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Global Thematics | North America

Are Enterprises Really Adopting Open-Weight Models?

Our answer is yes. Our 3Q26 CIO Survey shows 45% of enterprises are using open-weights models today, and this is expected to rise to 90% in 3 years. We address the three key questions on how companies are using open-weights models, and our "3 States of the World" framework outlines stock picks.

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Key Takeaways

- We answer key questions around open-weights adoption: 1) who's adopting, 2) are US companies willing to use Chinese models, and 3) where are workloads run?
- 3Q26 CIO Survey shows ~45% of enterprises are deploying open-weights models, and ~90% expect to in 3 years. This is consistent across company size.
- We believe US cos are willing to deploy Chinese models on US infrastructure, but geopolitical uncertainty remains. The development of the US ecosystem is key.
- More companies are generating ROI from open-weights models. A new trend is on-prem deployments for 1) security, 2) data sovereignty, 3) reduced token costs.
- We direct investors to our "3 States of the World" framework for stock picks to play this theme.

Tech Diffusion

A Morgan Stanley Research Key Theme of 2026

The world is increasingly multi-model...but are enterprises on the same page? As we've written here and here, a key debate is whether closed or open-weight models win, or we live in a hybrid world. We believe this is an important question, as it has implications for 1) token costs, 2) Jevons Paradox / the speed of enterprise adoption, 3) hyperscaler capex, and 4) what segments of the tech stack benefit most. Recent data points like the Codex/Baseten partnership and Grok Bot utilizing multiple open/closed models support our view that the world is increasingly multi-model. Today, open-weight models represent the vast majority of tokens on OpenRouter and Vercel (Exhibit 13), but data skews towards developers and SMBs, which begs the question: *what does this look like for enterprises?* Our 3Q26 CIO Survey shows that ~45% of enterprises are deploying open-weights models and ~90% expect to in three years, a notable 2x increase. While deployments are small today, they are growing, and trends are consistent across company size. This combined with increasing US public company commentary that open-weights models are driving

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ROI supports our view that these models are a key "enabler" tool for faster AI diffusion, which is good for Jevons Paradox and capex. We are carefully tracking these dynamics and **answer three key questions around enterprise adoption below.**

How do we play this theme? From a stock perspective, we'd direct investors to our "3 States of the World" framework. Our open vs. closed stock framework highlights ways to play each state of the world (Exhibit 1) – where closed models win, open models win, and hybrid wins – across the whole stack: semis/hardware/networking, data center operators, cloud providers, model providers, and SaaS. ***We'd highlight our tech team's recent notes on the implications of open-weights models for their sectors:***

Microsoft: Battle of the AI Stack: Built for a Multi-Model World (7 Oct 2026)

Internet and Software: Why Amazon Bedrock and Microsoft Foundry Should Become Household Names (7 Oct 2026)

Internet: How Could Open-Weight Models Impact GenAI ROIC? (12 Aug 2026)

Cybersecurity / Networking: Thinking Through Closed- vs. Open-Weights Model Adoption Impacts on Cyber / Networking (3 Aug 2026)

Exhibit 1: Stocks we like across our "3 States of the World" — where closed models win, hybrid wins, and open models win.

	Scenario 1 (Closed Models Win)	Scenario 2 (Hybrid)	Scenario 3 (Open Models Win)
	Small number of frontier labs win. Prefer names levered towards hyperscale data centers or custom chips for frontier labs.	*Many model architectures win and workloads run both on-prem/cloud. Prefer names exposed to multi-model workflows, orchestration, observability, and/or distributed workflows.*	*Open models proliferate, driving down token costs and driving faster enterprise adoption. More workloads are run on-prem or at the edge, benefitting hardware names.*
Biggest Beneficiaries	**Cloud Providers:** GOOGL, AMZN **Model Providers:** GOOGL, META **Security Software:** PANW, CRWD, ZS, NTSK, OKTA **Optical/Networking:** ANET, LITE, COHR **PSPs / On-Site Power Providers:** CIFR, WULF, HUT, RIOT, GLXY, BE, INIO, SEI, WMB, LBRT **Semis:** NVDA, AVGO	**Cloud Providers:** AMZN, GOOGL, MSFT **Infrastructure Software:** DDOG, PLTR, APPN **Security Software:** PANW, CRWD, FTNT, ZS, NTSK, OKTA, SAIL, VRNS **SaaS:** SAP, NOW **Optical/Networking:** CSCO, FFIV **PSPs / On-Site Power Providers:** CIFR, WULF, HUT, RIOT, GLXY, BE, INIO, SEI, WMB, LBRT **Semis**: NVDA	**Cloud Providers:** MSFT **Model Providers:** MiniMax, Z.ai, BABA, Tencent **Infrastructure Software:** PLTR **Security Software:** PANW, CRWD, FTNT, OKTA, SAIL **SaaS:** SAP, NOW, SHOP **On-Prem Infrastructure:** DELL, HPE, NTAP, P **Edge Devices:** DELL, HPQ, AAPL **VARs/Distributors:** SNX, INGM, CDW **PSPs / On-Site Power Providers:** CIFR, WULF, HUT, RIOT, GLXY, BE, INIO, SEI, WMB, LBRT **Semis:** NVDA
Other Beneficiaries	**Cloud Providers:** MSFT **Colocation Data Centers:** DLR **Neoclouds:** CRWV, NBIS **Security Software:** SAIL	**Model Providers:** MiniMax, Z.ai, BABA, Tencent **Colocation Data Centers:** EQIX, DLR **Neoclouds:** CRWV, NBIS **SaaS:** SHOP, WDAY, CRM, INTU **On-Prem Infrastructure:** DELL, HPE, NTAP, P **Edge Devices**: DELL, HPQ, AAPL **VARs/Distributors:** SNX, INGM, CDW	**Cloud Providers:** AMZN, GOOGL **Colocation Data Centers:** EQIX **Neoclouds:** CRWV, NBIS **SaaS:** WDAY, CRM, INTU

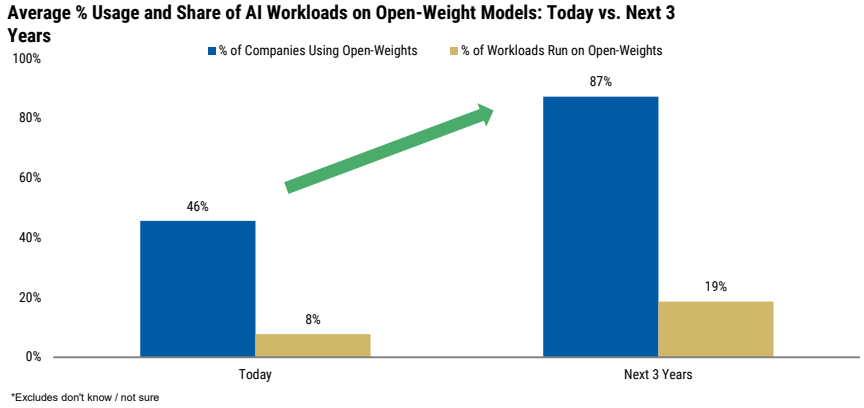
Source: Morgan Stanley Research

1. Are enterprises really adopting open-weights models today?

Our survey says: yes. Our 3Q26 CIO Survey shows that ~45% of companies surveyed use open-weights models, and this is expected to roughly double to ~90% in three years (Exhibit 2). Deployments are small but growing – across all CIOs, 8% of workloads run on open-weights models today, and this is expected to rise to 19% in three years. While usage is lower than what Vercel/OpenRouter would suggest, this is largely in-line with our expectations for large enterprises. While there are

outliers like AT&T who are running close to 40% of tokens through open-weights models today, we believe the majority of enterprises have smaller deployments and use the frontier models for their most complex tasks. This data is supported by a broadening set of companies are talking about generating ROI from open-weights models, with references expanding from names like Spotify, Pinterest, and Revolve (see more here) to companies like PNC Financial Services, HPE, Oracle (see a comprehensive list in Exhibit 14).

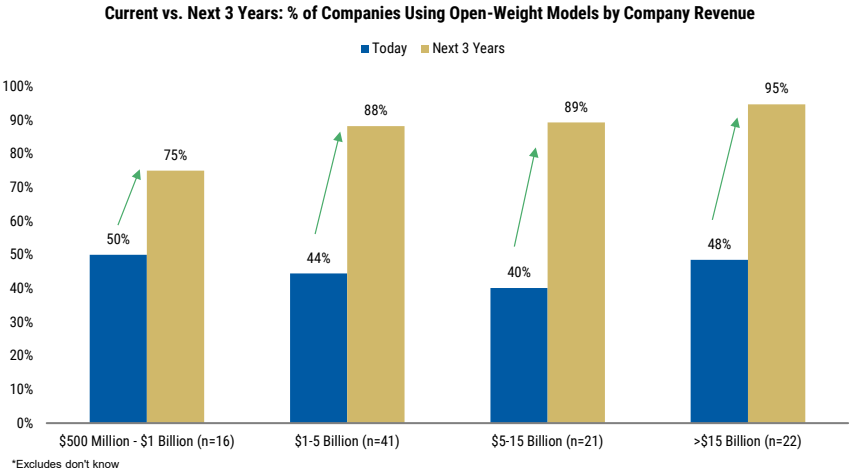
Exhibit 2: ~45% of companies surveyed use open-weights models, which is expected to roughly double to ~90% in three years. Open-weights models represent 8% of overall workloads today and that is expected to rise to 19% in three years.



Source: Alphawise, Morgan Stanley Research. n=92 for today and n=86 in three years.

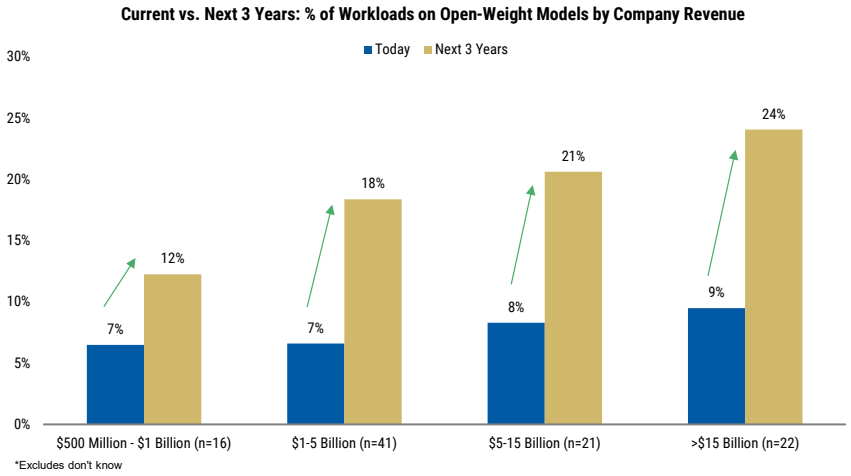
Who is using them? Open-weights adoption is largely consistent across company sizes. The largest enterprises surveyed ($15B+ in revenue) are actually expected to be the highest adopters over time, with a 95% adoption rate and 25% of workloads running on open-weight models in three years (Exhibit 3 ; Exhibit 4). This is notable as many investors are skeptical of larger companies' willingness to adopt open-weights models.

Exhibit 3: Looking across company sizes, a consistent ~40-50% of companies use open-weights today. Notably, the largest enterprises are expected to be the highest adopters in 3 years...



Source: Alphawise, Morgan Stanley Research. n=100

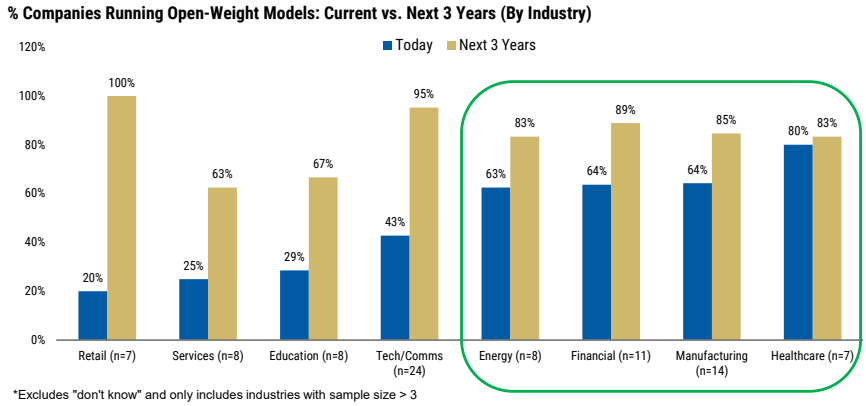
Exhibit 4: ...and this is consistent when looking at % of workloads expected to run on open-weights models.



Source: Alphawise, Morgan Stanley Research. n=100

Adoption varies by industry, with highly-regulated or edge-focused industries leading the way. Today, adoption of open-weights models ranges widely from 20-80%, depending on the industry. High adopter industries include Healthcare, Manufacturing, Financials, and Energy (Exhibit 5). While we'd note the sample size is small, there are some key themes between these industries. First, Healthcare and Financials are highly regulated – dealing with sensitive data such as patient records, customer and network data, trading and risk data – that may want to be kept on-premise. Second, Manufacturing and Energy companies likely require more edge use cases – either at the factory / plant / site – for latency purposes. These could all be potential reasons why open-weights adoption is higher, as frontier models can't run on-premise. Looking out three years, the dispersion of open-weights adoption narrows to 60-100% depending on the industry, with Retail and Technology expected to see the largest increases in adoption.

Exhibit 5: By industry, highly regulated industries (Healthcare and Financials) are high current adopters. Retail and Tech are expected to see the largest increase in open-weight model usage over the next three years.

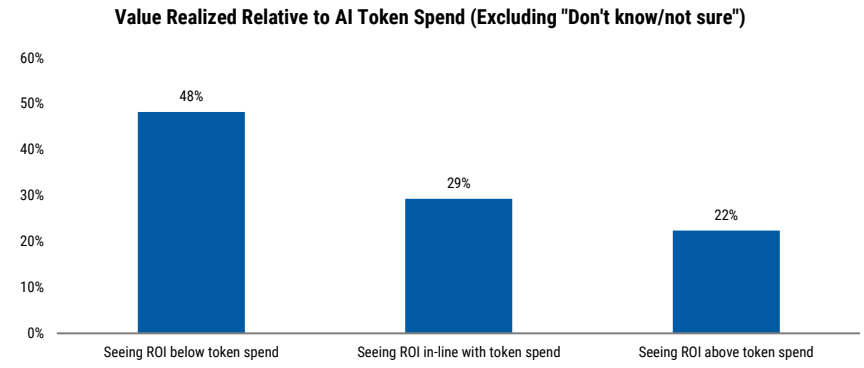


Source: Alphawise, Morgan Stanley Research. n=87

We believe adoption is growing because open-weights models are an important tool to help companies get the most out of their token spend. Our survey shows

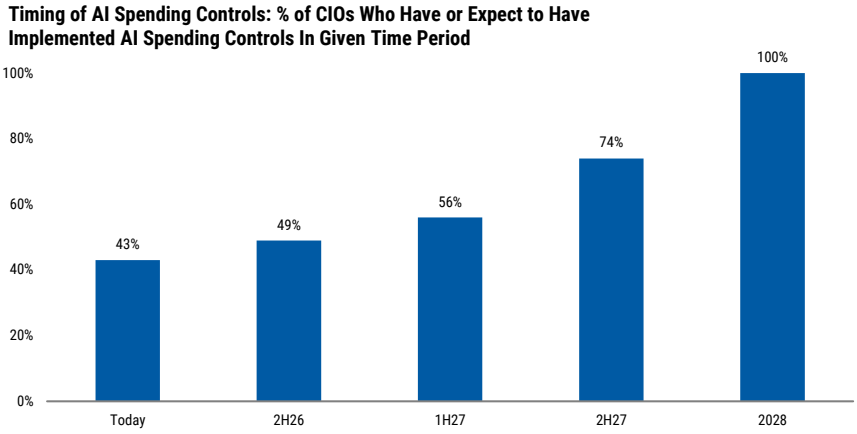
48% of CIOs able to assess ROI on AI token spend (n=58) are seeing ROI below token spend, while 52% see ROI in-line with or above token spend (Exhibit 6). As a result, 43% of CIOs have spending controls in place today (expect to reach 75% by the end of 2027) (Exhibit 7). While spend is still growing for the majority of companies able to quantify the impact of spending controls (Exhibit 8), this in our view reflects how early we are within enterprise adoption story, as 1) companies are still identifying high ROI use cases, and 2) median company spends ~$12/month per employee. We believe the continued use of open-weights models, custom model harnesses, and routers will help companies drive ROI more quickly, highlighting the utility of these models.

Exhibit 6: Roughly ~50% of CIOs who are able to assess ROI on AI token spend (n=58) say they are seeing ROI below token spend today.



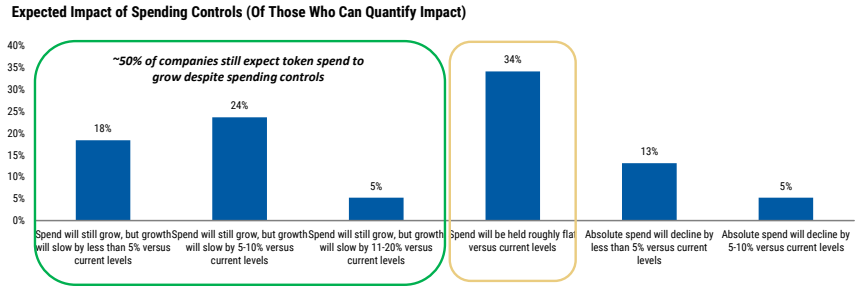
Source: Alphawise, Morgan Stanley Research. n=58 able to assess ROI on AI token spend

Exhibit 7: By the end of 2027, roughly 75% of CIOs expect to have AI spending controls in place.



Source: Alphawise, Morgan Stanley Research. n=100

Exhibit 8: ~50% of companies able to quantify the impact of spending controls expect their AI spend to still grow, while another ~35% expect it to stay flat.



Source: Alphawise, Morgan Stanley Research. n=38 for respondents who quantified the effect

2. How do we think about US enterprise adoption of Chinese open-weights models?

We have fielded a number of questions around if US enterprises feel comfortable deploying Chinese open-weights models. **Today, we believe many companies are willing to use Chinese models if deployed on US infrastructure** – either on-prem or via a hosted service like Bedrock (see our Internet & Software team's work on this here) – with companies like Pinterest and Match explicitly citing use of Chinese models. Some, like AT&T, have cited exploring Chinese models but have only deployed US open-weight models to date. Our conversations indicate a similar dynamic in regions like Europe and Japan. **However, we do acknowledge the potential business continuity / geopolitical risk around these Chinese models** (*what happens if I've fine-tuned a model to a mission-critical workflow, and then it's banned?*) We believe this applies more directly to companies fine-tuning open-weights models rather than companies using open-weights models via a model router (where it's easier to replace a model with no impact to the user). To be clear, we don't expect sweeping open-weights model regulation or model bans (see work on this with our Head of US Public Policy here), but this is something companies are attuned to. While there is a perceived "security risk" around Chinese model providers being able to see a company's data, we don't believe this is the case.

These dynamics and the concept of sovereign AI only increases the value of the US open-weights ecosystem, with key US politicians and the administration talking about the importance of supporting the US open-weights ecosystem (see here, here, here). Existing players include Meta, Google, and Nvidia with Nemotron. We believe there is an opening for a new cohort of pure play U.S. model players releasing models, like Thinking Machines (Inkling) and others. We will be continuing to watch how this ecosystem evolves.

3. Could open-weights models on-prem be a trend to watch?

As we wrote with our US IT Hardware team here, we believe a key question to watch is: *does enterprise AI remain predominantly a cloud infrastructure story, or will the growing adoption of open-weight models shift more AI workloads back on-prem?* We have recently heard seen more companies mentioning using open-weights models on-prem in order to drive greater ROI:

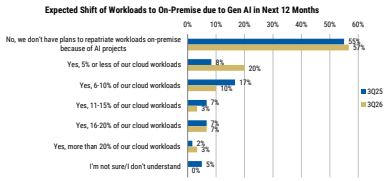
- **AT&T** has said open-weights models power 40% of employees' AI queries,

and this is expected to go to 60% and 70% in the coming years. They use Nemotron, Llama, and Gemma, some of which are run on-prem because it *"is* **often cheaper** *than renting servers to run such models from cloud providers."*

- **Nutanix** has invested $20M in their own clusters running open-weights models, which serve 80% of their needs. They noted the benefits of not paying per-token costs for open-weights models run on prem and cite that the ***"ROI on that is very good for us. Within a year we expect to recover some of those costs."***
- **Globant** noted that they're *"processing a big chunk of our tokens with our own infrastructure and our own models, using open-weight models in many occasions. And some of* **our customers are requesting that.**"
- **Intercontinental Exchange** says *"we've been buying additional GPUs, NVIDIA GPUs, and building them into our data center...we're able to run open source or open weight models against the client's data in our own data center and make sure that there's* **no data leakage**."

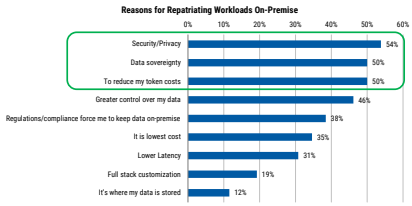
In our 3Q26 Hardware Survey, ~45% of Hardware experts cited they expect to repatriate some workloads on-prem due to AI over the next 12 months, with the main reasons being 1) security/privacy, 2) data sovereignty, and 3) to reduce token costs (via open-weights models) (Exhibit 9 ; Exhibit 10). The team's hardware survey also shows that ~60-70% of respondents expect some incremental on-prem compute/storage requirements from AI (Exhibit 11 ; Exhibit 12). We believe this is a trend to watch, as 1) customers with longer-term cloud/neocloud contracts begin renewing at elevated rates, and 2) models become smaller and easier to deploy on less hardware.

Exhibit 9: Today, ~45% of Hardware domain experts are noting some repatriation of workloads on-prem due to AI...



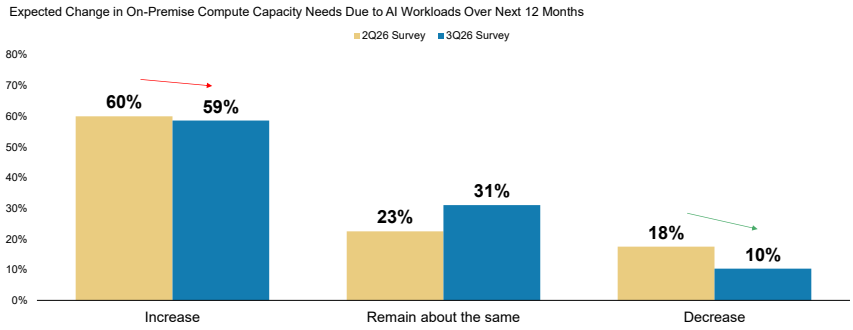
Source: Alphawise, Morgan Stanley Research. n=60

Exhibit 10: ...with the biggest reasons being security/privacy, data sovereignty, and to reduce token costs.



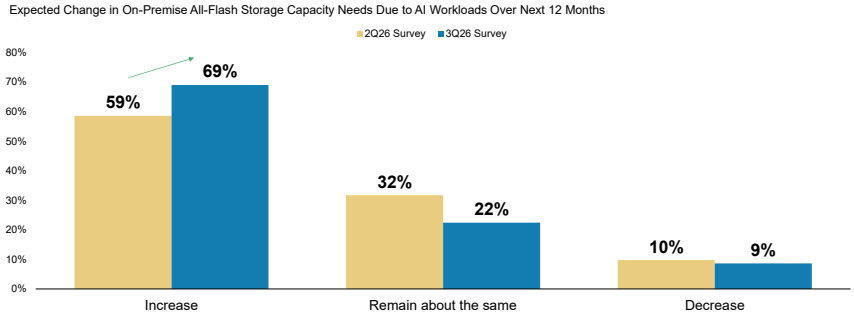
Source: Alphawise, Morgan Stanley Research. n=26

Exhibit 11: 59% of CIOs expect on-premise compute capacity needs to increase due to AI workloads over the NTM, vs. 60% from our 2Q26 survey.



Source: AlphaWise, Morgan Stanley Research. n=58 (US and EU data).

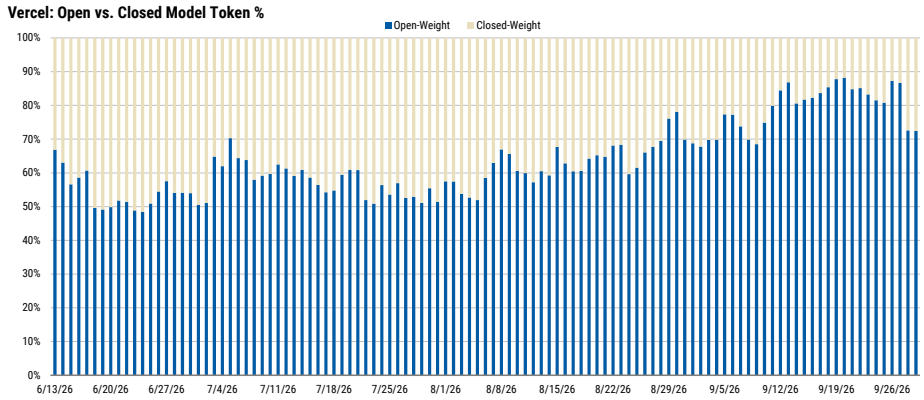
Exhibit 12: 69% of CIOs expect on-premise all-flash storage capacity needs to increase due to AI workloads over the NTM, vs. 59% from our 2Q26 survey.



Source: AlphaWise, Morgan Stanley Research. n=58 (US and EU data).

Exhibits

Exhibit 13: 70% of tokens running Vercel's platform are open-weight models, however, this data skews towards SMBs and developers.



Source: Vercel, Morgan Stanley Research

Exhibit 14: Recent commentary from conferences and earnings calls on open-weights model adoption.

Date	Company	Quote
9/14/2026	The PNC Financial Services Group, Inc.	"**We're using the frontier models with the hyperscalers, but we've got open-weight models in our data centers with no data sharing in the Chinese models.** And where we're doing developing, when you talk about agentic development of harnessing capabilities, we're doing that in-house, too, and not relying on vendors."
9/9/2026	Autodesk, Inc.	"You need accuracy and you also need cost effectiveness. So, what we're going to do is we're going to bring the tools to bear that allows us to do that. And that's going to be a **combination of proprietary models we've built, open-weight models and other models** that are out there in the industry."
9/9/2026	AT&T, Inc.	"And in some cases, when you do some of the meat and potatoes like managing customer service functions, handling customers better, being more efficient on engineering, you don't need frontier models to do that work. **You can do that work on, basically, last year's version of chips and some pretty good open-source models**...And we feel pretty good about the returns we're getting as a result of that."
9/9/2026	Duolingo, Inc.	"What happened is that over the [last] few years, our team did an incredible job, **mainly by switching mostly to open-source AI models to decrease the cost of the video call. At this point, the cost is well below $0.01 each time you do it. So, it went from $0.30 to well below $0.01**...By the way, that does not mean that today 100% of our AI usage is open-source stuff because there are cases where the frontier models are better than open source. But what we're finding is that for most of our use cases, **we can substitute for the open source, and we are very happy with that."**
9/8/2026	NetApp, Inc.	"**We are using more open source and open-weight models to manage costs**. We are building our own infrastructure to manage token costs."
9/8/2026	Nutanix, Inc.	**"We invested $20 million in our own clusters, running open-weight models, and we expect to service about 80% of our needs through those clusters and go to the frontier model for the remaining 20%**. And therefore, that 80%, it's a one-time capex spend, we spent $20 million, that will go take us for about five years or so. We're no longer paying on a per-token basis. We have full use of those clusters. They can be used for multiple applications we shared. So, it's a win for us. the ROI on that is very good for us. Within a year we expect to recover some of those costs."
9/8/2026	Match Group, Inc.	"We're very big customers of all the hyperscalers and **also using Chinese open-weight models as well to mitigate cost.** So just employees have superpowers now in a way that they didn't even a year ago. It's pretty extraordinary. I mean, every single employee has changed the way they do their work."
9/2/2026	Hewlett Packard Enterprise Co.	"HPE is now deploying an internal agentic AI platform built on our own private cloud AI**, open source and open weight models, leveraging intelligent routing** that sends each workload request to the most cost effective AI model. According to our own internal analysis, our **PCAI offering can reduce token costs versus the public cloud by up to 60%.** Routine tasks stay on-premise, while frontier models are reserved for the most complex work."
8/27/2026	Workday, Inc.	"**We have small models, open-weight models, and large frontier models**, all in the set of models that we use to build our AI systems and agents with...And quite frankly speaking, **we are pretty excited about open weight models.** So, if they open up new opportunities for us, for having own reinforcement learning, building on adapters over them, they give us a much stronger optionality when you think about international and sovereignty."
8/26/2026	Oracle Corp.	"**We arbitrage open source models...**I think there will be multiple winners in the space. I think there will be open source winners as well. I do. I think customers are going to make the choice as to which one they'd like to consume. And I think in certain regulated industries, it's probably going to tend more to the enterprise-provided models than it does to the open source."
8/13/2026	Globant SA	"When we see Glob.AI, we see something that it could use pretty much any model on the core when developing the software or creating the software, including open-weight models, if that's the case. **We're processing a big chunk of our tokens with our own infrastructure and our own models, using open-weight models in many occasions.** And some of our customers are requesting that."
8/6/2026	Grindr, Inc.	"Historically, we've used a lot of Cursor and [others]. In the last few weeks, we've actually seen a ton of adoption for Devin, which I think is quite exciting for what it's worth and most of what we do are from frontier companies. **We have deployed open source models in our system for other things, but not for coding in an aggressive way yet."**
8/5/2026	Figma, Inc.	"So, I would orient everyone around three variables. One is latency. The second is quality. The third is cost. And as we work on first-party model development, which could **include post-trains of open source models, especially US-based open source models, you will likely see us be able to further discretize certain tasks which could help with latency, it can help with quality, and it can help with cost.** And we think that's applicable not just to Make; it's also applicable to agent and to plenty of other surfaces across the Figma platform."
8/5/2026	Recursion Pharmaceuticals, Inc.	"AI is advancing incredibly quickly and no single model will remain state-of-art forever. **Our strategy isn't to depend on any one model.** It's to build an AI-native product engine that can rapidly develop and adopt the best advances, **whether they're developed at Recursion or by the broader open-source community**."
8/5/2026	Block, Inc.	"The strategy from a cost perspective for us starts with **intelligently routing our workloads, being efficient in how we think about compute and leveraging multiple models, including open-source models where appropriate**."
8/4/2026	Spotify Technology SA	"We are seeing sometimes the **leading open-source models are better today than what existed six months ago**, and therefore we have the ability to leverage whatever is the frontier model from an intelligence or cost perspective based on what we've built. **You don't need the most leading-edge model now for the vast majority of knowledge work.** And so we can then route based on what we're seeing as the advancements play out."
8/4/2026	Pinterest, Inc.	"So, **Chirp lets our engineers switch models mid-task and route every job to the best available price performance, including open-source models that we host ourselves,** so we are never locked in." "**The Open Source movement is very helpful for us**. And we've talked about this. The Large Taste Model is based on Open Source. It is using what is called CPT, continuous pre-training, where you take a model that was trained, an Open Source model, and you continue to train it on your proprietary data. This is what I talked about that is performing really well for us." "Our approach to model deployment includes our own compact, fit-for-purpose models built for Pinterest specific use cases, and **suitable open source models post trained in our own environment within our secure cloud infrastructure**." "**When we leverage open source models, such as with Pinterest Assistant, we are seeing superior performance for our use cases** when compared to closed third-party models because we are able to post train open models on our highly unique data." "With open models, we are achieving **cost per transaction at less than 8%** of the cost of comparable closed proprietary models." "Our early adoption of open source has enabled us to scale AI efficiently to serve our 640 million users, while also expanding margins and generating significant free cash flow."
8/4/2026	Revolve Group, Inc.	"**We're already leveraging open-source models in a very significant way.** And so, we already have optimizations in place that can route certain types of tasks and queries automatically to where we think it's going to still produce the result we need, but with the cheaper open-source model...equally important to the AI innovation is parallel cost efforts and optimization efforts constantly analyzing, okay, **what work was done on the frontier models that we can move to a cheaper model or an open-source model.** And the difference between the frontier models and the open sources, that gap is diminishing day by day."
7/30/2026	Intercontinental Exchange, Inc.	"We've been buying additional GPUs, NVIDIA GPUs, and building them into our data center. So, what Ben and his team have been building with AI, **we're able to run open source or open weight models against the client's data in our own data center and make sure that there's no data leakage**, which we're finding increasingly is becoming important to the financial services industry."
7/22/2026	ServiceNow, Inc.	"There is no reason for using some of these most expensive ones. So, **we're very smart about how we use and leverage some of these emerging technologies, where you use open-weight versions**, where do we have our own, where we have domain-specific ones, and where we use some of these higher-end frontier models."
7/14/2026	JPMorgan Chase & Co.	"**The idea is use the right model for the right purpose, be smart about open source where appropriate, and ensure that you're getting value out of it ultimately in the end.** Either we're going to have a lot more capacity or we're going to have a lot more efficiency or both, or we're going to have better revenue outcomes or we're going to compete more effectively, and we just need to be disciplined about how we handle that."

Source: Morgan Stanley Research, Alphawise

Current prices of highlighted stocks: AAPL USD 336.64; AMZN USD 262.43; ANET USD 216.74; APPN USD 40.10; AVGO USD 361.54; BABA USD 111.37; BE USD 280.50; CDW USD 142.17; CIFR USD 13.52; COHR USD 312.62; CRM USD 229.13; CRWD USD 275.04; CRWV USD 82.08; CSCO USD 118.39; DDOG 293.26; DELL USD 586.06; DLR USD 178.76; EQIX USD 1026.06; FFIV USD 479.83; FTNT USD 194.75; GLXY USD 20.33; GOOGL USD 351.66; HPE USD 73.46; HPQ USD 30.20; HUT USD 84.27; INGM USD 27.72; INIO USD 19.79; INTU USD 302.75; LBRT USD 19.00; LITE USD 1103.355; META USD 718.67; MiniMax (0100.HK) HKD 213.00; MSFT USD 535.07; NBIS USD 221.07; NOW USD 140.86; NTAP USD 237.15; NTSK USD 20.755; NVDA USD.28; OKTA USD 232.13; P USD 154.49; PANW USD 418.78; PLTR USD 209.05; RIOT USD 16.885; SAIL USD 20.77; SAP USD 214.78; SEI USD 76.40; SHOP USD 170.85; SNX USD 273.37; Tencent (0700.HK) HKD 424.80; VRNS USD 50.12; WDAY USD 186.59; WMB USD 72.67; WULF USD 13.77; ZS USD 233.73; Z.AI (2513.HK) HKD 641.50.

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(as of September 30, 2026)
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	Coverage Universe		Investment Banking Clients (IBC)			Other Material Investment Services Clients (MISC)	
Stock Rating Category	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
Overweight/Buy	1599	43%	455	48%	28%	783	44%
Equal-weight/Hold	1563	42%	394	42%	25%	763	43%
Not-Rated/Hold	2	0%	1	0%	50%	1	0%
Underweight/Sell	570	15%	96	10%	17%	227	13%
Total	3,734		946			1774	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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