

# How AI is re-platforming the economy

AI is re-platforming the economy—forcing existing technology stacks to evolve to fully harness AI’s potential. Karthik Subramanian and Usman Ashraf, who lead Infrastructure Software Investment Banking at Goldman Sachs, discuss these profound shifts and the opportunities they are creating.

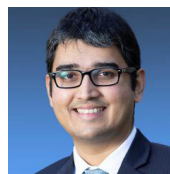
## 1 How is AI fundamentally altering the trajectory of infrastructure software?

For the last decade, we utilized our “4D framework” for understanding enterprise software, focusing on applications fueled by **D**ata, built on **D**eveloper-friendly architectures, **D**eployed in hybrid environments, and consumed on mobile/IoT **D**evices in decentralized enterprises.

Today, AI appears to be leveling the playing field—shifting power to data and compute platforms while fundamentally transforming developers’ roles. Enterprises are increasingly demanding open platforms across data, observability, and software development life cycle (SDLC), rejecting “walled gardens” to enable flexibility. This transformation is occurring amid a challenging macroeconomic environment, making cost and value considerations even more critical.

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“Enterprise AI could produce the next cutting-edge technology company as model innovations and new inferencing stacks proliferate.”



**Karthik Subramanian**

Head of Infrastructure Software Banking  
Goldman Sachs

## 2 Why should infrastructure software be top of mind for investors and strategics?

The last few major technology shifts have followed a similar pattern: virtually all financial gains are first captured by semiconductor and hardware companies but “blossom” in the infrastructure software layer. In fact, ~60% of the Total Addressable Market (TAM) value in the Cloud Era accrued to the infrastructure software layer.

Today, infrastructure software sits at the heart of this AI re-platforming—bridging innovation in hardware at the bottom of the stack with application development at the top. As in previous eras, infrastructure software will be the next investment horizon following outsized CapEx in AI hardware (e.g., chips)—unlocking significant opportunities for strategics, sponsors, and investors as legacy infrastructure markets get redefined and completely new ones emerge.

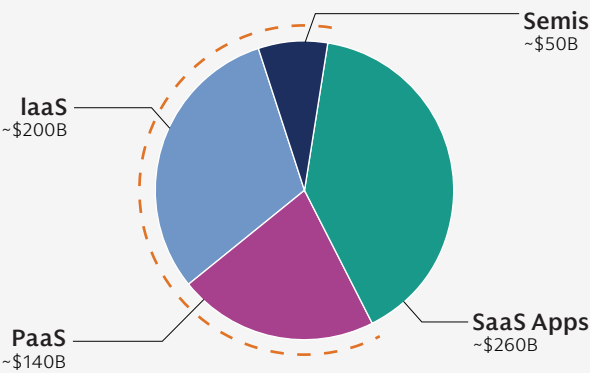
## 3 You emphasize that developers are now more strategic than ever. Why?

Developers—defined broadly to include designers, data scientists, and even AI agents—are the architects of software. Winning their engagement and loyalty helps position your platform to be the foundation upon which the next generation of applications is built. Historically, developers have been the on-ramp to enterprises, compute, and now AI. As AI directly reshapes the developer workflow itself, this dynamic is even more nuanced—but the developer community’s power remains intact.

During every platform shift, developers have been the catalysts of innovation, and this trend holds true today. Platforms successfully empowering developers today will become leaders of the enterprise software market tomorrow.

### Act 2: Increase exposure to infrastructure software

~60% of the Total Addressable Market (TAM) value accrued to the infrastructure layer in the Cloud Era\*








\*Estimated figures sourced from AI Research Report—Coatue (Nov 2023)

## 4 What are the implications for the competitive landscape in compute and data platforms?

Salesforce CEO Marc Benioff once noted, “In the software industry, when there is a new technology model and a new business model, everything is up for grabs.” Well, the software paradigm has fundamentally changed, with three critical vectors driving this evolution: **compute** has experienced a seismic shift from CPUs to GPUs alongside the emergence of new CPUs equipped for specific AI workloads; **software** has evolved from application-centric to data-centric design; and **data** has become a foundational input for application development. These shifts are disrupting traditional boundaries, and the subsequent land grab is unfolding in real time.

Chip providers are building sophisticated software stacks atop their hardware to attract and retain a large community of AI developers—NVIDIA’s CUDA libraries help accelerate the building, deployment, and optimization of applications. Hyperscalers are developing proprietary chips (ASIC)—to reduce their dependency on GPU providers like NVIDIA—and combining enterprise data warehousing with big data analytics (e.g., Microsoft Fabric) to challenge their new data platform “frenemies” like Databricks and Snowflake. Lastly, as data becomes the core input, data platforms are incorporating application development capabilities within their platforms. These shifts have produced a complex “3D chessboard” where companies from vastly different backgrounds are competing for leadership in the lucrative enterprise AI market.

### Act 1: Continue to lead in the silicon layer

Semis Revenue*		
	AI Present and Future	~\$1.5T
	Cloud 2015–Present	~\$600B
	Mobile 2005–2015	~\$350B
	PC 1980s–2000s	~\$200B
	Mainframe 1980s–2000s	~\$50B

\*Estimated figures sourced from AI Research Report—Coatue (Nov 2023)

## 5 How is M&A shaping this evolution?

M&A will play a critical role in defining this new era, especially with an already extensive backlog of private companies awaiting exits. We expect many smaller AI companies to seek consolidation with larger players, corporates to cement their AI capabilities via opportunistic M&A, and financial sponsors to increase their exposure to the re-platforming of our global economy through strategic transactions—creating a dynamic environment ripe for high-impact deals. The last year has offered a preview as semiconductor companies seek to bolster their full-stack capabilities through M&A—highlighted by Advanced Micro Devices' intent to acquire ZT Systems to gain system-level design capabilities.<sup>1</sup>

Software companies with entrenched customer relationships and proprietary datasets represent beachheads for AI transformation. This anticipated wave of industry transformation has already driven a surge of M&A in functional and vertical software companies—with a focus on durable business models and upside potential.

Strategics, after navigating regulatory scrutiny and establishing their internal strategies for AI, are poised to accelerate acquisitions. After all, value = ideas + team + execution. If you can get the first two and use your existing execution machine as an acquirer, why not? In 2024, Salesforce acquired Own, whose data platform will enable Salesforce to power AI and agentic use cases.<sup>2</sup> IBM similarly announced its intent to acquire HashiCorp to create a comprehensive end-to-end hybrid cloud platform built for AI-driven complexity.<sup>3</sup>

## 6 What emerging categories within infrastructure software are you most excited about?

New AI Cloud ecosystems are among the most compelling—including neo-clouds and specialized software ecosystems designed to support enterprise-grade AI workloads. Innovations like reasoning models, inference-as-a-service, and agentic infrastructure are just the beginning.

Unlike traditional cloud computing—primarily focused on storage and compute for general applications—AI Cloud is optimized for AI workloads like machine learning (ML) model training, inference, and data processing. It combines high-performance GPUs and specialized AI chips, automated MLOps pipelines, and AI-native orchestration tools to streamline AI deployment at scale. A key component of the AI Cloud is data governance and security, ensuring that sensitive AI-driven insights are managed responsibly. As AI adoption grows, the AI Cloud is becoming the backbone of enterprise automation, real-time analytics, and generative AI applications, driving innovation across industries.

<sup>1</sup> Announced August 19, 2024

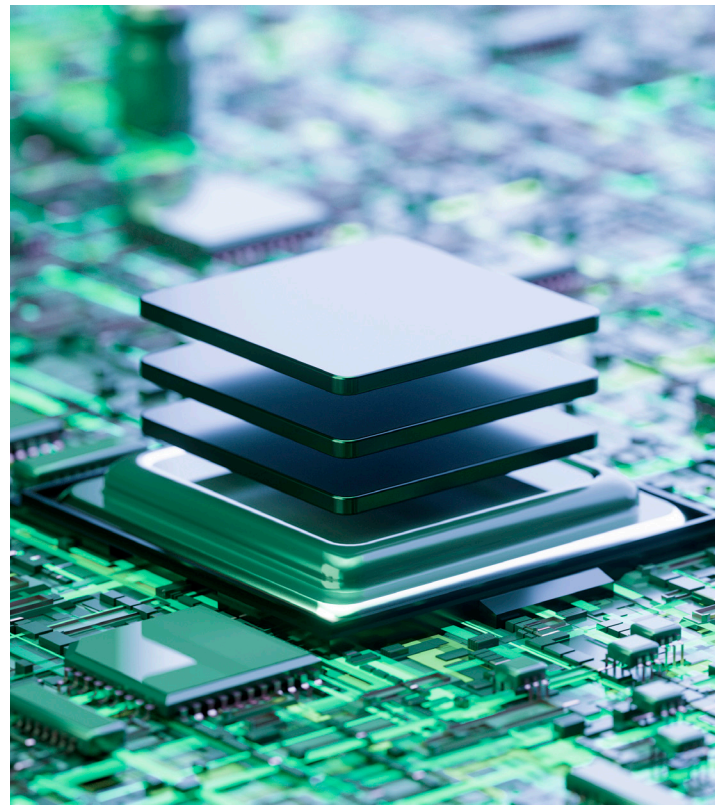
<sup>2</sup> Announced September 9, 2024

<sup>3</sup> Announced April 24, 2024

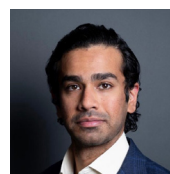
These emerging categories could produce the next cutting-edge technology company as enterprise AI products and services materialize in the coming decade. The ecosystem is rapidly evolving and only scratching the surface of its transformative potential.

## 7 What role will the IPO market play in 2025?

As liquidity taps open up alongside a healthy IPO market, we expect robust IPO activity as investors look for companies with scale, visibility into growth, and proven unit economics laying out a clear path to scaled margins.



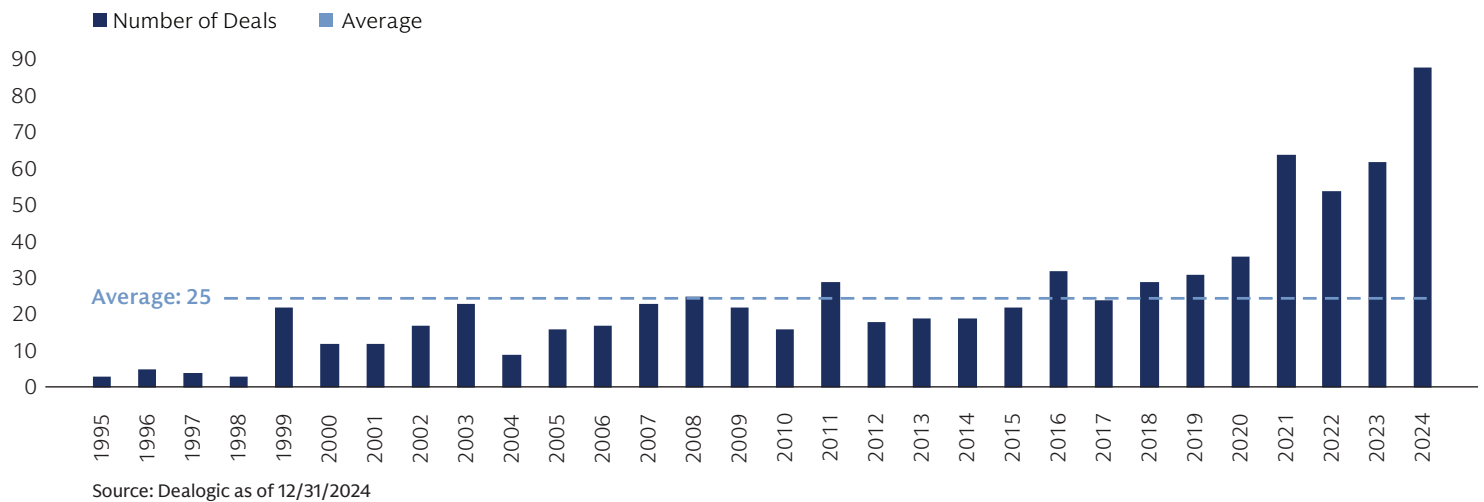
“AI has leveled the playing field, shifting power to data and compute platforms.”



**Usman Ashraf**

Vice President, Software Investment Banking  
Goldman Sachs

## Global Take-Private Deals—Technology Sector



## 8 How is private equity engaging companies that remain outside the IPO and M&A spotlight?

The answer reflects a broader evolution of financial sponsors who have moved beyond traditional strategies focused on leverage and cost optimization. Today, they are pursuing growth assets with value-creation strategies that mirror venture-backed companies—albeit with a more disciplined focus on metrics like the Rule of 40.<sup>4</sup> Increasingly, sponsors are plugging the gap left by strategics and have demonstrated their willingness to pay competitive multiples. As a result, some private companies are considering sponsors a “stepping stone” to public markets and positioning the IPO as a subsequent—rather than immediate—step.

However, sponsors are also collaborating with strategics to structure transformative partnerships, acting as long-term allies to entrepreneurs and playing pivotal roles in helping companies go public. Their growing influence offers a refreshing dynamic and significant depth to the ecosystem.

Sponsors are also engaging companies that may be negatively impacted by AI. Within software, for example, business moats once thought impenetrable are in question as AI permeates the tech stack. Specifically, generative AI is expected to unlock efficiencies that prove deflationary and potentially disruptive for some SaaS companies—pushing down valuations. These cheaper multiples have made take-privates an attractive investment for sponsors, with 2024 setting a global record for take-private deals in the technology sector. This momentum has persisted into 2025, with observability and IT management software company SolarWinds announcing it has agreed to be acquired by Turn/River Capital in a take-private transaction.<sup>5</sup>

## 9 What aspect of today’s infrastructure software landscape has surprised you most?

We have been most surprised by how enduring some legacy companies have proven to be. We are witnessing a fascinating paradox where platforms are evolving faster than ever but legacy platforms—like mainframe—are proving to be unexpectedly sticky. We wouldn’t have expected the companies pioneering that era to be as relevant as they are today. Not only do they still exist, but they are redefining themselves—experiencing a resurgence alongside the AI revolution. For example, Rocket Software’s acquisition of OpenText’s Application Development and Modernization (AMC) business enables the company to provide solutions in the mainframe modernization space—helping corporate clients bridge the gap between traditional systems and future technology ecosystems.<sup>6</sup>

Market windows in capital markets close and reopen, but strategic windows, once closed, have historically remained closed. However, we are now in a period filled with multiple “strategic windows”—there isn’t just one thesis. As AI continues broadening the aperture, strategic windows will reopen for many companies to reinvent themselves and/or seize new opportunities.

We continue to stress the vitality of capturing these moments, focusing on seeing around corners for our clients to help identify these opportunities.

<sup>4</sup> An industry metric stating that a software company’s combined revenue growth rate and profit margin should equal or exceed 40%

<sup>5</sup> Announced February 7, 2025

<sup>6</sup> Announced November 28, 2023

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