

S I G N A L

When AI is unavoidable

How institutions are positioning
for structural change



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INTRODUCTION

The AI dust is far from settling

Artificial Intelligence (AI) – specifically of the large language model variety – has had an unusual run in investment discourse. Few themes arrive so loudly, so quickly, and with such confidence that they have an immediate impact on assumed norms. By now, most institutional investors don't need convincing that AI matters. The more interesting question is what they are doing with that belief.

That's where this edition of Signal comes in. Rather than adding another forecast to the pile, we looked at behavior: what investors are actually reading, debating and, crucially, acting on. Strip away the breathless headlines and something more disciplined emerges.

Across our expert contributors, a consistent tension emerges. On one side sits the opportunity: AI accelerating research, sharpening quantitative models, surfacing patterns that would otherwise remain hidden. On the other sits discipline: clear boundaries around decision authority, governance structures that evolve alongside adoption, and a sober assessment of where productivity gains genuinely translate into durable growth. Across all these views the common theme is calibration.

What's clear is that AI is no longer being treated as a novelty spectacle and there are serious conversations around infrastructure integration. This edition explores how institutions are positioning for that reality and what it means for risk, returns and decision-making in the years ahead.



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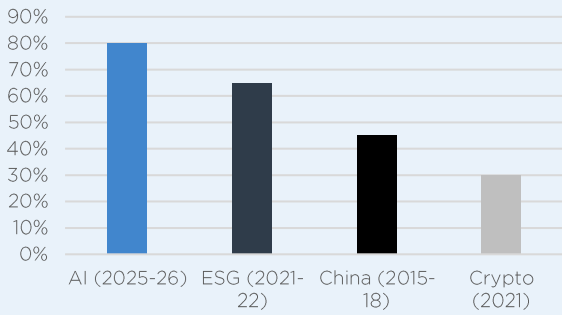


“[...]most institutional investors don't need convincing that AI matters. The more interesting question is what they are doing with that belief.”

How institutions are interpreting AI: The behavior behind the thinking

At this point, showing data that confirms AI is widely discussed risks stating the obvious. The more revealing insight is how pervasively it has embedded itself across investment thinking. What our data shows is that AI has become a connective layer shaping the investment case across equities, credit, and private markets – as well as the investment process underlying risk, and portfolio construction itself.

AI has been mentioned in 80% of global outlooks outperforming other themes at their peak



AI is now a baseline assumption

AI features in around 85% of 2026 investment outlooks, exceeding the peak influence of ESG, China, or crypto in prior cycles. Its significance now spans both AI as an investable opportunity and AI as a tool influencing how growth, risk, and portfolio decisions are being made. This has made the topic near avoidable even for the most resistant of investors.

All stock selection leads to AI

Investors clicked in their thousands at the phrase “equity concentration” in 2025. This intensified investor focus on AI, making it the most-read asset class theme on Savvy Investor in 2025. With a narrow group of stocks driving returns, allocators have engaged heavily with research on how to access AI upside while mitigating concentration and potential downside risk.

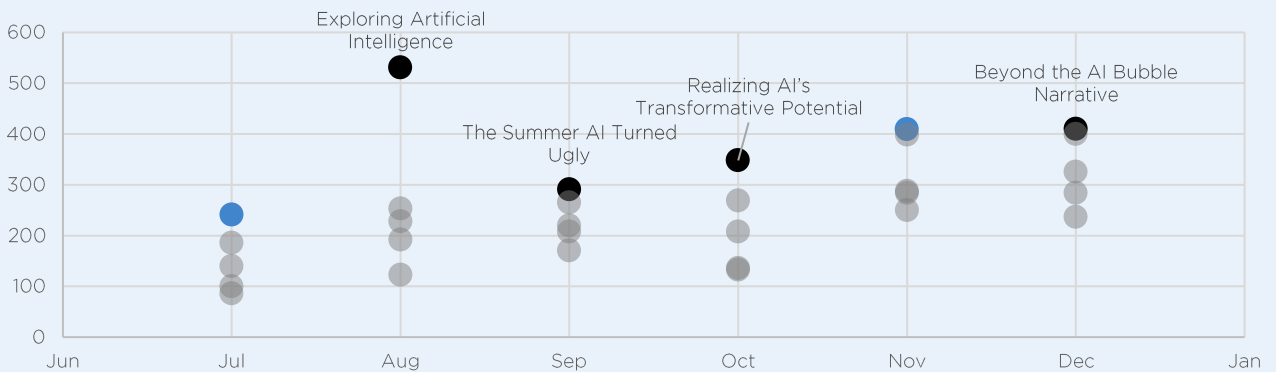
AI enthusiasm has shifted to scrutiny

Four of the six most-read papers on Savvy Investor in the second half of 2025 focused on AI, but the progression is telling. Much like the ESG cycle before it, engagement rose as the narrative shifted from exploration to scrutiny. In the case of AI, this has meant valuation concerns, and portfolio implications beyond the bubble debate. For allocators, this reflects a move from thematic curiosity toward disciplined assessment of durability and risk.

Why this matters

Taken together, these signals point to a clear shift in investor behavior. Having previously been assessed as a standalone theme over 2024, the factors influencing portfolio structure, concentration risk, and decision-making frameworks have become more prevalent - even urgent. For institutional investors, the narrative shift seems to indicate an acceptance that AI matters and will play an important role going forwards. The question now seems to be how this impact will be reflected across allocations, processes, and long-term resilience.

Four out of the six top papers in H2 2025 covered AI



AI and the concentration problem

AI has become inseparable from conversations about equity concentration. The most popular research treats AI as a force shaping how markets behave rather than a theme to allocate to. Institutions are reading this material to understand how a small group of companies came to dominate returns, how durable that structure may be, and what it implies for portfolios built on diversification assumptions that feel increasingly stretched.

When one idea carries the portfolio

Some asset managers frame today's concentration as a rational and natural outcome of scale and capital intensity. Others have devoted their analysis to how tightly performance has clustered around a handful of names and how sensitive portfolios have become to changes in expectations.

The popularity of the latter suggests institutions are actively pressure-testing how dependent recent outcomes have been on AI leadership continuing uninterrupted.

AI exposure is being actively managed

Investor engagement points to AI moving into explicit risk discussions. Institutions are consuming research that helps them identify where AI exposure sits across portfolios, how it behaves under stress, and how it interacts with benchmarks.

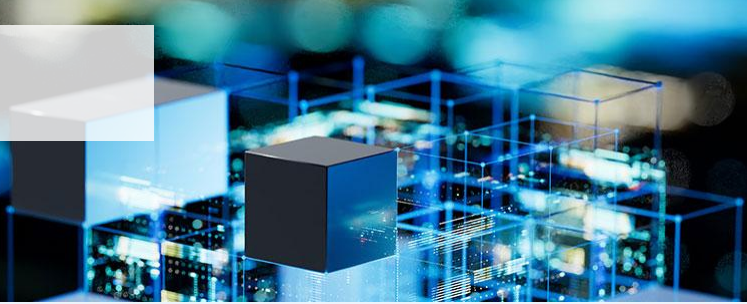
This reflects a desire to govern AI exposure deliberately, rather than discovering it indirectly through market concentration.

“[...] institutions are actively pressure-testing how dependent recent outcomes have been on AI leadership continuing uninterrupted.”

Increased risk of AI dependency to drive returns



AI's second act: From suppliers to “appliers”



Why value is shifting from AI infrastructure to the businesses that integrate and monetize it.

ChatGPT has only been on the scene since 2022. Since then, the world has raced to build the “picks and shovels”—the chips, power, and data-center infrastructure that make AI possible. Now the story is shifting: the appliers who weave AI into products and workflows appear positioned to define the next decade.

Since launch, the AI narrative has largely revolved around the companies enabling the build-out of infrastructure—semiconductors, electrical equipment, power generation, and data-center construction. We believe the opportunity in these suppliers will continue.

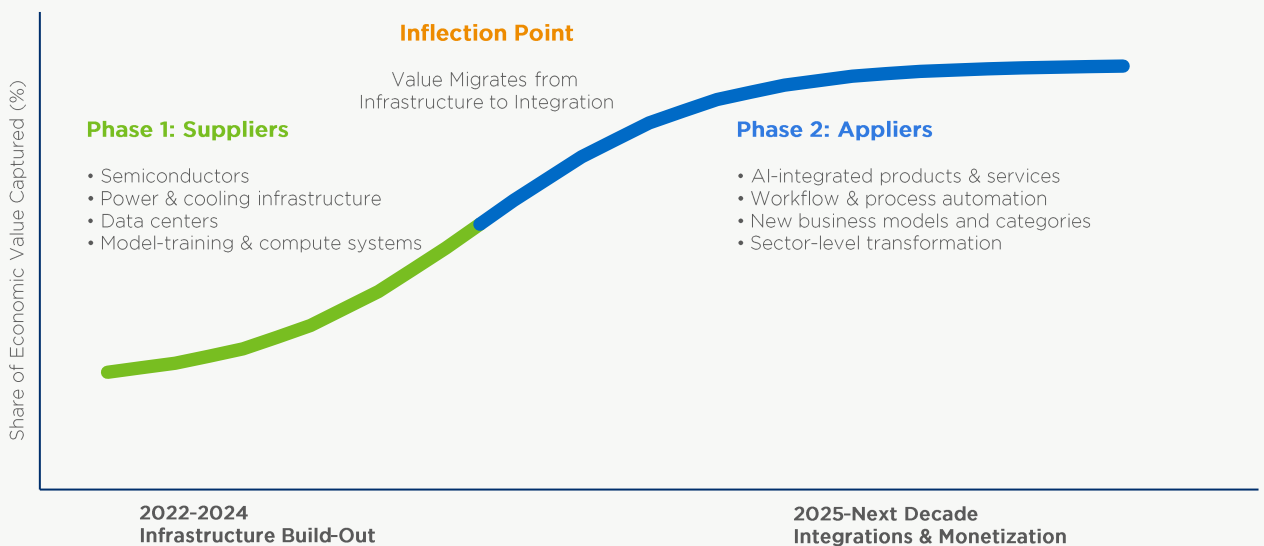
But history shows that the baton eventually passes from the suppliers to the appliers—businesses that embed new technology into products, processes, and, in some cases, entirely new categories.

The late 1990s internet cycle offers a useful framing: early value accumulated to the companies laying the foundation (fiber optics, networking gear, servers), where demand was driven by capex cycles rather than true end-market adoption. Over time, however, the biggest winners were those that integrated the internet into their models to scale, serve customers better, and pioneer new business models.

Many of today's mega-caps—including Amazon and Google—emerged from that transition.

We believe a similar dynamic is unfolding with AI. Infrastructure remains essential, but value creation is increasingly shifting from the “picks and shovels” providers to the appliers—businesses that integrate and monetize AI within their products. To illustrate this shift, Figure 1 provides a conceptual view of how we see value migrating from suppliers to appliers across the AI ecosystem.

Shifting Value Capture in the AI Ecosystem: From Suppliers --> Appliers



For illustrative purposes only. The chart is intended to depict the directional shift in where AI value may be captured as adoption matures. In practice, both infrastructure and application layers are expected to continue expanding, with significant overlap as suppliers and appliers compete to capture downstream economic value.

Health Care

We think Health Care is among the sectors most ready for AI-driven change. Health Care faces high administrative costs, clinician burnout and shortages, fragmented data, and inconsistent patient experiences. AI can lower administrative burdens for busy clinicians and improve triage decisions by helping identify which patients need higher-acuity care sooner.

Beyond services, AI is also reshaping biotech and pharma. Drug discovery and R&D have historically been slow and expensive.

AI can accelerate early-stage screening by rapidly evaluating potential compounds and modeling interactions before lab testing.

In clinical trials, AI can help identify eligible patients faster and support real-time monitoring, potentially shortening timelines and improving productivity.

Consumer

For consumers, the key is to distinguish surface-level AI features from genuine integration into the customer experience.

Companies with strong first-party data can leverage AI to personalize discovery and recommendations, boost loyalty, and reduce friction.

Even returns can be improved if AI clarifies product details, refines sizing, and predicts return risk. This not only lowers high operational costs but also enhances the overall customer experience.

AI can also help brands respond faster to shifting preferences by enhancing demand forecasting, inventory management, and supply chain decisions. Over time, AI might open up entirely new consumer categories. Humanoid robotics is one emerging example at the intersection of consumer and industrial applications. Although estimates of the market potential vary widely, a quick look at Tesla's current valuation provides some insight into the market's excitement for humanoid robotics over the next decade.

Industrials

Industrials often operate with high fixed costs and long-lived assets, which makes improved uptime and efficiency especially valuable. Highly variable capex and economic cycles govern the profitability of many of these companies, and this lack of predictability is why many investors ascribe a below-market multiple. One of the most direct applications is predictive maintenance, shifting from scheduled maintenance to condition-based insights that anticipate failures before they occur. For airlines, railroads, utilities, and factories, this can reduce unplanned outages, extend asset life, and improve working capital efficiency.

AI also supports autonomy and robotics where labor is scarce, safety matters, and consistency is critical, such as logistics, warehousing, agriculture, mining, and ports.

A third area is manufacturing yield and quality optimization. AI can detect defects earlier, optimize process parameters in real time, reducing scrap and rework, and help avoid costly quality failures.

Closing Thoughts

The next decade of AI leadership likely won't be defined by the companies building the tools. It is expected to be defined by the companies using them. Those that weave AI into mission-critical workflows, unlock new customer value, and enhance unit economics stand to reshape industries. If past technological shifts are any guide, the enduring winners may be the appliers who translate capability into competitive advantage. For investors, spotting where AI creates structural differentiation, not just short-term hype, will be key to capturing the next wave of long-term value creation.

[Read the full article here](#)

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Will productivity gains translate to returns?

Alongside concentration, investors are engaging deeply with research on value capture. The most-read papers explore how AI's economic benefits spread through the value chain and how those effects show up in earnings and competitiveness over time. Institutions are using this material to frame expectations around where returns may compound and where optimism may already be reflected in prices.

Tracing value through adoption

It was fairly popular in early 2025 for firms to pivot their AI house view around infrastructure, compute, and capital investment. As the year went on, greater emphasis was placed on embedding AI into existing operations.

Research highlighting productivity gains, margin expansion, and efficiency improvements has therefore increasingly resonated with investors seeking exposure tied to business fundamentals, rather than visibility alone. This debate reflects an effort to understand how AI translates into cash flows across different business models.

The hunt to identify growth

Engagement suggests institutions are widening how they express AI exposure. Investors are reading across regions, sectors, and styles to understand how adoption unfolds beyond the largest platforms.

The focus is on identifying steady, repeatable benefits that accumulate through operations, signaling a broader and more distributed interpretation of what AI exposure can look like in practice.

AI's impact on "investment edge"

A notable share of AI engagement centers on information and decision-making. Investors are drawn to research examining how analytical capability influences market behavior, signal formation, and performance persistence. This reflects growing awareness that AI affects not only what investors buy, but how insights are generated and filtered, and then acted upon across increasingly competitive markets.

Timing the market or shaping the market?

A significant upside for future integration is AI's ability to accelerate research, to synthesize information, and to surface patterns. The counterargument is that these same tools may shape crowding, timing, and behavioral effects.

Papers exploring these dynamics attract attention because they speak directly to how advantage forms, how quickly it travels, and how fragile it can become as similar capabilities spread.

Investment edge is redefined

Institutions are interested in ideas that tie outcomes to process quality. Attention is shifting toward how decisions are reached and how signals are validated.

This suggests that investment skill is being discussed more often in terms of structure, discipline, and governance rather than simply alongside traditional performance metrics.

How AI can transform processes, data and accountability for investment managers



Mike Chen

Head of Next Gen Research
Robeco

ROBECO

Most asset managers today are using AI primarily as a support tool for research and productivity. How realistic is it that AI systems will eventually move beyond this and begin initiating and executing investment decisions themselves? And what would that change fundamentally about how portfolios are managed?

You're absolutely right that AI is very applicable as an efficiency tool. But from a quant perspective, Robeco have been using AI for quite a while. And when we say AI, we don't just mean generative AI—the latest iteration—we also mean earlier forms such as neural networks, gradient boosting algorithms and natural language processing. On the quant side, we've been using these in our investment engine for close to 10 years.

They help us detect nonlinear dynamics in asset prices, identify sentiment in management communication, and extract relationships between companies—competitors, customer-supplier links, even 'frenemy' dynamics. But these uses are relatively narrow and well-defined.

What people are really asking is whether AI can frame the question itself, determine the relevant metrics, and ultimately decide whether to go long or short a security. That is still very much a work in progress. We are experimenting with generative AI, but we are still some way away from that scenario.

Generative AI is essentially a next-word predictor—autocomplete on steroids. It produces the most likely output based on its training data. In financial markets, if everyone does the expected thing, it gets priced in. So, using it in a straightforward way is unlikely to produce a consistently intelligent investor.

Given that debate—whether AI replaces or augments humans—how do you see the roles of portfolio managers and analysts evolving over the next decade?

For the foreseeable future—say five years—it's not human versus AI, it's human plus AI. AI is very good at repetitive, mechanical and well-defined tasks. Humans are better at less well-defined problems.

The mechanical part can increasingly be allocated to machines. Humans will focus more on framing the questions, governing which models to use, deciding what outputs to trust, and ensuring ethical and societal considerations are respected. Judgement becomes more important, not less. Even if 95% of the work becomes automated, the remaining 5%—the judgement—really matters.

If an AI-driven investment decision leads to significant losses, who becomes accountable? How should asset managers think about governance in that environment?

You can outsource the task, but you cannot outsource the accountability. In investment teams, junior staff may do the heavy lifting, but senior professionals sign off and are accountable. The same principle applies with AI.

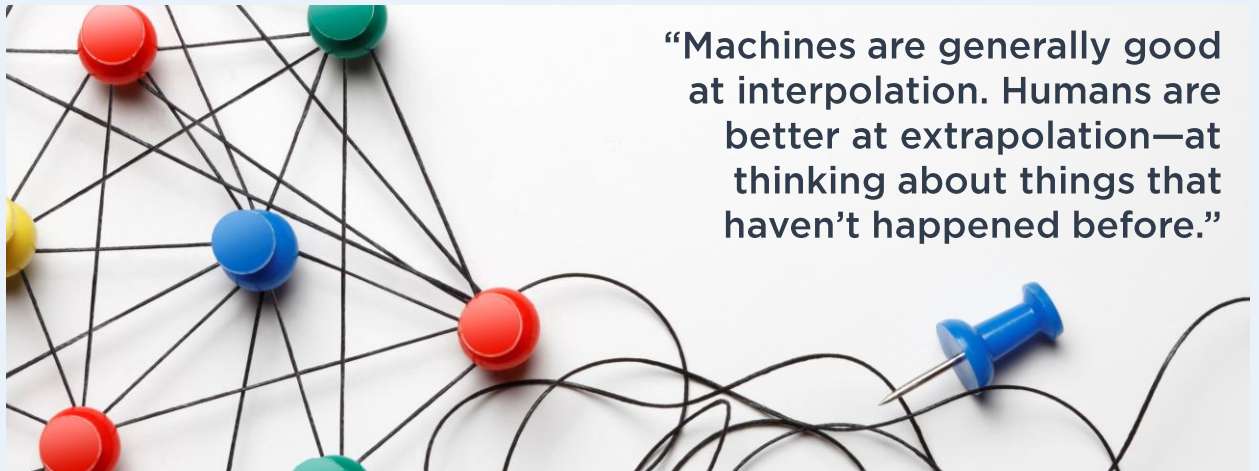
AI may perform the mechanical work, but humans must still approve decisions and own the outcome. It makes no sense to say, 'It wasn't me—it was the algorithm.' That's why AI literacy is crucial. You need to understand what the model is good at, what data it was trained on, and where you need to exercise extra caution.

Financial markets are often noisy and data-constrained. To what extent is data availability a limiting factor for advanced AI in investing?

Data availability is a major limiting factor. Humans often outperform in unfamiliar situations because they understand fundamental principles and dynamics. Even if an event hasn't happened before, humans can reason from first principles.

AI models trained purely on historical data may struggle with rare or unexpected events. Markets are full of these. There is probably enough data for commonly occurring events, but for corner cases, I would still trust an experienced human more.

“AI literacy is crucial. You need to understand what the model is good at, what data it was trained on, and where you need to exercise extra caution.”



“Machines are generally good at interpolation. Humans are better at extrapolation—at thinking about things that haven’t happened before.”

There’s increasing discussion around synthetic data. Do you see it as helpful or risky?

Synthetic data can be useful, but it has limitations. It fills in gaps within existing dimensions of knowledge—it doesn’t add entirely new ones.

Take COVID. It was the most dramatic market drawdown of the past decade. Very few datasets meaningfully captured a modern global pandemic. Synthetic data is unlikely to generate a true black swan scenario like that.

Machines are generally good at interpolation. Humans are better at extrapolation—at thinking about things that haven’t happened before.

If AI becomes widely adopted, where does sustainable competitive advantage come from?

Given the cost of training foundational models, most financial firms won’t build their own. We’re not a foundational model lab like OpenAI or Google.

The advantage comes from building the right system and culture—creating an environment where people can experiment, learn quickly and discover new applications. The edge is less about owning the model and more about knowing how to use it effectively.

How is AI being used at Robeco today?

On the quant side, we’ve used AI for around a decade—for detecting non-obvious dynamics, predicting sentiment and extracting entities to build network graphs.

On the fundamental side, teams are increasingly experimenting. For example, financial models that once took weeks to build can now be produced in minutes using cloud-based AI tools. That frees up time for higher-order thinking. We also use AI for summarization, coding assistance and various efficiency gains.

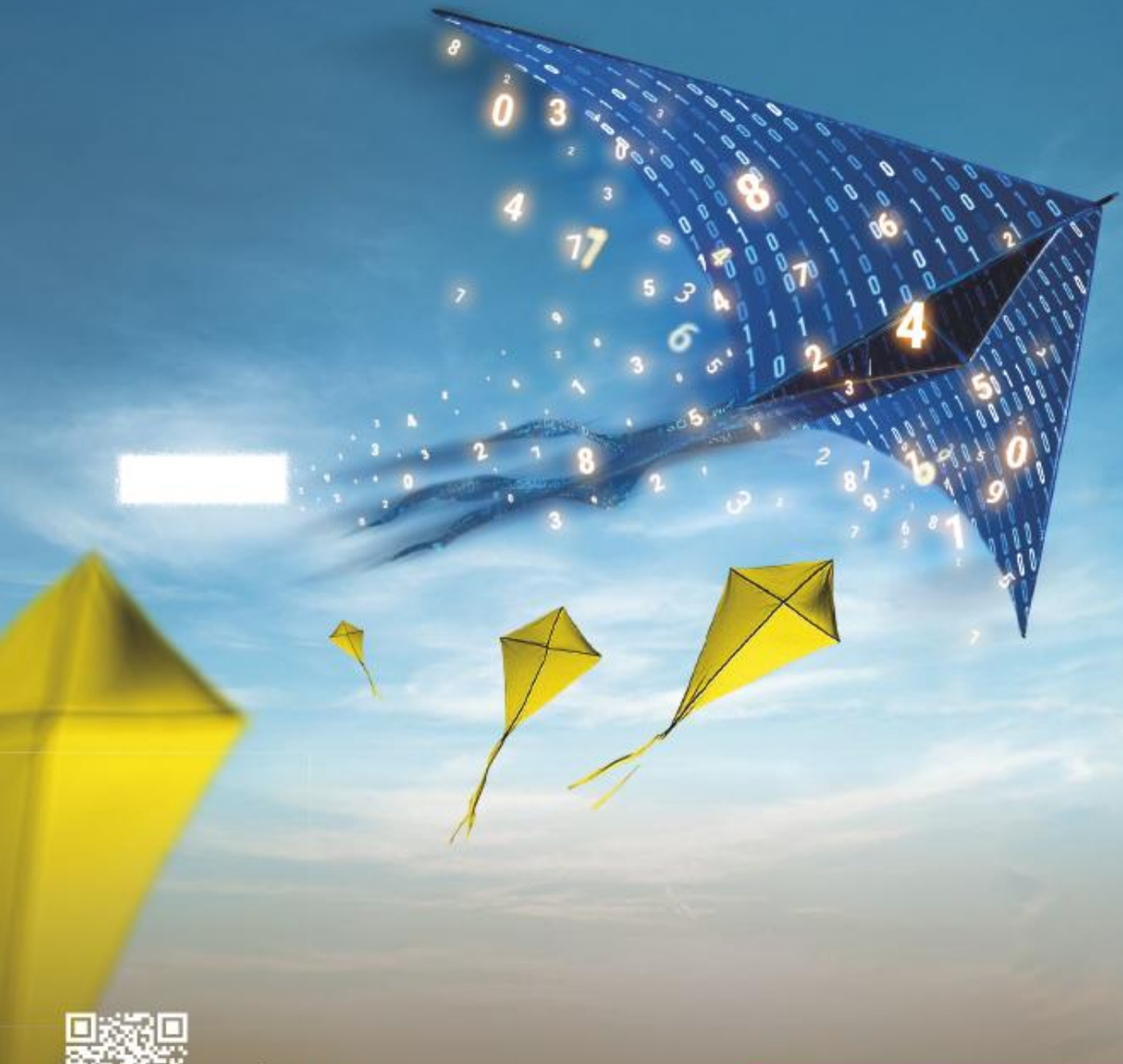
Any final message for institutional investors?

Maintain a healthy sense of skepticism. AI-washing is a real risk. Ask detailed questions about the technology stack, the models being used, and where AI is actually embedded—is it generating alpha, supporting operations, or simply improving productivity?

Kick the tires. Ask specifics. That’s the best advice.

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Not so artificial: The case for building investment-led AI solutions



Matthew Lyberg, CFA

Global Head of AI, Asset Management & Product
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Are today's AI-powered investment tools just a new flavor of hype, or do they have the ability to deliver real, measurable alpha?

AI is absolutely surrounded by hype. At the same time, the capability shift is real, and it matters in a very practical way for fundamental investing.

Alpha often comes from finding information that's not yet fully priced in. The challenge has never been that investors lack ideas. The challenge is the work required to prove or disprove them. That work lives in transcripts, filings, footnotes, internal notes, and years of history. When AI collapses the time it takes to search, connect, and summarize that material, it removes the bottleneck in the process. Teams can test hypotheses faster, go deeper on a company, and cover more of the opportunity set without lowering the bar on fundamental work.

On measurement, we believe alpha begins with the insights of our fundamental investment teams.

We don't use AI to make investment decisions. We use it to accelerate research and improve alignment; however, accountability stays with our investment professionals. The effectiveness of AI-powered investment tools might best be measured by leading indicators that are tightly linked to investment outcomes: reductions in time spent mining lengthy documents, faster processing of information, broader company coverage for a given team capacity, and faster responses during market-moving events.

Can AI-driven research really enable investment managers to play catch-up in real time during market-moving events and make better-informed decisions?

The short answer is yes. In fast-moving markets, time is a scarce resource. Everyone is trying to answer similar questions, and the edge comes from getting to the relevant context quickly and then applying judgment.

We saw this during "Liberation Day" last April, when the U.S. tariff regime drove market dislocations. We developed a semantic search tool that ingests company transcripts and related materials and makes them searchable. When the event hit, our investment teams were able to look across names in their

portfolios, pull up management discussions from prior cycles about tariff exposure, and get an initial ranked view of which holdings were likely more exposed. That's a starting point, not a conclusion, but it's a powerful starting point. It helps portfolio managers and risk partners decide where to focus their attention and how to frame current volatility within the context of our long-term investment thesis.

When volatility spikes and markets move, human activation remains central to investing. Are we at a point where we can rely on agents to flag changes, analyze developments, and present them to investment managers?

We're getting closer. However, as I learned working in performance attribution earlier in my career, while the rearview mirror is always crystal clear, the view ahead is decidedly less so—the windshield is foggy, and the wipers might not be working.

In other words, the relevant themes and market-moving events are always changing. Today's major event might be a small hedge fund in China releasing a superior large-language model (LLM), tomorrow's might be political in nature.

What I'm most excited about is the integration of qualitative and quantitative work in a controlled way. LLMs are excellent at working with text, like transcripts, filings, and internal notes. Quantitative inputs such as financial models, macroeconomic measures of activity, and factor exposures can also be incorporated, but that'll require the LLM to call a specific tool for computation and alignment.

We're partnering with vendors who are at the forefront of this work, while also exploring applications in related contexts. From here, we might be able to see something like early-warning workflows, but they will still require controls, validation, and human review.

There's skepticism in the market. Is it overdone? Are we framing AI accurately when we talk about its ability to influence the search for alpha?

We have the privilege of working with investment analysts, who by definition are professional skeptics. In my view, we need to be skeptical. AI can feel like a catch-all for every problem, and when something is broadly useful, it's easy to start believing it can do everything. It cannot.

AI isn't magic fairy dust. It's a set of technologies that require inputs to get outputs. To honor our fiduciary obligations and fulfill regulatory requirements, we need to substantiate our investment decisions. That requires input data normalization, pipelines, controls, and clear governance. AI doesn't make that go away. Hallucinations are a real risk, especially on open context questions where there might not be an obvious source of truth for validation.

That is why we've set a hard boundary—we will not use AI for investment decisions.

More importantly, every AI solution we have in place today was proposed by analysts and portfolio managers. As a technical team, we weren't guessing what we hoped might be useful. We were co-creating solutions with our investment colleagues. Along the way, we were all alternatively delighted and disappointed, learning together.

How do you keep AI from amplifying groupthink and herding behavior?

It starts with the boundary. AI doesn't decide. Portfolio managers do.

Groupthink is a real risk because these models are optimized to produce plausible language that can look like consensus even when it isn't grounded in anything useful. The control here is context. We require traceability back to source material and keep expert review in the loop. When our portfolio managers and analysts ask questions, the questions are often specific to a theme that they're researching. We designed the tools so that they'll always provide citations in their output. This feature helps to ensure integrity in attributing insights from source material and assists the user in evaluating whether the tool has returned a likely but unsubstantiated result.

This is where our close partnership with investment teams plays a key role—portfolio managers and analysts will ask hard questions. They'll find hallucinations, and they'll keep you honest.

At the same time, groupthink is also something you want to understand, measure, and manage. AI can help identify where consensus is building, where exposures are concentrated, and where narratives are dominating price action. Those can be valuable inputs into portfolio construction and risk management. The key is to treat them as inputs and leave the decision-making to humans in the context of a broader governance framework.

Vendors are investing tens of millions to capture this. Why build anything internally at all?

The narrative we hear a lot in the industry is that if you can get everything you need from vendors and providers, you shouldn't build internally and generally this makes sense. However, it doesn't always apply.

The reason we still take a hybrid approach comes down to workflow integration and control. Providers build capabilities inside their own platforms. Investment teams work across many platforms. If AI and data become the foundation for a more unified investment framework where you connect systems and make them interoperable for portfolio management teams, you need an integration layer you control, especially if you care deeply about proprietary data security and governance.

The second reason is process specificity. We do have a platform, and it's customizable for different investment teams. And that's difficult for a vendor to do deeply without being embedded in our process. We also onboard AI-native vendors for capabilities that would be difficult for us to build well ourselves.

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¹ <https://www.manulife.com/ca/en/about-us/news/manulife-named-number-1-life-insurance-company-for-ai-maturity-by-evident>
² https://www.manulife.com/content/dam/manulife-com/ca/financial-documents/pas/en/MFC_AI_2024_EN.pdf

If you look back to the last 18 months, what's been the biggest challenge or setback? And looking ahead, what's your biggest concern?

In a highly regulated industry such as investment management, when you're thinking about launching an AI program from scratch, you might ask: Who decides what foundational model you can use? How do we verify that model providers aren't using our inputs for training in ways that violate our expectations? How do we protect our data?

We benefited from Manulife's broader commitment to digital transformation and responsible AI. Since 2017, the firm has invested more than \$1 Billion in this space, and the inaugural Evident AI Index for Insurance recognized Manulife as the #1 life insurance company for AI maturity in 2025¹. That institutional foundation, especially our published Responsible AI Principles², gave us the framework to move quickly. For asset management specifically, we had strong conviction that the program needed to be led by investment teams, and that Risk and Compliance oversight must be integrated into every step of the process.

It's an interesting paradox. Many believe that governance is the opposite of innovation. For us, it was a superpower. A robust governance program provided the guardrails needed to innovate with AI for asset management in the first place.

The biggest challenge then for us was how to balance experimentation with accountability. We're stewards of client capital and the firm's resources. Traditional ROI frameworks assume you can predict outcomes. With investment AI in particular, you often can't. The models move quickly, and some work will be throwaway. In our case, senior management already brought almost a decade of experience in leading AI initiatives across Manulife. And that leadership support has made all the difference. For us, Investing in asset management AI was more of a calculated risk than a leap of faith.

We managed the risk by minimizing the cost of being wrong through a structured release program. A prototype sits with a couple of analysts. If it looks promising, it becomes a pilot with deeper risk, compliance, and legal review. We measure adoption and engagement, then it graduates to production, where it's supported within the broader technology framework.

This approach helped us to balance our commitments while still leaving space for exploration

Do you have any worries about AI?

Yes, of course. I think we all do and it would be hard not to. Investment management is an apprenticeship business. I remember many nights working through a question, gathering data, formatting, aligning, and figuring out how to visualize my work. Much of this was pure drudgery. Along the way, I learned data modeling, computation, and analysis at an almost intuitive level. As AI has the potential to automate much of this early career work, I wonder what that means for the apprenticeship model, and by extension, how we, as an industry, will be training the next generation of analysts and portfolio managers.

AI as the *next* investment frontier: accelerating insight, capturing opportunities

Driven by curiosity, inspired by possibilities

Learn more about our approach to AI integration, and how we're striving to create value for our clients by harnessing these powerful new tools strategically, transparently, and responsibly.



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AI inside the investment organization

Implementation-focused AI content has attracted sustained interest. Investors are spending time with material that examines how AI fits into real investment workflows and what changes when it becomes embedded rather than played around with as a curiosity. This reflects institutions thinking carefully about scale, reliability, and responsibility as AI influences recurring decisions.

Embedding AI into daily decision making

AI is being heralded as a productivity enhancer across research and risk. Despite this, the main debate today is focused less on output volume than on controls and oversight.

The popularity of this work reflects institutions working through how AI shapes decision-making at scale, alongside the understanding that human judgment remains essential. Accountability must be preserved as processes become more automated.

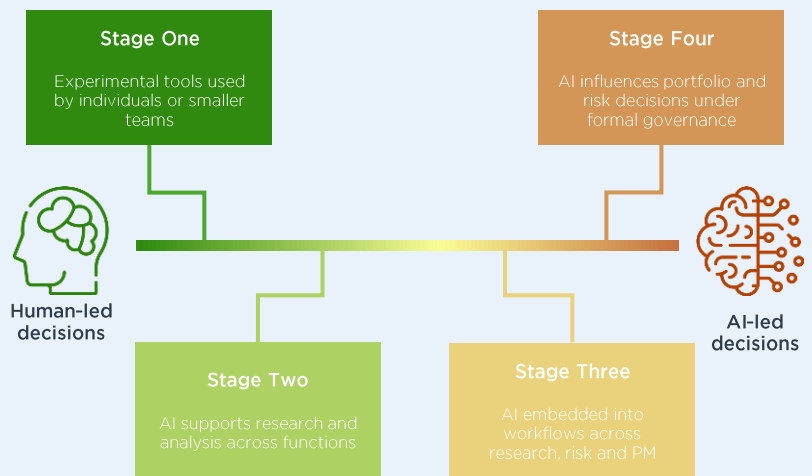
AI is becoming operational

Engagement indicates that AI is being incorporated into investment operating models. Institutions are reading closely on governance frameworks, oversight structures, and internal safeguards as adoption progresses.

This signals a focus on making AI dependable, auditable, and resilient as part of long-term investment infrastructure.

“institutions [are] working through how AI shapes decision-making at scale, where human judgment remains essential, and how accountability is preserved”

The evolution of the AI integration conversation



Inside the institutional response to AI: Survey insights from global asset allocators



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Head of Macro Credit and
Global Investment Strategist
Nuveen

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Based on Nuveen's EQUilibrium survey and the TIAA Institute's research, where are institutional investors using AI today in their investment processes, and where is adoption still more aspirational?

Our research shows that institutional investors are using AI primarily to automate and accelerate information-heavy, repeatable parts of the investment workflow. This includes searching and synthesizing research, producing reports, conducting audits and extracting signals from large and unstructured data sets. In more advanced cases, AI is being used to identify patterns across diverse data sources, support multi-factor portfolio analysis and improve understanding of cross-asset relationships.

Adoption becomes more aspirational when the goal shifts from efficiency to AI-led decision-making and return generation. Many investors are skeptical that large language models have demonstrated persistent, repeatable alpha, a view captured in both the TIAA Institute's findings and our own EQUilibrium survey results. While 63% of institutions cite AI as the most influential megatrend shaping five-year strategy, and 76% expect it to drive a meaningful productivity boost in the next decade, only 12% report actively reallocating away from sectors they believe will be disrupted by AI.

In portfolio construction and risk management, what differentiates areas AI at present can improve and what will still require human judgement?

AI is most effective today in areas where scale, complexity and speed matter. It can enhance portfolio optimization across multiple dimensions, improve scenario analysis and accelerate understanding of interconnections between different factors and asset classes.

In risk management, this translates into more efficient monitoring, faster identification of emerging risks and deeper exploration of alternative outcomes. In turn, this frees investment teams to focus on higher-value judgement rather than information processing.

What still requires human judgement is the core of fiduciary decision-making: defining objectives, setting constraints, weighing trade-offs and being accountable, especially when models are opaque. This is particularly important when decisions involve uncertainty, regime shifts or ethical considerations. The most effective approach emerging from the research is to use AI as a "sparring partner" to challenge assumptions, uncover blind spots and stress test portfolios. But humans still retain responsibility for validation, governance and final decisions.

Looking three to five years ahead, how do you expect AI to reshape the competitive landscape among institutional investors, and what will distinguish the leaders from the laggards?


AI is expected to be a defining force in institutional investing, but competitive differentiation will depend on execution rather than intent.

Leaders will likely be firms that operationalize AI across research, portfolio construction and organizational decision-making while maintaining transparency, auditability and clear accountability. As stakeholders increasingly demand institutions "explain what you own and why", highlighted by the TIAA Institute research, the ability to pair AI-driven insight with disciplined governance will likely be a key differentiator.

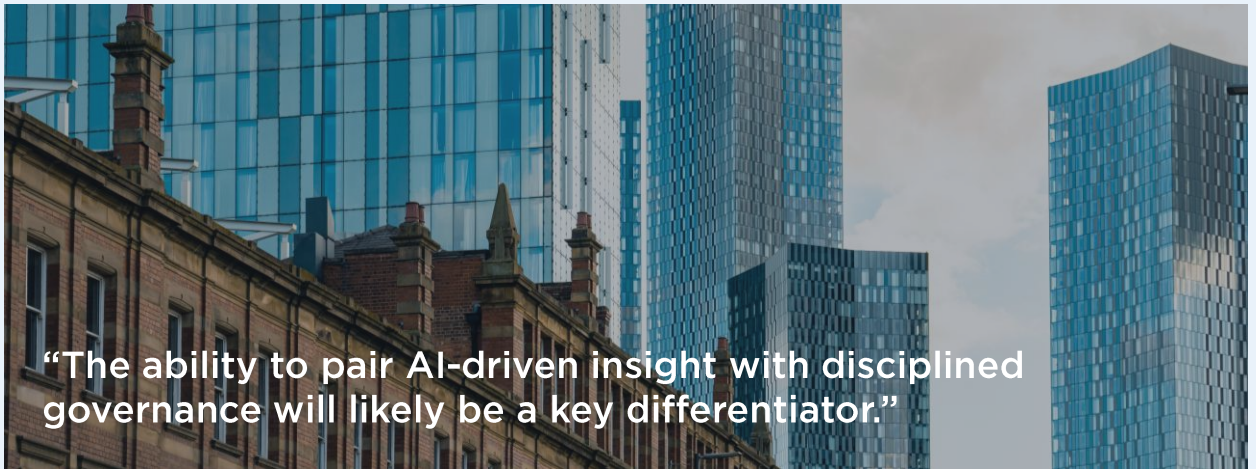
Laggards, by contrast, are likely to either treat AI as a narrow technology trade, missing the broader cross-asset implications, or fail to deploy it at scale due to weak data foundations and operating discipline.

Where are the AI investment opportunities across public and private markets?

AI represents a capital-intensive, multi-year investment cycle rather than a narrow equity theme. For investors, the opportunity lies in structuring exposures across public and private markets to balance growth, income and resilience.



"AI is most effective today in areas where scale, complexity and speed matter."



Public equities remain central, with earnings momentum strongest across semiconductors, networking, cloud platforms and AI-enabled software. However, leadership is evolving as productivity gains diffuse into industrial automation, logistics and healthcare technology. International markets, particularly European and Japanese industrials, offer complementary exposure at more attractive valuations.

Beyond equities, AI is a duration-heavy build-out, that creates opportunities across fixed income. Investment-grade utilities, municipal government bonds, infrastructure debt and long-dated project finance benefit from electrification, grid upgrades and rising data center power demand, offering defensive and often inflation-linked cash flows. Select high-yield issuers tied to automation and data infrastructure provide access to AI growth through carry rather than multiple expansion.

Private markets add precision. Private credit and infrastructure play a central role in financing the capital-intensive parts of AI adoption, including data centers, power and cooling infrastructure, and network capacity, translating rising compute demand into contracted, long-duration cash flows.

While we see widespread investment opportunities, findings from our EQUilibrium survey show that currently capital is being directed toward specific enablers, such as infrastructure, computing capacity and energy systems, rather than broad-based portfolio repositioning.

For further insights on this research...

Read Nuveen CIO Saira Malik's views in [A CIO's Guide to Long-Term Investing in a Short-Term World](#)



Nuveen's EQUilibrium survey of institutional investors which will be available from 15th March at nuveen.com/equilibrium



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Exploring Artificial Intelligence: Assessing AI in the economy and markets

21 Aug 2025 | Invesco

Invesco believes AI is a critical theme in today's markets. This report explores artificial intelligence from definition to the driving forces behind the recent acceleration in innovation, Invesco's predictions around the growth of AI, and its impact on economies and markets.



Artificial Intelligence for Behavioral Finance

1 Dec 2025 | Amundi

Artificial Intelligence (AI), particularly Machine Learning (ML) and Deep Learning (DL) application in analyzing retail investors' behaviors and designing tools to shape financial advice has emerged more recently.



The Macro Implications of the AI Capex Boom

7 Jan 2026 | Bridgewater Associates

The total portfolio approach represents a more holistic and dynamic approach to investing, one that considers a broader range of factors and allows for more flexible decision making.



AI Outlook 2026: Agents of Productivity

27 Nov 2025 | Barclays Private Bank

AI Outlook 2026 looks beyond the headlines to the inner workings of artificial intelligence, to understand where the technology is headed in 2026 – and the potential implications for businesses and society.

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