Al-Augmented Investment Management Systems

September 2025

Next Generation of Allocators: The AI-Augmented LP Asks Better Questions

1. Executive Summary

Private markets are expanding at an unprecedented pace — and with them, scope and complexity. But many allocators are still operating with the same tools they have used for years — spreadsheets, PDFs, multiple meeting notes, disjointed data platforms, and investment decisions are often guided by personal judgement and intuition.

But now we are entering the age of the **AI-Augmented LP** — an allocator who doesn't solely rely on experience and networks, but scales investment intelligence with machines. The value proposition is practical: Use AI to structure chaos, automate the grunt work, surface patterns, and most importantly — ask better questions in the investment process, but leave judgment, conviction, and final investment decisions where they belong: with human investment professionals.

Traditional Investment Analysis



Disjointed Databases: Information is manually captured and stored in multiple databases. Data updates may not be consistent.



Hidden Insights: Insights from meetings and document reviews kept inconsistently and difficult to share across the team.



Static Documents: Reports prepared for documentation purposes with limited future use of investment intelligence.

Al-Augmented Investment Analysis



Data Upload: Systematic capturing of relevant information from documents & notes and transformed into structured data.



Al-Processing: The Al-system extracts information, structures the data, and creates a scalable, augmented workflow that supports investment professionals throughout the process.



Group Intelligence: Insights stored in a central knowledge base, creating institutional intelligence and enabling informed decisions.

 $Image\ 1: Comparison\ Traditional\ Investment\ Analysis\ vs.\ Al-Augmented\ Investment\ Analysis,\ Polar\ Night\ Capital\ Polar\ Night\ Nigh$

We lay out a vision of hybrid investment intelligence—where NLP-models, LLMs and AI agents augment and support, not replace, the allocator's edge. These tools can offer investors a way of scaling their ability to process the vast amounts of information they are now confronted with, including complex investment strategies, bespoke structures and the global regulatory complexity.

But in this new age of analysis, failure to adopt these new tools is not the only risk for investors. It's also in doing too much — blindly. Al models can hallucinate, misread nuance and return wrong results confidently from confused prompts. Al models are not trained to understand institutional investing, let alone alternatives and private markets. A significant risk also lies in LPs trusting Al tools because it speaks well—even when they are wrong.

This paper outlines our view on a viable model for the future: **Symbiosis between human investment professionals and Al-augmented applications.** Let Al extract, summarize, detect patterns, flag and monitor, and let humans probe, contextualize, judge, and decide. This is not about automating investment analysis but augmenting it.

The next level of technical development has arrived. The only question is: Will you be the allocator asking better questions—or the one left behind trying to answer them the old way?



2. New Era of Complexity in Private Markets

Private markets are no longer a satellite allocation for institutional investors; they now often sit at the heart of investors' portfolios, offering growth, yield, and diversification. And yet, many allocators are still trying to manage this complex and changing world with workflows designed for a simpler era.

The scale and scope of alternatives have expanded greatly. Every year more sub-asset classes added. investment strategies are What used to be a manageable number of clear categories has evolved into a diverse landscape of distinct strategies, including preferred equity, private credit, structured credit. continuation vehicles and secondary funds amongst others. More choice is good for investors, but it also means complexity and additional effort.

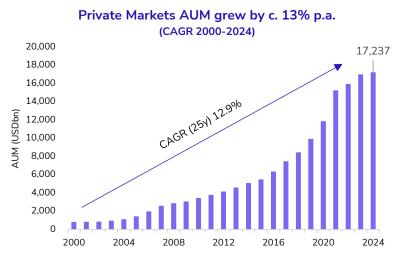


Chart 1: Private Markets AUM in USDbn (PE, PD, Infra), 2000-2024, Pregin

On one side, allocators cover mainstream private markets funds: Large, established GPs offering institutional vehicles that feel more and more like extensions of the heavily regulated public markets. On the other side are niche, satellite funds: Small, specialized strategies that aim to generate uncorrelated returns — often **more complex and opaque**. Segments such as litigation finance, IP royalties, or frontier infrastructure illustrate the breadth of emerging opportunities in private markets — areas that can provide genuine diversification and uncorrelated returns, but which are difficult to access and evaluate without a **sophisticated and scalable approach to sourcing and diligence**.

At the same time, demand from institutional LPs has surged. In 2025, the majority of institutional investors, from pension funds and family offices to sovereign wealth funds, have substantial, and growing, allocations to alternatives. Over the past decade, institutional LPs have steadily increased their exposure to alternatives, driven by macroeconomic and structural factors on the supply and demand side: Post-Covid regulatory changes accelerated the retrenchment of banks from traditional lending activities. This financing gap was filled by alternative lenders. Due to the prolonged low-interest-rate environment after the GFC and Covid, LPs targeted stable yields and access to sources of return with low correlation to public markets.

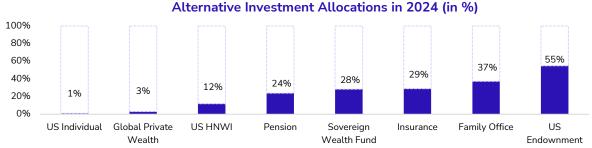


Chart 2: Alternative Investment Allocations (PE, PD, Infra, HF), 2024, UBS, KKR, BAI



With each new strategy structure, the volume of data and the complexity grows. Even sophisticated LPs with good systems and large investment teams have difficulties keeping up. Compared with traditional asset classes, alternatives funds are subject to higher return dispersion. data shows significant performance dispersion among funds within alternative investments strategies, including private equity and private credit. For certain alternatives segments, it is typical for top-quartile funds to outperform the bottom-quartile by over 10 percentage points.

Alternatives have higher Return Dispersion (2014-2024)

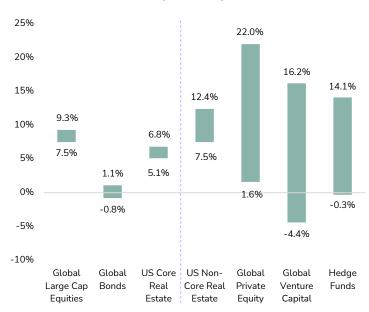


Chart 3: Dispersion (Q4 2014 Q4 2024), J.P. Morgan, Deutsche Bank AG. Data as of Feb. 2025.

The return dispersion of alternative

investment GPs may be due to factors such as the heterogenous nature of investment strategies and underlying assets, illiquidity, lower diversification and the lack of standardized benchmarks. However, managers' capabilities and experience are also likely relevant factors as alternative investment strategies require specialized expertise, such as the GPs' network to originate deals, as well as ability to underwrite risks and construct a robust portfolio. Moreover, differences in risk management and restructuring capabilities as well as operational processes and execution efficiency can lead to significant performance variations.

As allocations to alternatives and private markets are expected to reach new peaks, this emphasizes importance of in-depth due diligence by investors, as choosing the right manager can greatly impact investment outcomes. Even nuanced differences in strategy managers' fund and capabilities can materially affect the financial returns that LPs achieve. Investors should thoroughly assess the managers' investment strategy and operational capabilities, with increased focus on their specialized expertise and track record as well as the alignment of interest.

Private Markets Fundraising forecasted to reach new peak in 2029

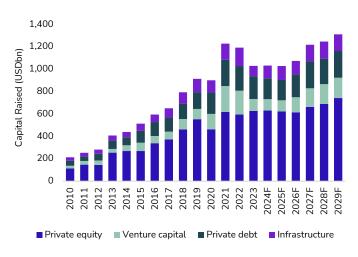


Chart 4: Future of Alternatives (PE, PD, Infra), 2010-2029F, Pregin



3. What AI Can—and Can't—Do for Institutional Investors

There is a growing interest around AI in the investment industry. Some see it as the ultimate supporting tool and others avoid it due to security concerns and black-box behavior. AI is powerful, but its limitations are a source of risk: AI-tools can extract and structure data, flag patterns and compare results. Using AI-tools, certain tasks, which previously required several hours of manual work, may be reduced to minutes with minimal human oversight. But AI applications do not truly understand global markets, do not reason like an investment professional, and consequently, cannot replace expert judgment.

Therefore, it is critical to know exactly what AI can do—and what it can't do.

Institutional investors currently have access to four main AI technology types:

- Machine Learning (ML): Statistical models that detect patterns in structured data—used for forecasting, pricing, and quantitative back-testing.
- Natural Language Processing (NLP): Tools that can read, tag, and extract structured information from unstructured text—useful for analysis of documents, like PPMs & DDQs.
- Large Language Models (LLMs): LLM tools can generate fluent summaries, draft memos, prepare Q&As, and comparisons by predicting the most likely next word or sentence.
- Autonomous Agents and Automation Tools: Rule-based, Al-driven programs that perform specific tasks, such as scoring, classifying, or notifying when KPIs deviate from benchmarks.

Individually and combined, AI-tools can cover a vast array of tasks within the investment decision-making process. These tools can identify details in documents, group GPs and funds by asset classes, strategies and themes, and even pre-fill investment memos based on extracted data. They can process in seconds what takes analysts hours or days. This yields scalability.

What investors need to keep in mind is that these models don't think and don't understand institutional investment allocation. Al tools — even the most advanced ones — would fail when asked to do what seasoned investment professionals do every day: Interpret nuance, assign credibility, weigh trade-offs, or evaluate a new, unknown situation.

The objective is not to dismiss AI applications, but to apply them with discipline considering investment processes and security requirements. Used properly, AI can significantly contribute to process efficiency as it can extract and structure data from unstructured sources, automate repetitive tasks, detect inconsistencies, classify strategies and products, and track changes over time as well as flag potential risks buried beneath layers of information. However, AI cannot replace human judgment as it cannot read between the lines of a GP's track record, assess the chemistry in an investment team, or evaluate the investment approach in a niche investment strategy. AI should be used to help make better decisions, not conduct investment decisions autonomously.



In Focus: Al-Model Failures

Here's why Al-Model failures happen and how investors can guard against them:



Black Box Behavior: Models generate outputs that look credible but can't explain the rationale of the result. These models operate on statistical correlations, not expertise. They optimize for fluency or predictive accuracy—not interpretability.

<u>Mitigation:</u> Use explainable AI (XAI) frameworks where possible. For LLMs, structure prompt-to-output traceability and embed human review in all decision-critical outputs.



Hallucinations: LLMs may return inaccurate information. Models may conflate data from two different funds or vintages or invent information without notification to provide a complete result. LLMs generate language based on probabilities, not verified knowledge. When prompted on unfamiliar topics, they may "fill in the blanks" with plausible but incorrect statements.

<u>Mitigation:</u> Use retrieval-augmented generation (RAG) tied to source documents. Limit open-ended prompts. Require fact-checking workflows and encourage prompts that request citations or references.



Data Quality: If the prompt is vague or the input data of low quality, the result could be either irrelevant or misleading. Al models are only as good as the instructions and data they receive. A lack of prompt clarity or domain-specific context severely limits the effectiveness of Al-powered systems.

<u>Mitigation</u>: Invest in prompt engineering training. Develop libraries of task-specific prompt templates. Pre-clean and structure data before ingesting it into Al-Models.



Context Collapse: Models struggle to distinguish between nuance and noise. Al models may conflate information across vintages, funds, or GPs, leading to flawed benchmarking or analysis. Without document segmentation, metadata tags, or timeline structuring, models treat all inputs as equal—ignoring nuance or chronology.

<u>Mitigation:</u> Use document parsing tools that preserve structure and version history. Segment data by fund, year, and manager to isolate context in AI processing.



No Domain Memory and Bias: Most LLMs are not trained on specific expertise and information from the allocator's IC history, existing mandates, or risk frameworks. They do not know what the CIO cares about—or what has been discussed before in the IC. Training data is largely public, consensus-based, and skewed toward general-purpose language—not professional or proprietary investment intelligence.

<u>Mitigation:</u> Fine-tune models with specific intelligence and templates. Always pair Al analysis with expert validation. Avoid relying on Al for the final judgment.



Security and Privacy: Feeding proprietary documents like LPAs or confidential data into an unsecured model is a data security breach. Most applications do not follow institutional security standards by default.

<u>Mitigation:</u> Use dedicated, privately-hosted AI environments. Develop internal AI policies aligned with NDA obligations and LP governance standards.



4. Augmenting the Investment Process: Where AI Enhances Judgment

With alternative investments and private markets being now a core component of strategic asset allocations for institutional investors, the investment processes used to evaluate target funds have become thorough and detailed, yet often slow, labor-intensive and lacking pragmatism. This worked well for much of the industry's relatively short history – while the amount of potential target funds and strategies was manageable. Yet it is less suited to the market as it stands today, where the number of private equity GPs alone lies in the tens of thousands. Analysts must still analyze numerous PDF-documents, while investment committees still review extensive investment memos without checking the original sources. The allocator's investment process is oriented towards documentation and reporting obligations but offers limited support for the deep analysis and informed decision-making.

Al-tools could shift the equation — not by replacing the allocator's role, but by augmenting the process. What if machines took over the repetitive, high-friction tasks and gave humans more time and clarity to focus on insight, context, and judgment? We analyzed how that would work across each step of the allocation process:

"The allocator's investment process is oriented towards documentation and reporting obligations but offers limited support for the deep analysis and informed decision-making."

i) Strategic and Tactical Asset Allocation: Structuring the Why Before the What

At the beginning of every investment process the investor must decide on how the portfolio should be allocated on a strategic and tactical level. While the Strategic Asset Allocation (SAA) targets the long-term investment plan of the allocator, the Tactical Asset Allocation (TAA) allows for flexibility — capturing dislocations and short-term opportunities. In practice, many allocators may be locked into a calendar-based process including annual allocation review meetings. For many LPs, especially regulated institutions like pension funds or insurers, SAA is bound not by preference but by Asset-Liability Management (ALM) models, cash flow forecasts, actuarial obligations, capital budgeting, and regulatory constraints. These investors have already complex quantitative models in place running stochastic simulations, stress tests, and policy-based allocations.

Al should not replace the calculations but enhance the bridge between strategic modeling and the portfolio construction. Moreover, Al enables continuous updates as strategic and tactical considerations may be adapted dynamically as markets evolve, internal mandates shift, or new strategies emerge. This way, the allocator remains in control, while using Al-tools to synthesize multi-dimensional constraints and sharpen the lens through which future decisions are made.

Al Use-Cases: SAA & TAA

- Investment Profile: LLMs can assess policy documents and extract the regulatory constraints into actionable strategy profiles and investment search term sheets.
- Capital Efficiency: Al agents can evaluate capital efficiency across model portfolios, enabling more dynamic and informed allocation discussions.



ii) Sourcing and Screening: Structuring the Chaos, Surfacing What Matters

Allocators source investment opportunities from multiple channels, such as proprietary networks, consultants, placement agents, conference meetings, paid databases, internal trackers, inbound emails, and desk research. These inputs do not guarantee coverage, structure, or visibility. What is in the inbox is not always seen, what is in the database is not always considered, and what is strategically relevant may be lost due to outdated slide decks or inconsistent data.

Identifying investment opportunities today is still a function of serendipity and bandwidth. If an attractive opportunity appears at the right moment, is marketed effectively, and happens to reach the responsible analyst, it stands a reasonable chance of being considered. For niche managers: Smaller, emerging, or geographically distant GPs operating in high-alpha but low-visibility spaces, being seen can be a real challenge. Large GPs with well-resourced in-house fundraising and marketing teams tend to

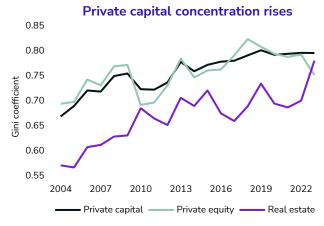


Chart 5: Private Capital (PE, PD, Infra) Concentration, 2004-2023, Preqin

dominate. Many emerging funds never make it into standard funnels—not because they lack quality, but because they lack reach or are discarded in rather simplistic screening process.

Filters are typically applied on the basis of vintage, AUM, geography, or quartile rankings, while qualitative aspects — such as philosophy, investment process, and competitive edge — remain difficult to assess at scale. As a result, even well-resourced LPs leave value undiscovered. Most institutional investors recognize this challenge, yet the persistence of labor-intensive workflows and the constraints of team capacity mean that this issue remains unresolved. This is where AI becomes a structural enabler without requiring more headcount. By extracting, structuring, and comparing both quantitative and qualitative data, AI-augmented processes allow investors to get more out of their existing sourcing channels. In practice, this shifts sourcing and screening from static to dynamic and intentional. The advantage is not only in identifying more managers, but in identifying the ones that truly fit.

Al Use-Cases: Sourcing & Screening

- From Inbox to Insight: LLMs can parse pitch decks, emails, DDQs, and fund summaries structuring unstructured content and surfacing matches based on investment criteria.
- From Passive to Proactive: Al-powered agents can tag, cluster, and cross-reference data from external sources and proprietary notes, making it easier to detect emerging themes. Al-tools can continuously scan filings, fund launches, news mentions, and global databases to identify new funds, spinouts, or niche managers. This allows investors to take a proactive approach to sourcing—rather than relying on chance inbound opportunities or sales outreach.
- From Sorting to Prioritizing: Scoring engines can assess strategic fit across multiple variables, flag potential concerns (e.g., team instability, fee anomalies, track record dispersion), and route the most relevant opportunities to the right team.



iii) Due Diligence: Structuring Judgment at Scale

The Due Diligence stage is the most knowledge-intensive, judgment-driven step of the process:

- Investment Due Diligence: Analyzing performance & track record as well as team composition, investment strategy, competitive edge, portfolio construction process, etc.
- Operational Due Diligence: Reviewing firm infrastructure, compliance, cybersecurity, business continuity, and back-office systems, etc.
- Legal and Tax Due Diligence: Dissecting fund terms, legal structures, jurisdictional implications, waterfall mechanics, and tax considerations, etc.
- Technical Due Diligence: Applied in sectors such as infrastructure, deep tech, or energy
 assessing engineering, construction risk, or platform scalability, etc.

The diligence work is highly analytical and requires the review of numerous documents and data sources — PPMs, LPAs, track record tables, DDQs, operational and risk policies, organizational charts, financial statements, and often, specialized third-party reports. Moreover, human interaction is another crucial part of the due diligence process: Calls, video meetings, onsite visits, follow-ups, and informal chats all form part of the diligence picture. While insights from human interactions with GPs are mostly documented — in CRM notes, follow-up emails, or brief bullet points — they are rarely captured in a structured way that allows for systematic comparison across managers, vintages, or strategies. As a result, valuable intelligence is generated but may not be effectively leveraged.

In Focus: Handling Key-Person Risk

Reliance on individual team members for critical investment knowledge may expose allocators to key-person risk. In many organizations, analysts or portfolio managers become the de facto owners of asset class expertise — holding accumulated context, assessments insights, and nuanced judgments in their heads, personal notes or isolated files. When those individuals leave, parts of that institutional investment intelligence may be lost, as handovers rarely capture the full scope of their knowledge.

Al can help mitigate this risk by transforming dispersed information into a durable organizational asset. Transcribed meetings, structured due diligence notes, tagged risk flags, and Al-captured investment memos can be consolidated into a searchable, reusable knowledge base. This institutional memory not only survives personnel turnover but also enhances continuity, transparency, and resilience across the investment process.

The challenge in the due diligence phase is not the lack of information, but the difficulty of transforming that information into usable intelligence when it is required. Analysts spend a large portion of their time structuring data, aligning formats, interpreting inconsistent inputs, and documenting interactions. With multiple projects running in parallel and each fund requiring peer group analysis, workloads quickly become substantial. As deadlines approach, priorities often shift toward completing documentation, leaving limited time for the comparative analysis that should guide investment decisions. Al-tools could change this dynamic by automating extraction and structuring tasks. Al frees analysts to focus on interpretation, cross-manager comparisons, and the identification of weaknesses and patterns across vintages, strategies, and market cycles. This allows allocators to make more informed, conviction-driven decisions. The goal of Al in due diligence is not only about speed and efficiency, but the ability to unlock deeper, more consistent insight.



Al Use-Cases: How Al Reshapes Due Diligence

- Automated Structuring: NLP tools extract and organize key information, such as fund terms, performance data, process descriptions, and risk factors from hundreds of pages of documentation.
- Track Record & Attribution Analysis: All can parse performance tables, identify inconsistencies, calculate dispersion, and flag outliers.
- Document Comparison: Data analysis agents compare different versions of documents, highlight changes, and alert analysts when key sections deviate across vintages.
- Voice-to-Text Meeting Capture: Analyst conversations, manager calls, or GP meetings can be recorded, transcribed, and structured by AI for future reference, or tagging across themes.
- Thematic Synthesis: LLMs can summarize a diligence thread documents, notes, conversations —
 into a clear and coherent overview with supporting references, which can be used for internal
 discussions and the IC.

iv) Investment Decision: Raising the Quality, Not Replacing the Voice

The investment decision is the moment that transforms the LP's assessment into action, yet it may also be where the limitations of traditional allocator workflows become most visible. The investment committee (IC) is designed to be the sharpest, most focused forum in the allocator's process, however, in some cases it can become a formality or a timing bottleneck.

Despite the considerable effort invested in due diligence, certain investment committees may be overwhelmed with the level of detail and time constraints. Due diligence reports are lengthy, and complex findings are condensed into short summaries. Moreover, outcomes may be influenced not only by the underlying analysis, but also, in some instances, by interpersonal dynamics that affect decision-making within the committee. A further recurring risk in the IC assessment may be the tendency towards narrative consensus: When an investment case is well-presented and supported by credible numbers, members may be less inclined to challenge its assumptions.

"Al should not replace IC members, but to make them better prepared, better informed, and more confident in conducting investment and allocation decisions."

Al should never replace the human rationale behind the investment decision, but it can improve what decisions are based on, and how well they're framed for challenge. With the help of certain Al-tools IC members can be equipped to ask sharper, more relevant questions. This way, the IC can make more consistent, informed decisions by ensuring inputs are clearly structured and comparable with the peer group and historical investment decisions. By surfacing key information earlier, decisions can be made with more conviction, or walked away from faster, with clear rationale documented.



Al Use-Cases: Investment Committee and Decision-Making

- Supporting Documents: Al-tools can generate structured IC materials that summarize the relevant due diligence results highlighting outliers, relevant risks, and strategy fit with the allocator's mandate.
- **Benchmark:** All can benchmark the opportunity against peer funds and prior vintages from in-house databases highlighting where the current case deviates from comparable products.
- Scenario Analysis: Al-Models can simulate potential outcomes based on input assumptions, giving decision-makers quick views on downside scenarios, exposure overlaps, or fund concentration risk.
- Counterpoint Agents: Al-powered counterpoint agents provide structured challenge by leveraging
 diligence findings, documentation, and historical decisions. They highlight weaknesses, surface
 assumptions, and flag inconsistencies while referencing comparable past cases. Their role is not to
 replace human debate, but to strengthen it—creating a more disciplined foundation for IC discussions.
- FAQ Agents: Another frequent inefficiency in IC meetings is the time spent on basic but essential questions such as fund terms or performance targets. FAQ Agents act as research supporting tools, generating tailored FAQs prior to IC meetings, providing on-demand answers during discussions, and ensuring consistency by tracking what has already been asked and answered.

v) Monitoring and Portfolio Management: Making Oversight Continuous

Many investors commit considerably less time and resources to investments once the initial decision has been made. GPs provide quarterly reports, cash flow statements are recorded, and analysts focus their time on other priorities. Although private markets vehicles typically offer limited liquidity, notable developments can still occur during the term of the investment. Teams may evolve, strategies drift, and the market environment can change. Without structured, ongoing engagement, LPs risk flying blind or discovering relevant issues too late.

Monitoring shouldn't be a paper trail but a proactive process including regular updates with the GP via scheduled calls and ad-hoc check-ins. Moreover, the allocator should conduct regular update due

diligence to capture strategy extensions, team changes, or operational developments. Further, the portfolio allocation and performance should be constantly monitored and compared against pre-investment expectations. Certain allocators do not systematically document follow-ups and notes are therefore disconnected from the results of prior due diligence. This may limit the team's ability to monitor whether a fund is still delivering in line with expectations.

"Many investors commit considerably less time and resources to investments once the initial decision has been made."

An Al-augmented portfolio monitoring process enables investors to move beyond simply tracking reported inputs, providing greater transparency into how strategies are executed over time. This allows allocators to hold managers accountable to their stated objectives, identify emerging risks earlier, and—by reducing information asymmetry—proactively respond to developments.



Al Use-Cases: Portfolio Monitoring & Management

- Meeting Capture and Transcription: Every communication (GP call, quarterly check-in, etc.) can be transcribed, tagged, and summarized by LLMs. What was discussed, promised, or explained becomes part of the permanent oversight record.
- **Update Diligence Structuring:** When material changes occur, such as team departures, strategy pivots, fund extensions, etc., Al-tools can extract and compare key changes against the initial assessment.
- Scorecard-Driven Oversight: Al-tools can build and maintain monitoring scorecards that track each
 fund's performance, risk indicators, operational metrics, and strategic alignment. This allows LPs to
 evaluate not just IRR, but conformity to mandate, behavior under stress, and GP transparency over time.
- Actionable Monitoring: Scorecards become a decision platform. If a fund consistently underperforms
 or deviates materially from its expectations, LPs can consider mid-cycle actions, incl. active engagement
 or GP-level intervention, partial or full exit, or legal or compliance escalation in severe cases.
- Asset-Level Oversight: Al tools can extract and structure information not just at the fund level, but down to the portfolio company or asset level, enabling allocators to understand exposures to sectors, geographies, counterparty risk, ESG issues, or economic sensitivities in real time.

5. Case Study: Iceberg DD_® by Polar Night Capital

Polar Night Capital (PNC), established in 2024 and headquartered in Frankfurt, has developed a new diligence platform, **Iceberg DD**©, designed to operationalize many of the principles explored in this paper. While still in its initial stage, Iceberg DD represents a live implementation of **Al-augmented investment process**, specifically focused on solving real bottlenecks in **screening** and **due diligence**.

Core Objectives and Features

- Structuring and Standardizing Diligence Inputs: Iceberg DD© extracts and structures information from inputs provided by GPs and PNC analysts including GP documents, call transcripts, and meeting notes. Its purpose is to transform fragmented, inconsistent inputs into comparable, decision-relevant data.
- Screening Report: Iceberg DD® applies AI-powered techniques to identify and extract key fund characteristics, such as performance metrics, fund terms, legal structures, risk factors, etc. and consolidates those into a standardized screening report. This provides a consistent, comparable foundation for evaluating investment opportunities.
- Detailed Analysis: GP documents, meeting notes, and call transcripts are subjected to a series of detailed AI-driven prompts within Iceberg DD©, extracting comprehensive and sophisticated information across financial, strategic, and operational topics. This structured output is then evaluated and scored by PNC analysts, ensuring that the insights generated are both accurate and relevant.
- Human-Guided Curation and Review: Iceberg DD® operates under a human-in-control model. Investment experts review, validate, and refine AI-generated results, ensuring both accuracy and contextual relevance. Beyond correction, they evaluate and challenge the outputs, raise follow-up questions where necessary, and score results against defined criteria.
- Scalable Diligence Memory: Each processed case becomes part of a growing internal knowledge database within Iceberg DD⊚ enabling institutional memory, cross-manager benchmarking, and dynamic adaptation as the platform evolves.



Why Iceberg DDo is a Proof-of-Concept for the Al-Augmented LP

Iceberg DD® does not claim to automate decision-making. Instead, it amplifies human intelligence by helping LPs to structure their investment process more efficiently, reduce repetitive tasks for the analysts, and focus resources where it matters the most. Iceberg DD® tackles one of the hardest challenges in alternatives: The labor-intensive transformation of information from documents and conversations into structured data and usable insights. As such, Iceberg DD® offers a real-world case study in the principles at the heart of this paper: The symbiosis between allocator expertise and machine efficiency, the automation of repetitive work, and the preservation of human edge and judgment where it counts.

6. Conclusion: Al-Augmented LP Asks Better Questions

The next generation of allocators will not be defined by how much AI they adopt, but by how intelligently they integrate it into their investment process. The future of institutional investment should not be machine-driven, but machine-enhanced and human-led.

But we have also argued that AI has limits. It cannot make real decisions, evaluate ambiguous tradeoffs, or detect non-quantifiable signals like team trust dynamics, cultural fit, or emerging risks not yet clearly visible in the data. Blind over-automation could pose as great of a risk as staying analog.

Therefore, we think that the optimal model is symbiotic:

Machines structure. Humans interpret. Al suggests. Allocators decide.

Those who get this balance right will likely operate with discipline at scale. With AI support, LPs can ask better questions during the due diligence process and thereafter. They can build organizational intelligence that compounds, outlasts key-person turnover, and adapts as markets evolve.

As illustrated in the Iceberg DD® case study, this transformation is already underway. LPs who act now may not only improve process efficiency but also redefine how investment insight is generated and applied. In a world of near-unlimited access to information, the edge is not in collecting more data, but in structuring it effectively and knowing what to ask — before others do.

Most importantly: Al cannot replace a thorough investment professional. However, it may give allocators the space to do what they were always meant to do—challenge assumptions, frame better hypotheses, and ultimately, make better decisions under uncertainty.



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The founder, Eugen Leichner, has a track record of more than a decade working as investment professional, servicing fund-of-fund mandates and institutional investors. Prior to launching Polar Night Capital, Eugen Leichner was part of the Manager Selection and Fund-of-Fund team at Prime Capital AG. Throughout his career, he was involved in numerous fund searches and due diligence across alternatives and private markets strategies, such as Private Equity, Real Estate, Private Credit and Hedge Funds.

Polar Night Capital GmbH (PNC) provides bespoke investment research and due diligence services to institutional investors with a focus on Alternative Investments and Private Market strategies. Moreover, PNC develops Al-augmented processes and applications to enhance the investment process for professional and institutional investors. Polar Night Capital GmbH provides its services in investment brokerage and investment advice in financial instruments within the meaning of Section 2, Clause 2 No. 3 and 4 of the German Securities Act (Wertpapierinstitutsgesetz; "WpIG") as "Tied Agent" exclusively for the account and under the liability of AHP Capital Management GmbH, Weissfrauenstrasse 12-16, 60311 Frankfurt am Main.

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