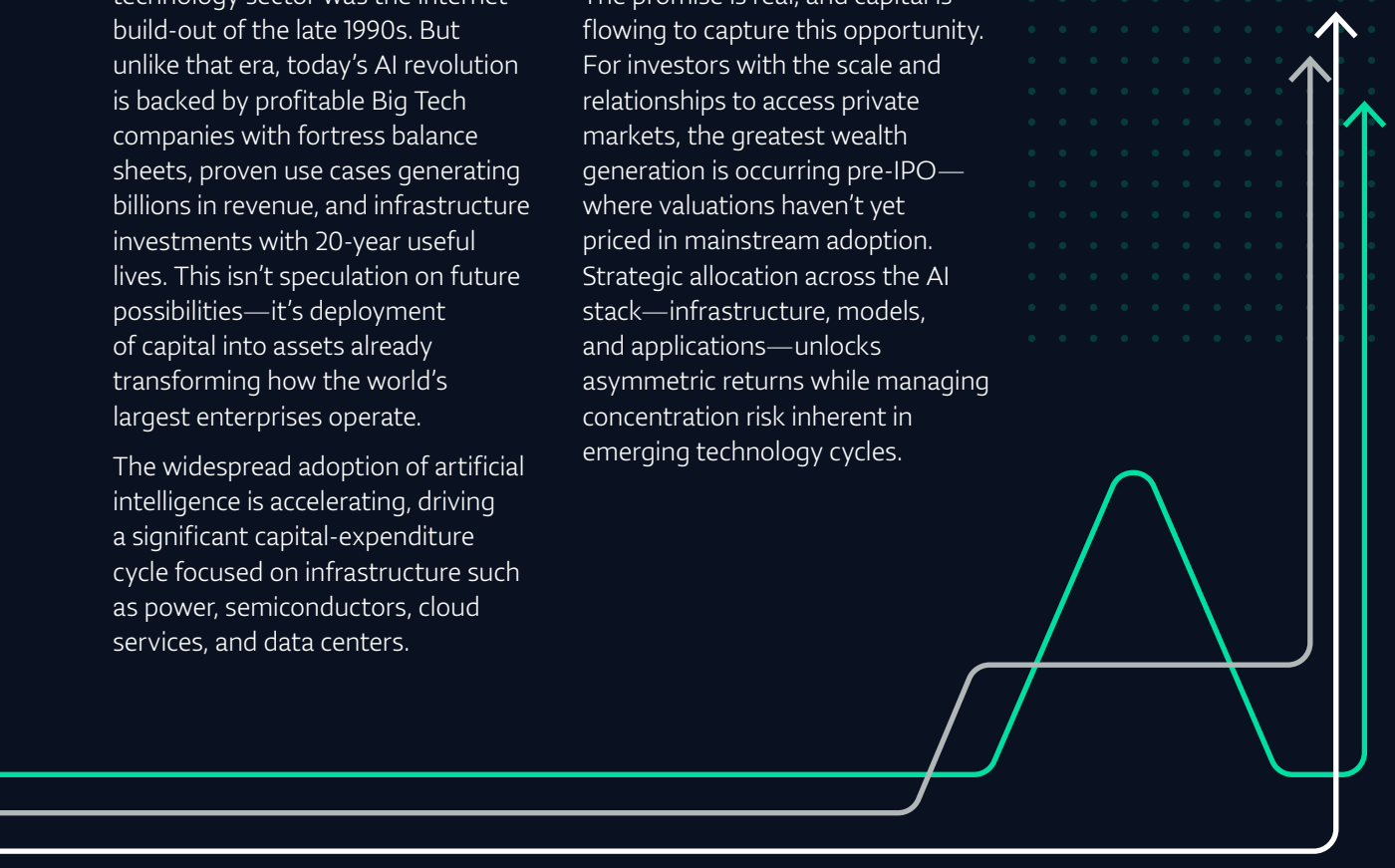
Since ChatGPT's launch in late 2022 (the foundation model that gained broad public attention), artificial intelligence (AI) has generated up to USD 19 trillion in market value[1], minted dozens of new billionaires, and created investment opportunities that won't repeat in our lifetime. The last time capital moved this decisively into a single technology sector was the internet build-out of the late 1990s. But unlike that era, today's AI revolution is backed by profitable Big Tech companies with fortress balance sheets, proven use cases generating billions in revenue, and infrastructure investments with 20-year useful lives. This isn't speculation on future possibilities—it's deployment of capital into assets already transforming how the world's largest enterprises operate.

The widespread adoption of artificial intelligence is accelerating, driving a significant capital-expenditure cycle focused on infrastructure such as power, semiconductors, cloud services, and data centers.

Spending currently exceeds revenue at most flagship firms, prompting bubble concerns; however, today's cycle is supported by strong Big Tech balance sheets and durable, reusable assets, which increase resilience and create a strong differentiator compared to past booms. Forecasts suggest a multi-trillion-dollar economic impact, rising ROI, and meaningful productivity gains if infrastructure scales efficiently, matching the growth rate of 19th-century industrialization.

The promise is real, and capital is flowing to capture this opportunity. For investors with the scale and relationships to access private markets, the greatest wealth generation is occurring pre-IPO—where valuations haven't yet priced in mainstream adoption. Strategic allocation across the AI stack—infrastructure, models, and applications—unlocks asymmetric returns while managing concentration risk inherent in emerging technology cycles.

Up to USD 19 trillion in market value



1 Fortune, "Goldman says the stock market has already priced in the AI boom, with $19 trillion of market value running ahead of actual economic impact so far", https://fortune.com/2025/11/17/is-ai-a-bubble-goldman-sachs-market-already-priced-in-19-trillion/

AI: The Big Promise

Ever since the computer was invented, scientists have been trying to create a machine as intelligent as humans—and perhaps even more advanced. Various ancient myths and science-fiction scenarios—although some are further from becoming reality—have created high hopes for how Artificial Intelligence technology will enhance our lives. A world where human labor is redundant, and everyone enjoys a carefree, creative life, free from the daily, mundane tasks of labor, is one of the most vivid expectations.

In terms of its impact on the economy and society, some researchers predict that it will exceed that of the Industrial Revolution over the next decade[2]. Some benchmarks suggest that AI could improve productivity in valuable areas such as scientific R&D[3], with returns justifying the billions of dollars invested.

Advances in AI will supercharge predictive analytics, data analytics, computer vision, and image and video analysis, which are essential to medical diagnostics and autonomous vehicles[4].

Many sectors in science and medicine may benefit significantly from leveraging AI's ability to analyze large datasets and may even unlock achievements that scientific communities have pursued for years, such as deciphering non-coding DNA to diagnose rare and uncommon diseases and even find cures for them, **extending the healthy human lifespan**[5]. Coupled with robotics, AI has the potential to significantly **boost industrial production**.

Applications are literally endless. But the biggest promise of AI itself is its evolution into what scientists call **Artificial General Intelligence**[6] (AGI)—a form of AI that matches and even surpasses human capabilities across all cognitive tasks. Scientists have varying opinions on when AGI may emerge. While some predict that human-level AI is only a few years away, others believe it will likely appear within the next century.

> **"AI is not a robot apocalypse; it's a tool for a better future."**
>
> **Demis Hassabis**
> (CEO of Google DeepMind)

> **"Artificial intelligence will augment human intelligence, not replace it."**
>
> **Ray Kurzweil**
> (computer scientist, author, futurist)

> **"The rise of powerful AI will either be the best or the worst thing ever to happen to humanity. We do not yet know which."**
>
> **Stephen Hawking**
> (theoretical physicist, cosmologist)

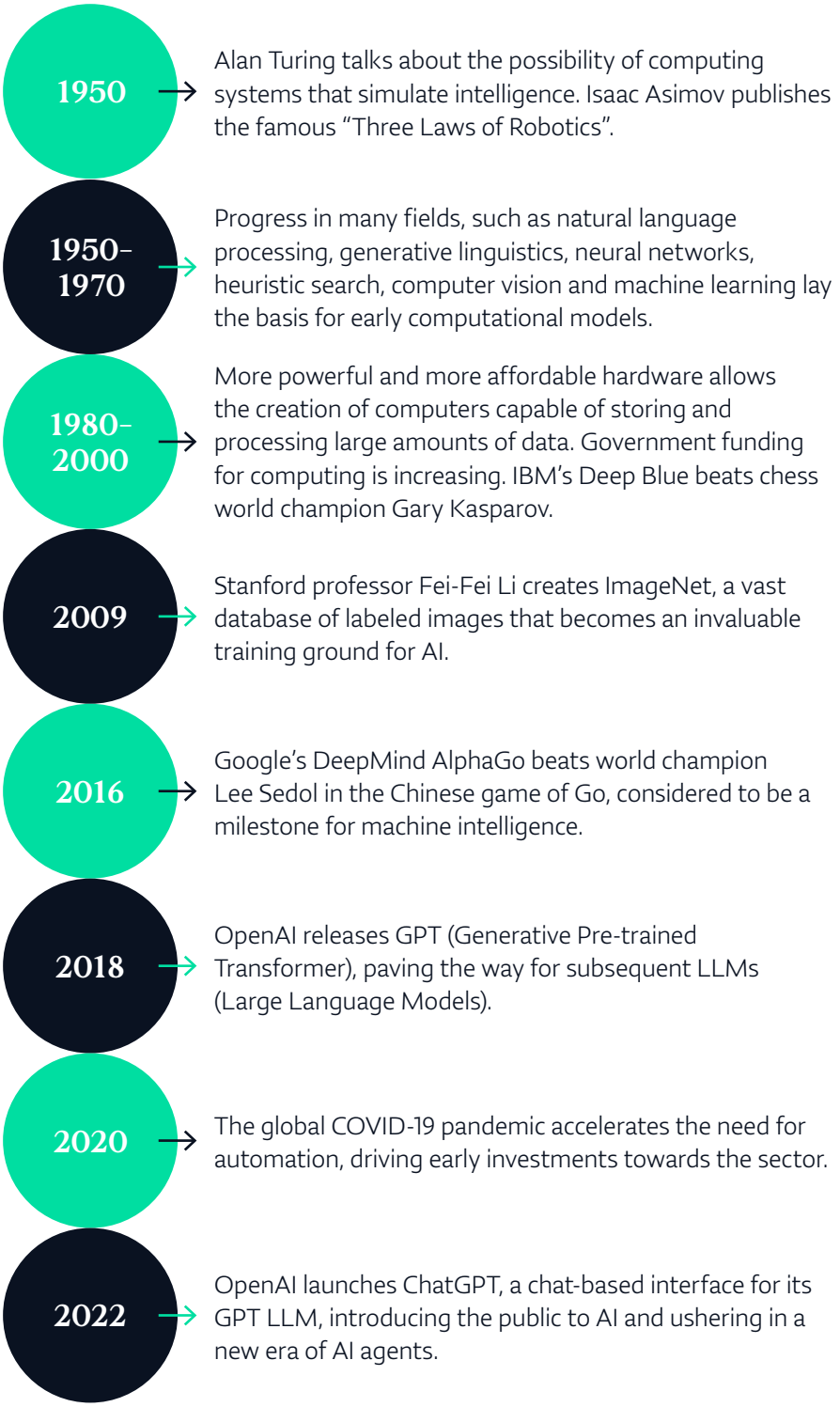
> **"Artificial intelligence and generative AI may be the most important technology of any lifetime."**
>
> **Marc Benioff**
> (CEO of Salesforce)

2 Kokotajlo D., Alexander S., Larsen T., Lifland E., Dean R., "AI 2027", https://ai-2027.com/
3 EpochAI, "What will AI look like in 2023?", https://epoch.ai/blog/what-will-ai-look-like-in-2030
4 IBM, "The future of AI: trends shaping the next 10 years", https://www.ibm.com/think/insights/artificial-intelligence-future
5 Dario Amodei, "Machines of Loving Grace", https://www.darioamodei.com/essay/machines-of-loving-grace
6 IEEE Transmitter, "Artificial General Intelligence: What is it?", https://transmitter.ieee.org/artificial-general-intelligence-what-is-it/

A Short History of AI

The concept of "machine intelligence" originated in 1950, when Alan Turing speculated about the theoretical possibility of creating machines that think, while the groundwork for neural networks was laid a couple of years earlier. The idea of artificial intelligence—and, most precisely, the possibility of building it—was the result of a convergence of progress in many scientific fields, from mathematics and engineering to psychology, economics, and political science. Centuries of philosophical exploration, advances in computer hardware, and improvements in algorithms have contributed to the creation of AI—from Aristotle to Leibniz, the greatest minds in human history have shaped the foundations of logic.

The Foundations of AI – From Theory to Practice



Based on data from SRI International[7], Stanford AI100[8], and other sources.

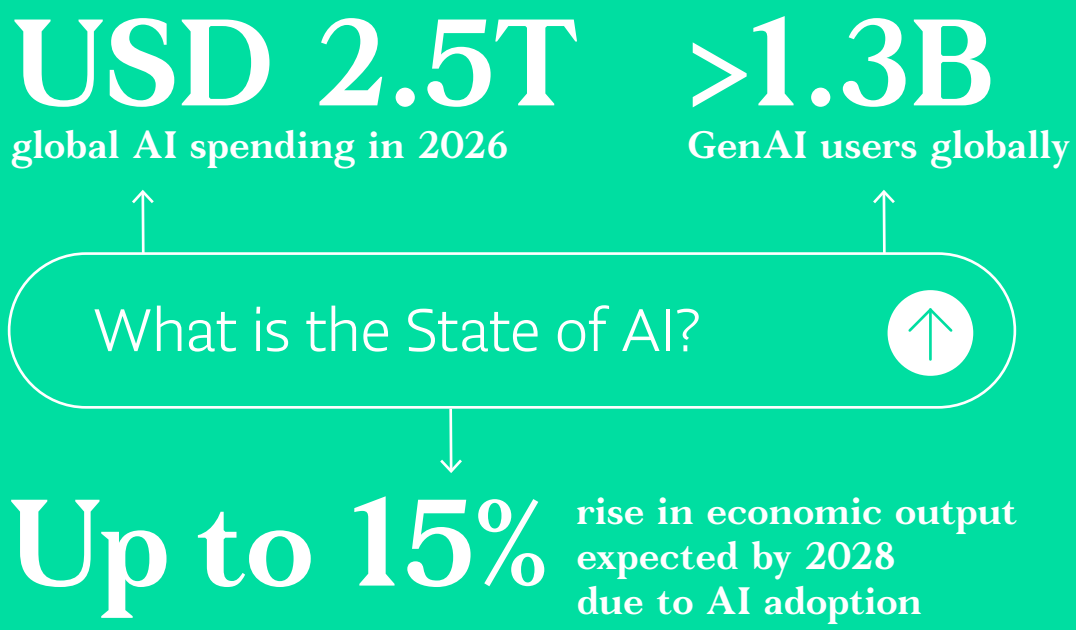
7 SRI International, "The SRI Artificial Intelligence Center – a Brief History", https://www.sri.com/wp-content/uploads/2021/12/635.pdf
8 Stanford, "One Hundred Year Study of Artificial Intelligence (AI100)", https://ai100.stanford.edu/

Market Overview

Today, Generative AI (GenAI), considered a significant step towards Artificial General Intelligence, is **used by 1.3 billion people globally**[9], making it **the fastest-growing computer application in history**. Since the first foundation models—Anthropic's Claude, Google's Gemini, and OpenAI's ChatGPT—entered the market, enthusiasm for AI has surged—and so have investments in the sector.

Market Size

- In 2026, total worldwide spending on AI is expected to reach USD 2.5 trillion[10].
- The global AI market is projected to grow from roughly USD 391 billion in 2025 to over USD 1 trillion by 2031[11], with some forecasts suggesting a rise to **USD 4.8 trillion by 2033**—a 25-fold increase in ten years[12].



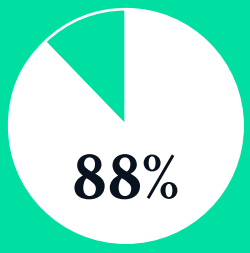
9 DataReportal, "Digital 2026: more than 1 billion people use AI", https://datareportal.com/reports/digital-2026-one-billion-people-using-ai
10 Gartner, "Worldwide AI Spending Will Total $2.5 Trillion in 2026", https://www.gartner.com/en/newsroom/press-releases/2026-1-15-gartner-says-worldwide-ai-spending-will-total-2-point-5-trillion-dollars-in-2026
11 Grand View Research, "Artificial Intelligence Market (2026 - 2033)", https://www.grandviewresearch.com/industry-analysis/artificial-intelligence-ai-market
12 UN Trade & Development, "2025 Technology and innovation report", https://unctad.org/publication/technology-and-innovation-report-2025

AI Adoption Rates

- As of late 2025, **16.3% of the global population** (roughly 1 in 6 people) uses generative AI tools, with usage in the Global North growing twice as fast as in the South[13].

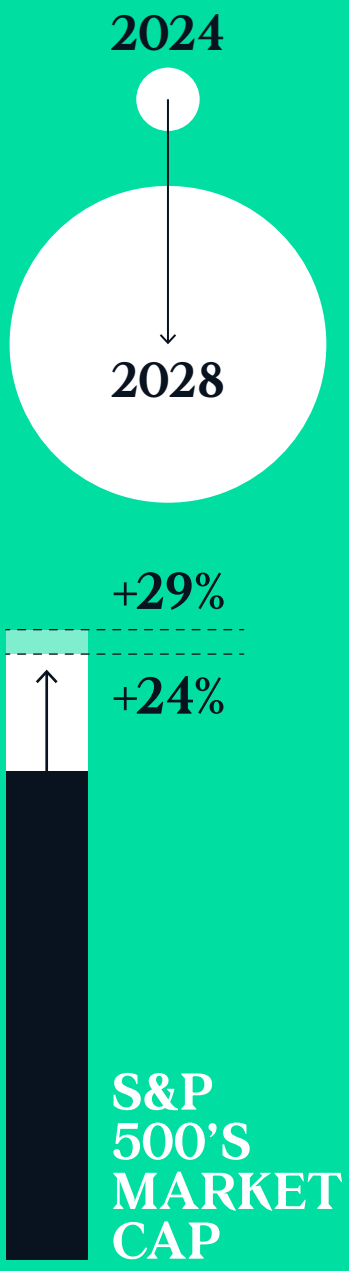
16.3%

- According to McKinsey's survey, **88% of organizations use AI** in at least one business function, with 62% being actively engaged with some form of AI[14]. PwC reports[15] that AI usage increased 100% across all industries, including those less obviously exposed to AI.



Potential Revenue & Value Creation

- Revenue from GenAI could reach about USD 1.1 trillion in 2028, growing over 20 times, a significant rise from USD 45 billion in 2024[16].
- Full AI adoption across S&P 500 companies could add up to an annual net benefit of USD 920 billion[17]. In the long term, that could translate into a USD 13 trillion to USD 16 trillion increase in the S&P 500's market cap, or 24% to 29% above the current level.
- AI has the potential to boost global economic output by up to 15% over the next decade. This would effectively add one percentage point to annual growth rates—on par with the growth increment the world began enjoying with 19th-century industrialization[18].
- Industries more exposed to AI are seeing 3x higher growth in revenue per worker[19].



13 Microsoft, "Global AI Adoption in 2025", https://www.microsoft.com/en-us/corporate-responsibility/topics/ai-economy-institute/reports/global-ai-adoption-2025/
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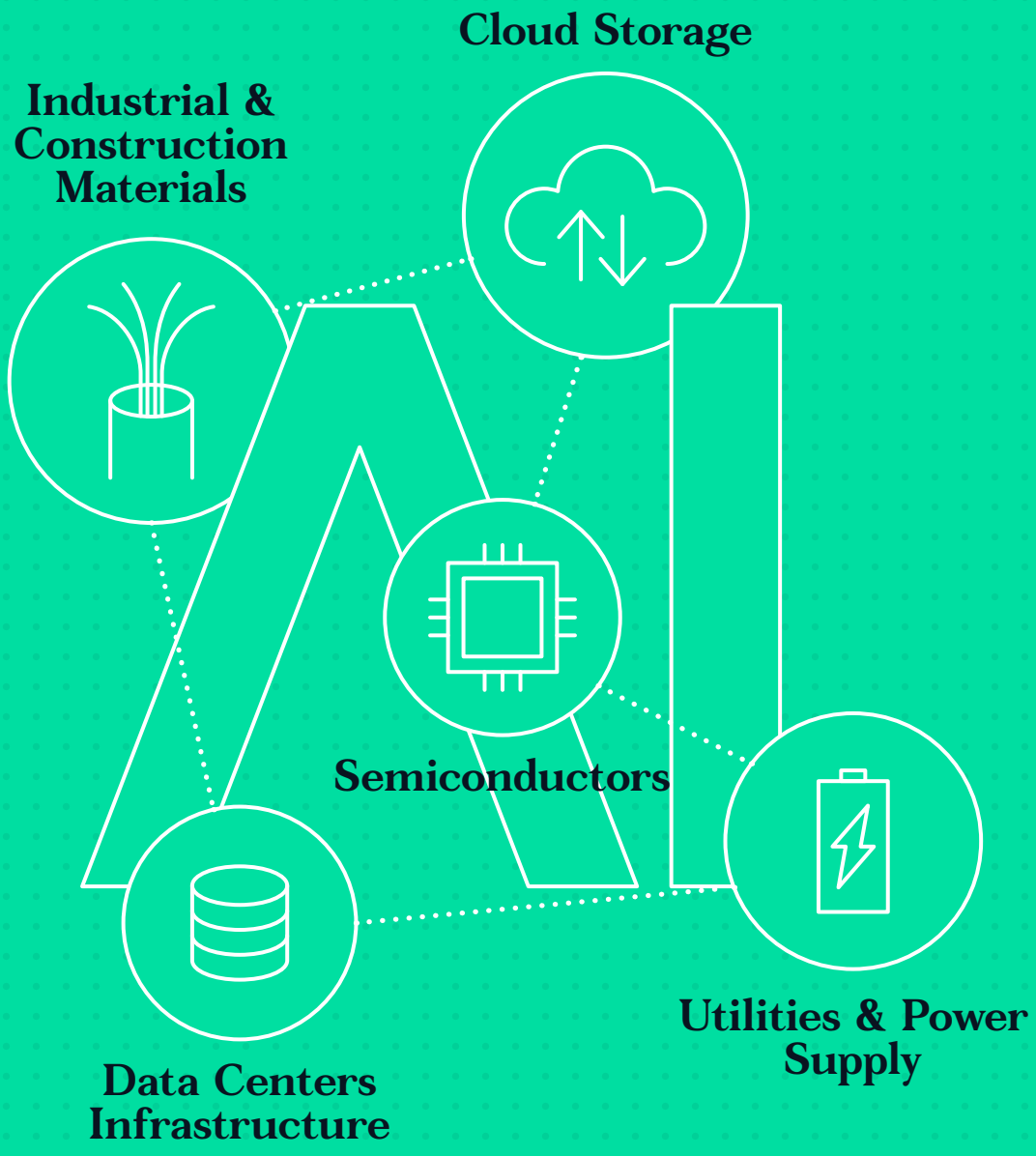
16 The Wall Street Journal, "How Sam Altman Tied Tech's Biggest Players to OpenAI", https://www.wsj.com/tech/ai/sam-altman-open-ai-nvidia-deals-d10a6525
17 Morgan Stanley, "AI Could Affect 90% of Occupations", https://www.morganstanley.com/insights/articles/ai-workplace-outlook-2H-2025
18 PwC, "AI adoption could boost global GDP by an additional 15 percentage points by 2035, as global economy is reshaped: PwC Research", https://www.pwc.com/gx/en/news-room/press-releases/2025/ai-adoption-could-boost-global-gdp-by-an-additional-15-percentage.html
19 PwC, "The Fearless Future: 2025 Global AI Jobs Barometer", https://www.pwc.com/gx/en/services/ai/ai-jobs-barometer.html

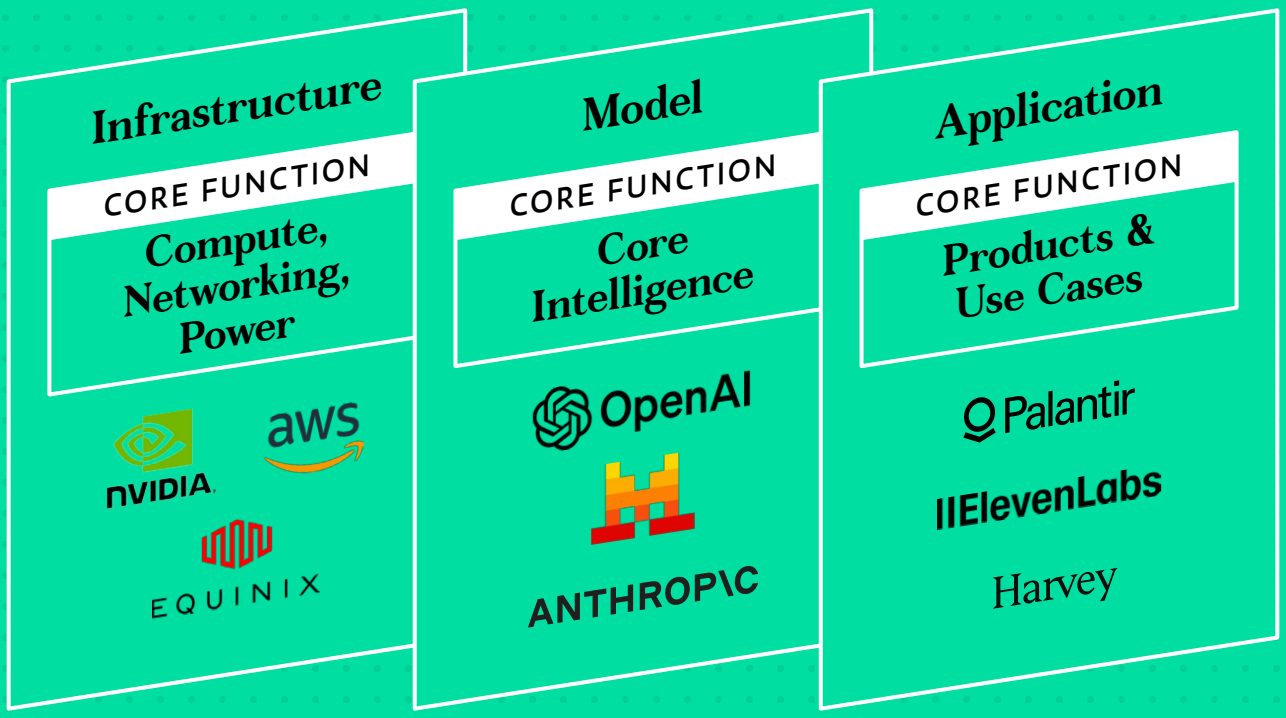
Market Players

Companies building the most widely used GenAI tools have shown remarkable progress during the last couple of years, but the AI boom has created multiple winners within the tech ecosystem, and a classic **"picks and shovels" investment opportunity**. Companies providing the physical infrastructure—such as power, real estate, and construction materials—are growing and profiting alongside the technology companies. So have companies building applications on top of the foundation models (vertical layer).

The AI Chain Reaction: Sectors Expanding to Support AI's Boom



The AI Technology Stack



The Infrastructure Layer: From Bricks to Power

The capabilities of AI products **rely heavily on computing power and, ultimately, power supply**. Equity analysts estimate that data center **power demand** is poised to grow 160% by the end of the decade, which should drive a significant acceleration in electricity growth in the U.S. and Europe, not seen in a generation[20]. The S&P 500 Utilities Sector—traditionally considered a "boring" stable sector—has delivered an 19% total return (year-to-date, March 2026), making it the top-performing sector in the entire S&P 500[21].

GenAI spending on hardware, networking, and memory is projected to rise from USD 98 billion in 2024 to nearly USD 276 billion by 2028—almost a threefold increase[22].

20 Goldman Sachs, "25 Years on; Lessons from the bursting of the technology bubble", https://www.goldmansachs.com/pdfs/insights/goldman-sachs-research/25-years-on-lessons-from-the-bursting-of-the-tech-bubble/redaction.pdf

21 S&P Global, "S&P 500 Utilities", https://www.spglobal.com/spdji/en/indices/equity/sp-500-utilities-sector/#overview

22 Morgan Stanley, "GenAI Revenue Could Surpass $1 Trillion by 2028" https://www.morganstanley.com/insights/articles/genai-revenue-growth-and-profitability

Another report estimates that global AI infrastructure spending will reach USD 758 billion by 2029, with accelerated servers accounting for 94.3% of the total market spending[23]. Global spending on data centers is predicted[24] to reach almost USD 3 trillion by 2029.

Lastly, **the chip manufacturers** have also advanced. Nvidia's remarkable rise—reaching a market value of USD 5 trillion just three months after USD 4 trillion[25]—is just the tip of the iceberg. Companies are actively seeking to secure AI chips, creating supply chain constraints and sparking a broader boom in the semiconductor industry.

> **"I don't think there are any priors to the size, the speed, and scale [of the AI build-out]. The good news is that infrastructure is sexy again. This is like the combination of the build-out of the internet, the space race, and the Manhattan Project all put into one."[26]**

Jeetu Patel
President and Chief Product Officer of Cisco

Breakout Company: Crusoe Energy

Crusoe

Crusoe Energy has carved out a unique position in AI infrastructure by solving two problems simultaneously: GPU scarcity and energy waste. It raised USD 1.38 billion in October 2025 at a USD 10 billion valuation[27] (USD 3.9 billion in total debt and equity financing since its inception in 2018). Crusoe builds AI computing facilities at sites with stranded or wasted energy, particularly flared natural gas from oil fields and renewable energy sources in remote locations[28].

The USD 10 billion-valued company is included in the 2025 Forbes AI 50 and TIME100 AI lists.

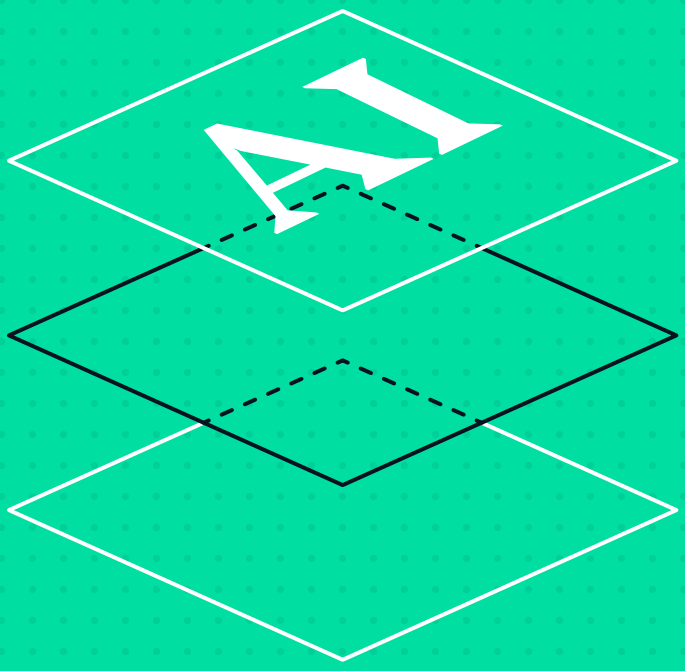
23 IDC, Artificial Intelligence Infrastructure Spending to Reach $758Bn USD Mark by 2029, according to IDC", https://my.idc.com/getdoc.jsp?containerId=prUS53894425
24 Financial Times, "'Absolutely immense': the companies on the hook for the $3tn AI building boom", https://www.ft.com/content/efe1e350-62c6-4aa0-a833-f6da01265473
25 BBC News, "Nvidia hits new milestone as world's first $5tn company", https://www.bbc.com/news/articles/cp8e970vn5vo
26 A16z, "Surviving the AI Sprint: up close with Google Cloud and Cisco", https://a16z.substack.com/p/surviving-the-ai-sprint-up-close
27 Reuters, "AI data centre startup Crusoe raising $1.38 billion in latest funding round", https://www.reuters.com/technology/ai-data-centre-startup-crusoe-raising-138-billion-latest-funding-round-2025-10-23/
28 McKinsey & Company, "The AI infrastructure of the future", https://www.mckinsey.com/capabilities/tech-and-ai/our-insights/the-ai-infrastructure-of-the-future

The Model Layer: The Foundations of AI

Foundation models (ChatGPT, Gemini, Claude, Llama, Mistral, etc.) lie at the base of the AI software stack. The AI application layer presents both massive user adoption and an explosion in valuations. What is also impressive is that this particular segment exploded since 2022.

OpenAI leads the model layer category at a USD 852 billion post-money valuation. Close behind, **Anthropic** has raised over USD 53 billion since 2021, achieving a post-money valuation of USD 380 billion[29], while a potential IPO in H2 2026 that could value the company at **up to USD 1 trillion**[30]. The company keeps pushing the boundaries in its category; in early 2026, it presented **Cowork**, a coding agent largely developed by its model, Claude, in 10 days[31].

French company **Mistral AI** has become Europe's fastest AI unicorn, reaching a USD 13.8 billion valuation after raising over USD 3 billion across seven rounds in just 29 months and reporting 25x year-over-year revenue growth. Its latest funding round was led by semiconductor giant ASML[32].



29 Anthropic, "Anthropic raises $30 billion in Series G funding at $380 billion post-money valuation", https://www.anthropic.com/news/anthropic-raises-30-billion-series-g-funding-380-billion-post-money-valuation

30 Financial Times, "Anthropic taps IPO lawyers as it races OpenAI to go public", https://www.ft.com/content/3254fa30-5bdb-4c30-8560-7cd7ebbefc5f

31 Business Insider, "Anthropic says its buzzy new Claude Cowork tool was mostly built by AI — in less than 2 weeks", https://www.businessinsider.com/anthropic-claude-cowork-release-ai-vibecoded-2026-1

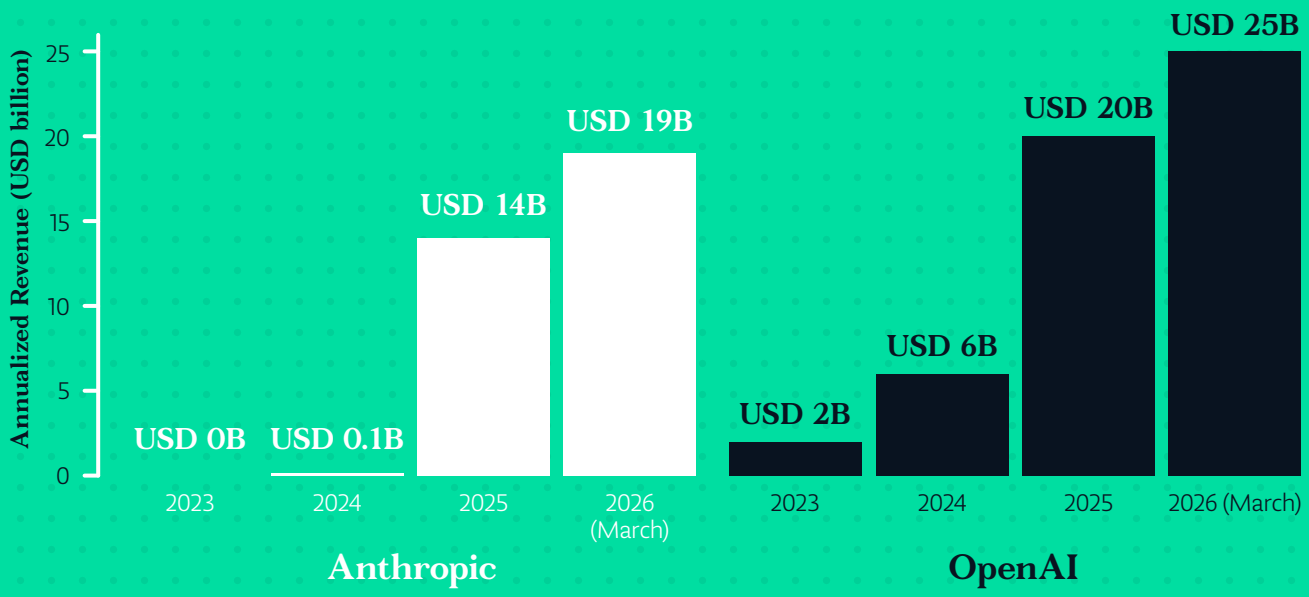
32 TechCrunch, "What is Mistral AI? Everything to know about the OpenAI competitor", https://techcrunch.com/2025/09/09/what-is-mistral-ai-everything-to-know-about-the-openai-competitor/

Breakout Company: OpenAI

OpenAI has undeniably become synonymous with the AI era, defining the whole model layer category. ChatGPT reached 100 million users in just two months, while the company achieved a USD 852 pre-money valuation in April 2026[33], with rumors of a potential IPO within 2026[34]. Its 2025 annual revenue surpassed USD 20 billion, growing 3x year-over-year, or 10x from 2023 to 2025[35]. More impressive than its growth are perhaps the deals it secured, with tech giants like AMD and Oracle, which committed to providing multi-billion-dollar infrastructure support over the next few years.

ChatGPT reached 100 million users in just two months

Anthropic's and OpenAI's Revenue Growth



Source: Anthropic, OpenAI

33 OpenAI, "Scaling AI for everyone", https://openai.com/index/accelerating-the-next-phase-ai/
34 Reuters, "Exclusive: OpenAI lays groundwork for juggernaut IPO at up to $1 trillion valuation", https://www.reuters.com/business/openai-lays-groundwork-juggernaut-ipo-up-1-trillion-valuation-2025-10-29/
35 OpenAI, "A business that scales with the value of intelligence", https://openai.com/index/a-business-that-scales-with-the-value-of-intelligence/

The Application Layer: Vertical-Specific

At the top of the AI application stack lie the so-called vertical applications. Value flows upward from foundation models to create **specialized solutions for specific industries**, such as finance, education, and healthcare. The success of many vertical AI companies demonstrates how premium valuations can also come when foundation model capabilities are combined with deep domain expertise and industry-specific data moats. The application layer has captured USD 19 billion in spending in 2025, representing over half of all generative AI investment[36].

Perplexity AI raised USD 200 million and achieved a USD 20 billion valuation in September 2025 (up from USD 18 billion just two months earlier), having raised USD 1.5 billion in total over three years[37].

ElevenLabs grew its ARR twofold in 9 months and achieved a USD 6.6 billion valuation[38] focused exclusively on voice AI.

Grammarly serves over 40 million daily active users and generates over USD 700 million in annual revenue[39], with its latest financing coming from General Catalyst.

Palantir has seen its stock surge 344% over one year and gained 155% in 2025 alone. Its revenue increased by 48% YoY (Q2 2025), driven entirely by the adoption of AI in enterprises[40].

Breakout Company: Harvey AI

Harvey AI is a custom LLM for law firms that is built on OpenAI's foundation model (and actually funded by OpenAI Startup Fund) and can draft, review, and summarize lengthy legal documents. It reportedly saves lawyers up to 3 hours a day for higher-value work, and its user base nearly doubled their time spent on the platform in less than 1.5 years[41]. Its largest funding round so far was raised in February 2025 (USD 300 million), followed by a second round in June 2025 for the same amount and USD 160 billion in December 2025, raising its valuation to roughly USD 8 billion[42]—a >10x increase in just two years.

Saves lawyers up to 3 hours a day for higher-value work.

36 Menlo VC, "2025: The State of Generative AI in the Enterprise", https://menlovc.com/perspective/2025-the-state-of-generative-ai-in-the-enterprise/
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39 Grammarly, "Grammarly Announces $1 Billion Growth Financing With General Catalyst", https://www.grammarly.com/blog/company/grammarly-announces-growth-financing/
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42 TechCrunch, "Legal AI startup Harvey confirms $8B valuation", https://techcrunch.com/2025/12/04/legal-ai-startup-harvey-confirms-8b-valuation/

How to Invest in the Space

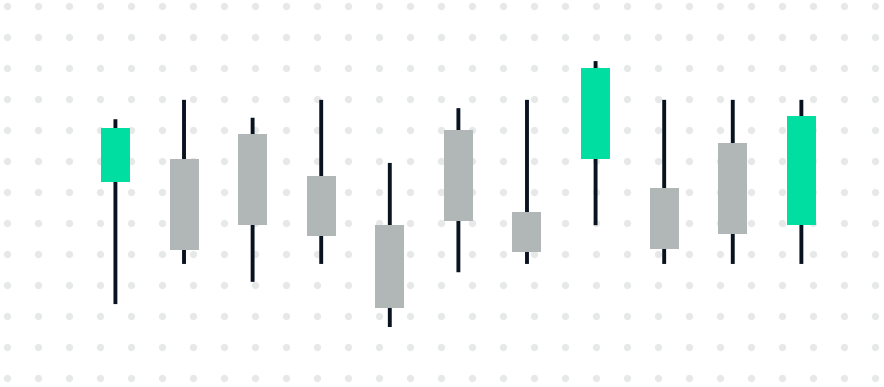
The AI boom has created a wide range of entry points for investors, spanning public hyperscalers, private infrastructure debt, late-stage venture equity, and vertical application investments. Access depends on risk appetite, time horizon, and capital allocation strategy: **public markets offer transparency and fungibility, while private markets deliver illiquidity premiums and access to pre-IPO growth**. Diversification across both reduces concentration risk and positions portfolios for multi-year value creation as AI infrastructure scales.

Public Markets: Direct Exposure Through Hyperscalers and Chipmakers

AI-linked companies have been dominating returns on public markets lately. **AI-related stocks have accounted for 75% of S&P 500 returns**, 80% of earnings growth, and 90% of capital spending growth since ChatGPT launched in November 2022[43]. In early 2026, the S&P 500 surpassed the 7,000-point mark for the first time in its 68-year history, driven by tech companies and the optimism around AI stocks[44].

Stock Picking: Capturing the Infrastructure Winners

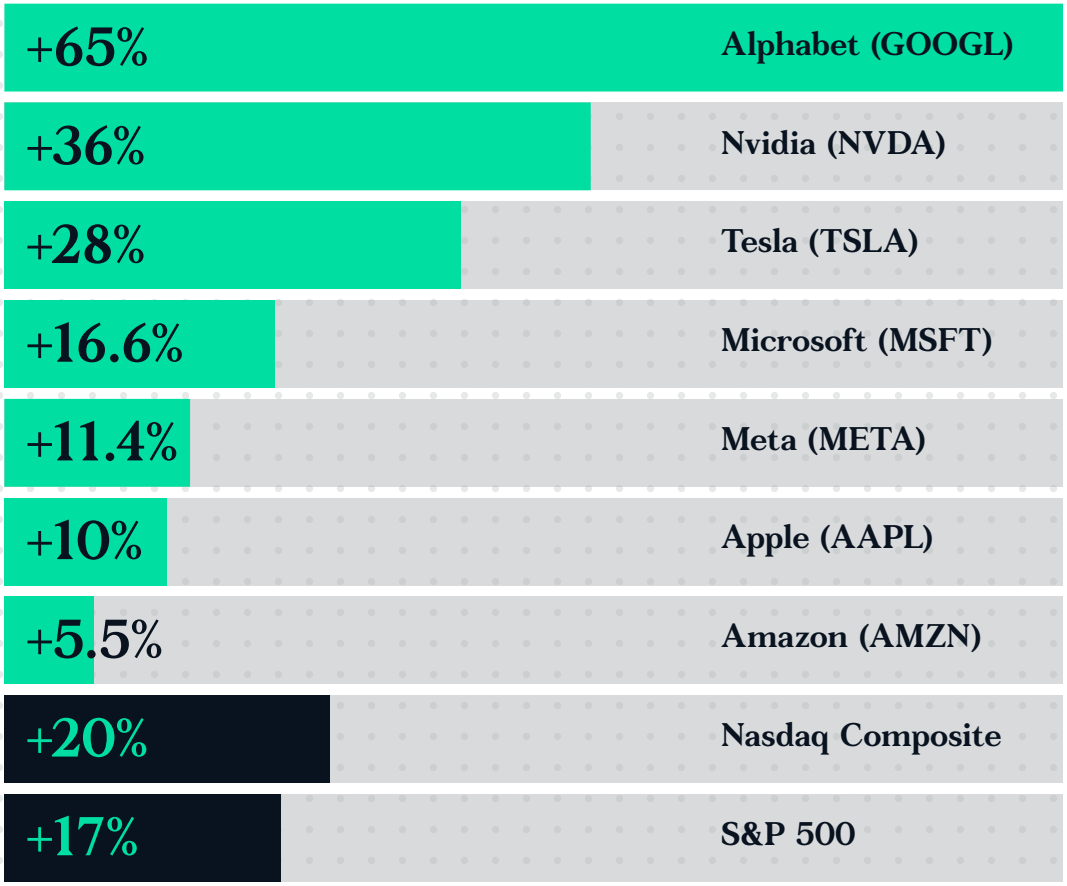
Capturing the market winners is always challenging. Out of the AI-related stocks, only a few have outperformed the market—mainly Alphabet and Nvidia. Stock picking is a high-volatility strategy with overvaluation risk, but it offers the potential for significant growth, especially for early movers.



43 J.P. Morgan, "Eye on the market (September 2025)", https://am.jpmorgan.com/content/dam/jpm-am-aem/global/en/insights/eye-on-the-market/the-blob-amv.pdf

44 Reuters, "S&P 500 breaches 7,000 points for the first time, lifted by AI optimism", https://www.reuters.com/business/finance/sp-500-crosses-7000-points-first-time-lifted-by-ai-optimism-2026-01-28/

The Magnificent Seven's Performance in 2025



ETFs and Diversified Funds: Spreading Concentration Risk

Single-stock volatility is not appealing to all investors. A broader exposure can be provided by AI-focused Exchange-Traded Funds (ETFs) like the **Global X Artificial Intelligence and Technology ETF**, which holds 86 stocks with no single position exceeding 2.5% of assets, or the **Robo Global Robotics and Automation Index ETF**, which targets automation and AI hardware with similar diversification (52 stocks). ETFs like these offer access to stocks across all layers of the technology stack, from infrastructure to applications, while some are more focused on specific layers than others (for example, targeting large-cap companies or semiconductor-only). While they offer effortless exposure to AI stocks, they don't always include high-profile or high-performing stocks like Nvidia, and they tend to be more expensive than other ETFs. Choosing the right manager is crucial, as not all ETFs are created equal; some have actually underperformed the S&P 500 and NASDAQ.

Private Markets: the "Picks and Shovels" Approach

Revenue from the top 50 private AI companies alone reached USD 14.1 billion by the end of 2025[45]. The pace at which their revenues have grown in the last few years is also notably faster (more than 2.5x) than that of non-AI companies. Private opportunities deliver exposure to non-listed assets with longer lock-ups, and often demand an illiquidity premium. These strategies suit institutional allocators and investors seeking uncorrelated returns.

As with ETFs, there are various funds with different focuses. Private equity firms favor a "picks and shovels" strategy, investing at lower levels of the technology stack—targeting AI infrastructure with stable, recurring revenue rather than riskier application developers. Data centers are often viewed as lower-risk investments with stable returns, a typical feature of the private equity approach. Analysts forecast a CAGR of at least 15% in data center investments over the next several years[46].

Private equity-backed deals have accounted for 80% to 90% of datacenter transaction value since 2022.

Infrastructure Funds and Private Credit

Several funds are supporting the infrastructure layer. One such example is **PIMCO European Data Centre Opportunity Fund**, which raised EUR 200 million from EIF and CDP Equity to finance data center builds across Madrid, Athens, and Milan. The fund targets supply-demand imbalances in European digital infrastructure, backed by long-term lease contracts and investment-grade tenants.

In the U.S., PIMCO partnered with Blue Owl to structure a USD 29 billion financing for Meta's Hyperion data center. The deal included USD 26 billion in 24-year bonds and USD 3 billion in equity, one of the largest private credit transactions ever closed.

Infrastructure debt offers predictable cash flows, contracted revenues, and asset-backed security. The strategy appeals to investors seeking stable yields with downside protection.

45 a16z, "State of market", https://docs.google.com/presentation/d/e/2PACX-1vQXsMMv5ZCWm77za7oXJcz1X-Th5Mz15g5nYBxbUjnomStVcjn8lXPjE5LzAlvc_hg4yHKgwASWLo5a/pub

46 Deutsche Bank Research Institute, "AI and energy sectors more intertwined than ever", https://www.dbresearch.com/PROD/RI-PROD/PDFVIEWER.calias?pdfViewerPdfUrl=PROD0000000000604341

Late-stage Venture Capital: Backing Model Providers

In the model layer, late-stage venture capital is dominant, and capital is concentrated in **companies with a proven track record** over the last couple of years, such as Anthropic, Mistral AI, and OpenAI. These later-stage rounds attract co-investment from sovereign wealth funds, corporate venture arms, and top-tier VCs. While in later stages the entry price is often higher, the risk of implementation and product-market fit is often solved for.

Venture funding for GenAI startups reached USD 73.6 billion in the first three quarters of 2025, pushing total AI investment to USD 110.17 billion—an eightfold increase since 2019 and more than double from 2024[47].

A third of all venture investment in Q3 2025 went to just 16 companies that raised funding rounds of USD 500 million or more each[48], and a third of that went to a single company, Anthropic. Mega-rounds and rising valuations signal sustained investor appetite for AI infrastructure, that appear poised to strengthen into 2026[49].

Early to Late-Stage Venture: Vertical Application Layer Opportunities

Early-stage vertical AI may offer higher exit multiples but demands patience. While the increasing power of general-purpose foundation models introduces a competitive dynamic, the true advantage of vertical AI lies in its deep integration with proprietary data and specialized workflows.

The inherent complexities of regulated sectors—such as legal, healthcare, and financial services—create substantial barriers to entry. This provides structural protection against commoditization and secures stronger pricing power for successful ventures.

Although these investments call for strategic patience, the reward is the potential for higher exit multiples. The disciplined effort required to achieve product-market fit and build trust with enterprise clients is what forges a competitive moat.

For investors with a long-term vision, vertical AI offers an opportunity to back companies that are becoming foundational pillars of their respective industries.

Co-Investments in Dedicated Deals

Co-Investment rights allow limited partners to invest alongside their fund managers in specific transactions with reduced management fees or carried interest on the co-invested capital. This structure improves net returns and provides exposure to marquee deals. Leading VCs syndicate mega-rounds to manage concentration risk and satisfy capital demand. Co-Investment opportunities arise in late-stage AI infrastructure, model providers, and vertical SaaS. Investors need existing LP relationships or advisor connections to access deal flow.

47 S&P Global Market Intelligence, "GenAI VC investment on pace to double 2024 totals amid funding frenzy", https://www.spglobal.com/market-intelligence/en/news-insights/articles/2025/10/genai-vc-investment-on-pace-to-double-2024-totals-amid-funding-frenzy-93938697

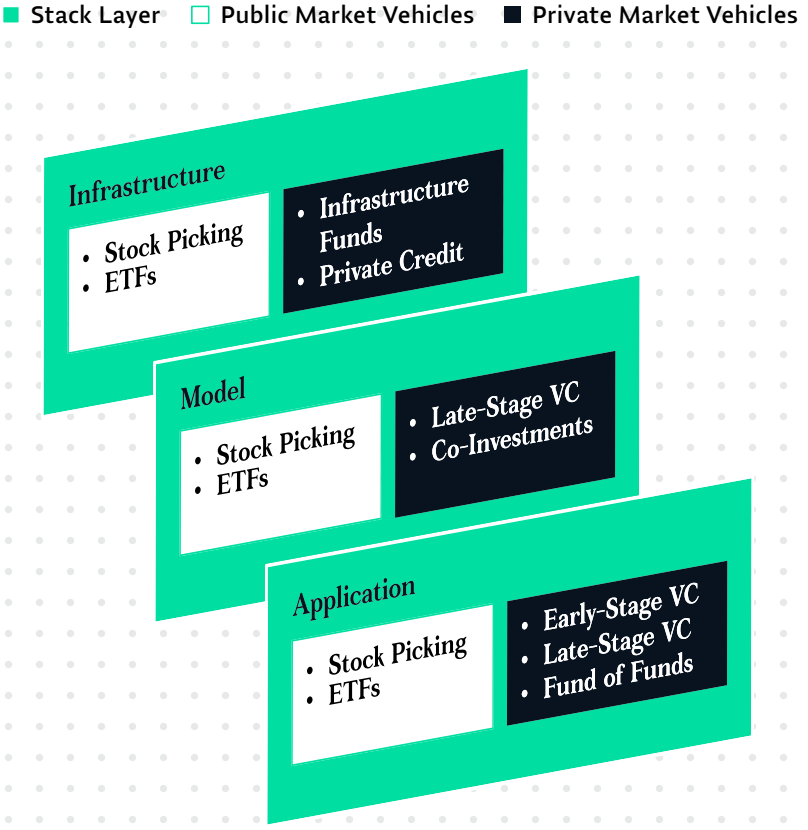
48 Crunchbase, "Q3 Venture Funding Jumps 38% As More Massive Rounds Go To AI Giants And Exits Gain Steam", https://news.crunchbase.com/venture/global-vc-funding-biggest-deals-q3-2025-ai-ma-data/

49 PitchBook, "Q3 2025 AI in VC trends", https://pitchbook.com/news/reports/q3-2025-ai-vc-trends

Diversification Through Funds of Funds

Fund of Funds (FoF) structures pool capital across multiple AI-focused managers, spreading exposure across geographies, stages, and specializations. FoFs provide indirect access to top-tier funds often closed to new LPs and reduce single-manager risk. Institutional investors and family offices use FoFs to gain diversified exposure to AI without building internal venture teams. The trade-off is an additional layer of fees on top of underlying fund costs. FoFs offer portfolio construction across infrastructure funds, model-layer VCs, and application-focused managers. This approach captures broad market upside while hedging against sector-specific downturns or valuation corrections.

AI Investment Framework: Technology Stack & Investment Vehicles



Investment Approaches

	Risk Tolerance	Liquidity Profile	Capital Required	Return Profile	Diversi-fication	Access Requirements
Lowest	Infrastructure (lowest)	Private all stages (10–13 years)	Public markets /ETFs (lowest)	Infrastructure (stable, 15% CAGR)	Stock picking and co-investments (concentrated)	Public (none)
	Model layer (medium)	Co-Investments or pre-IPO direct deals (3–5 years)	FoFs (high but diversified)	Late-Stage VC (moderate, proven)	ETFs and FoFs (broad)	Co-Investments (LP relationships)
Highest	Applications (highest)	Public markets (immediate)	Direct PE /VC investments (Highest)	Early-Stage VC (asymmetric upside)		Top-tier VC or PE (institutional)

Outlook: 2026 and Beyond

As the landscape of artificial intelligence evolves rapidly, adoption creates both challenges and opportunities, including productivity gains, economic impact, infrastructure needs, and investment trends. Advancements in robotics, the deployment of agentic AI, and powerful generative AI applications are expected to impact the global economy. Workforce readiness can help offset job losses, while strategic investment to realize AI's full potential can help ensure a resilient, sustainable, tech-driven economy. Nevertheless, there are also concerns about an economic bubble that could halt the progress made in this direction.

Financial Impact

Whenever a remarkable surge is observed in the market, investors are always wondering where the peak will be. Recently, numerous voices have been discussing an AI bubble that will burst sooner or later, driven by the rapidly rising valuations of AI companies across all layers of the stack and the need for significant infrastructure spend.

What Is a Bubble?

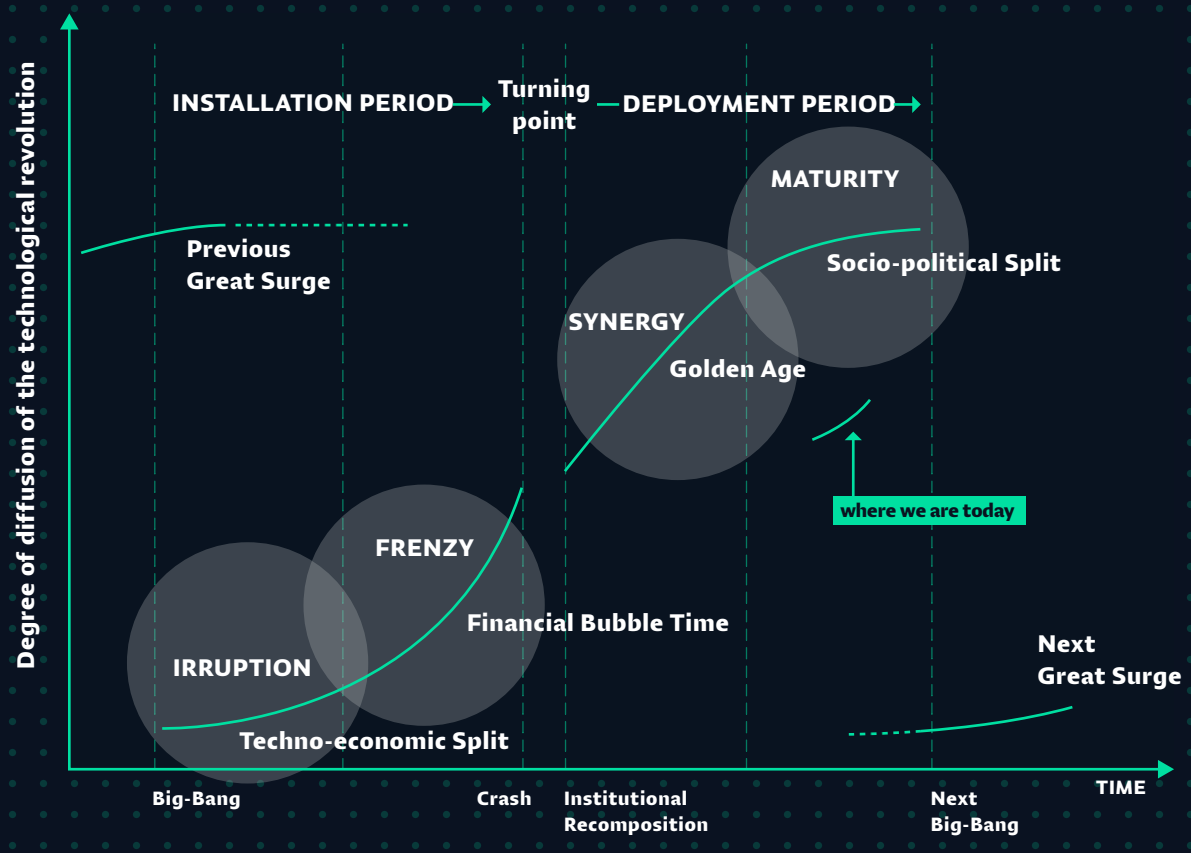
When a great innovation is born (technological, financial, structural, or a rapid economic growth phase), capital flows into these areas, asset prices increase, and investors become increasingly enthusiastic. This process, as described by American economic historian Charles P. Kindleberger[50], can stimulate both the broader economy and the financial sector; however, asset prices eventually reach unsustainable levels. This draws in even more speculators until, inevitably, prices start to decline and the bubble bursts. The resulting crash tends to be more severe when households, institutions, and individuals have borrowed heavily against rising asset values.

Over the past 250 years, **five significant technological revolutions** have occurred: the First Industrial Revolution, the Age of Steam and Railways, the Second Industrial Revolution, the Automobile Era, and, currently, the Information Era. Renowned economist Carlota Perez identified a consistent pattern in those major technological revolutions of modern times[51]. The sequence typically involves an initial emergence of new technology, followed by a speculative boom, an economic downturn, a subsequent period of widespread prosperity, often referred to as a Golden Age, and a final phase of slower growth once the market is saturated. During the "Installation Period" prior to the crash, novel technologies disrupt and integrate into receptive markets. After the crash, the "Deployment Period" marks the adoption of these innovations in more resistant sectors, revitalizing existing infrastructure.

50 Kindleberger, C.P., "Manias, Panics, and Crashes: A History of Financial Crises", Macmillan, 1978

51 Perez, C., "Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages", Edward Elgar, UK, 2002, https://en.wikipedia.org/wiki/Technological_Revolutions_and_Financial_Capital

According to Perez's framework, we are currently in **the second half of the fifth technological revolution** (deployment period). Perez argues that AI is a critical, mature phase of the Information and Communications Technology (ICT) revolution that began in the 1970s, and that it serves as the "turning point" of the digital age, shifting from the "installation" phase (building the internet) to the "deployment" phase (using AI to unlock the full potential of that infrastructure)[52].



Source: Adapted from Carlota Perez's Technological Revolutions and Financial Capital.

52 Perez C., "What Is AI's Place in History?", https://www.project-syndicate.org/magazine/ai-is-part-of-larger-technological-revolution-by-carlota-perez-1-2024-03

Why Today's AI Boom Differs from Past Tech Bubbles

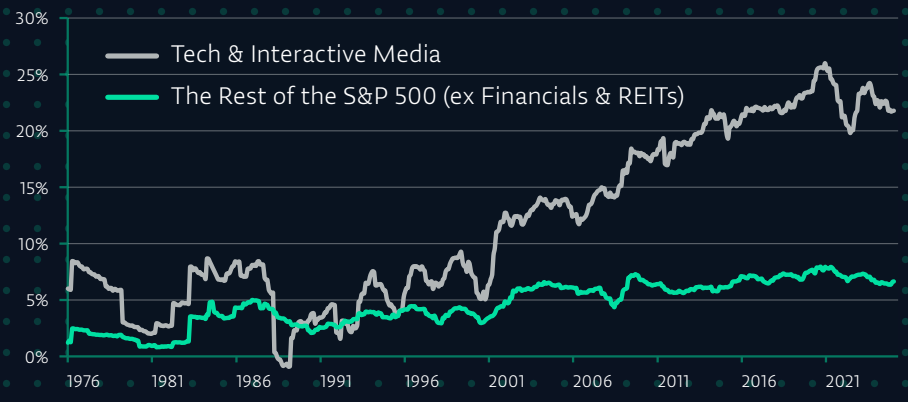
Most AI frontliners are not profitable—yet: Anthropic recently told investors its gross profit margin from selling its AI models, and Claude chatbot directly to customers was roughly 60% and is moving toward 70%, while OpenAI projected a gross profit margin of 48% in 2025, en route to an eventual 70% gross profit margin by 2029[53].

High valuations are considered the primary reasons igniting speculation about a bubble. Nevertheless, a critical difference between previous technology bubbles and today is that **the dominant technology companies have less extreme valuations** (especially compared to the dot-com era), **and the foundations of the technology sector are much stronger.**

Strong profit fundamentals justify the sharp rise of technology stocks in recent years. The earnings of the so-called "**Magnificent Seven**" (Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia, and Tesla) are **far greater than those of the S&P 500 companies**. Their combined market capitalization has surpassed USD 22 trillion, accounting for 37.4% of the S&P 500[54]. A broader group of 42 AI-related companies has generated 65%–75% of S&P 500 earnings, profits, and capital spending since ChatGPT's launch in November 2022[55].

Whether the AI enthusiasm will culminate in a market bubble remains uncertain, as market dynamics are difficult to predict. Established investment principles are prudent, like maintaining a balanced, diversified portfolio that mitigates risk while providing exposure to various segments of the expanding AI market. It is essential to closely monitor industry developments, pursue prudent early-stage investments, scale in response to demand, and implement effective risk management strategies.

S&P 500 Free Cash Flow Margins: Tech vs the Rest



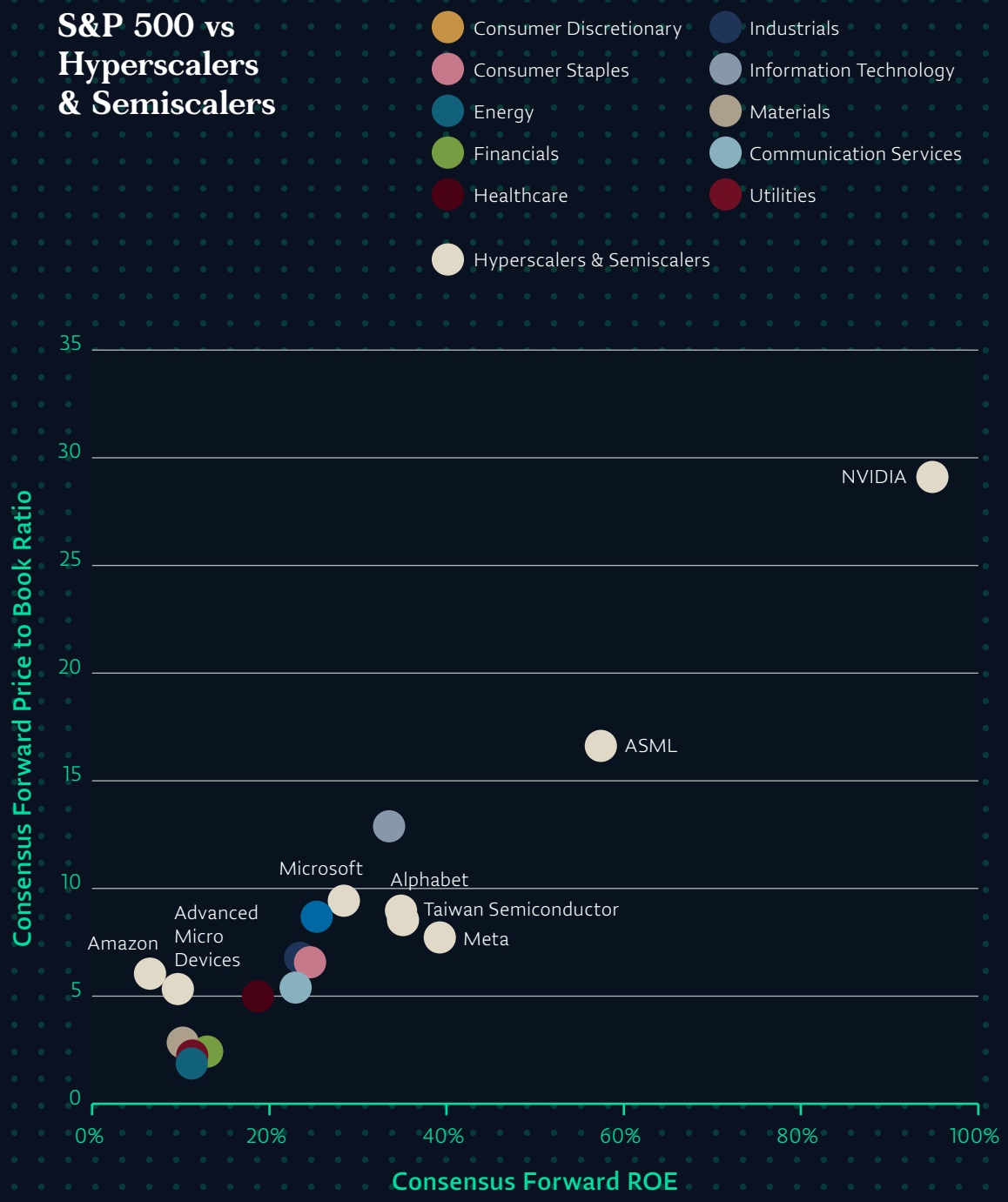
Source: Empirical Research Partners, December 2025

53 The Information, "Investors Float Deal Valuing Anthropic at More Than $100 Billion", https://www.theinformation.com/articles/investors-float-deal-valuing-anthropic-100-billion

54 Morningstar, "The 'Magnificent Seven' have never been this important to the stock market - and a big test lies ahead", https://www.morningstar.com/news/marketwatch/20251028233/the-magnificent-seven-have-never-been-this-important-to-the-stock-market-and-a-big-test-lies-ahead

55 J.P. Morgan, "Eye on the market Outlook 2026", https://am.jpmorgan.com/us/en/asset-management/institutional/insights/market-insights/eye-on-the-market/outlook-2026/

S&P 500 vs Hyperscalers & Semiscalers



Source: Bloomberg, JPMAM, December 17, 2025

Technology Outlook

Where is AI heading next? As enterprises turn to Agentic AI and industries push for AI-enabled robots, many promising possibilities emerge.

Robots

Developments in robotics have long been tied to advances in machine intelligence, and AI holds new promise for the field through **Embodied AI applications**. When artificial intelligence is integrated into physical systems, sensory feedback allows robots to see, hear, and feel as humans do, and to incorporate this input into their thinking and decision-making processes (contextual understanding). This signals **the next frontier in human-robot collaboration** and could potentially lead to a faster adoption of robots in daily use. Applications include, but are not limited to, humanoid robots, autonomous vehicles, warehouse robots, household robotic helpers, and factory arms. Numerous applications are already in use, and their contribution to the global economy is expected to grow in the coming years.

Agents

As the market is slowly shifting toward agentic AI, it is expected to account for 29% of total AI value by 2028 (up from about 17% in 2025)[56]. **Agentic AI is far more advanced** than AI applications such as GenAI. AI agents can manage and execute end-to-end processes with little or no human intervention. Although the vast majority (93%) of leaders believe in the value to be gained, only a fraction of organizations (14%) have implemented AI agents beyond a pilot phase[57]. Lack of trust in autonomous systems could be the reason, as could insufficient knowledge of the technology's capabilities. Nevertheless, enterprise deployment is expected to grow rapidly in the next few years, as well as the economic value created through revenue uplift and cost savings.

56 Boston Consulting Group, "The Widening AI Value Gap", https://media-publications.bcg.com/The-Widening-AI-Value-Gap-October-2025.pdf
57 Capgemini, "Rise of agentic AI", https://www.capgemini.com/wp-content/uploads/2025/07/Final-Web-Version-Report-AI-Agents.pdf

Will AI Fulfill Its Promise?

Today, AI delivers impressive results in narrow, specific tasks, saving time and producing useful output. Productivity gains still fall short of expectations, and Return on Investment (ROI) remains difficult to measure. Companies deploy pilots, but execution has not yet scaled. Yet investments in AI companies are still going strong, showing confidence in AI. Indeed, the technology improves, models get bigger and better, and applications multiply. The prospect of human-level intelligence across all domains is not that distant and could be achieved in only a few years. In the most optimistic scenarios, the advent of AGI could enable annual economic growth rates of more than 20%[58].

The promises of AI are no longer characterized as works of fiction. For it to become a reality, a lot must change on many levels. Appropriate guardrails and governance mechanisms must ensure the fair and ethical use of AI systems. A digitally savvy, AI-literate workforce will better manage technology's capabilities, while transparency and accountability must be preserved. Finally, **innovation and research must continue to be funded**.

58 Erdil, E., & Besiroglu, T., "Explosive growth from AI automation: A review of the arguments", https://arxiv.org/abs/2309.11690

Key Takeaways

1 Generative AI has sparked the fastest-growing wave of consumer software and is accelerating the path toward more capable systems, which are expected to have a significant impact on productivity. Infrastructure is both the bottleneck and the opportunity: AI's progress hinges on compute and power, fueling a massive CapEx cycle across chips, cloud, power generation, and physical build-out.

2 GenAI infrastructure spend is set to nearly triple by 2028, and flagship firms like OpenAI face costs far exceeding current ARR and even valuations, raising bubble concerns. Classic bubble markers (rapid CapEx, lofty valuations) are present, but today's cycle is backstopped by highly profitable Big Tech balance sheets, stronger revenue dynamics, and assets with reuse value.

3 Private equity investors and venture capitalists are deploying capital strategically across multiple vectors. The dominant approach is layer-based diversification, in which investments are spread across the infrastructure layer (chips, cloud, and data centers), the model layer (foundation models such as OpenAI), and the application layer (vertical-specific AI tools).

4 Late-stage capital dominates as VC flows are concentrating into larger, later rounds for proven AI platforms and infrastructure, while PE focuses on resilient, recurring-revenue "plumbing". Access to these companies is exclusive to private investors, including UHNWI and family offices.

5 GenAI's surge is expected to offer multiple benefits across the business and economic worlds, primarily through productivity gains. Forecasts point to a multi-trillion-dollar impact of AI, as rising ROI and productivity gains drive financial growth and long-term wealth creation.

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