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The Private Equity AI Dossier

A selection of high-impact use cases

The Deloitte AI Institute™

About the Deloitte AI Institute

The Deloitte AI Institute™ helps organizations connect all the different dimensions of the robust, highly dynamic, and rapidly evolving Artificial Intelligence ecosystem. The AI Institute leads conversations on applied AI innovation across industries, with cutting-edge insights, to promote human-machine collaboration in the "Age of With™."

The Deloitte AI Institute aims to promote the dialogue and development of AI, stimulate innovation, and examine challenges to AI implementation and ways to address them. The AI Institute collaborates with an ecosystem composed of academic research groups, start-ups, entrepreneurs, innovators, mature AI product leaders, and AI visionaries to explore key areas of artificial intelligence including risks, policies, ethics, the future of work and talent, and applied AI use cases. Combined with Deloitte's deep knowledge and experience in artificial intelligence applications, the Institute helps make sense of this complex ecosystem, and as a result, delivers impactful perspectives to help organizations succeed by making informed AI decisions.

No matter what stage of the AI journey you are in: whether you are a board member or a C-Suite leader driving strategy for your organization—or a hands-on data scientist bringing an AI strategy to life—the Deloitte AI Institute can help you learn more about how enterprises across the world are leveraging AI for a competitive advantage. Visit us at the Deloitte AI Institute for a full body of our work, subscribe to our podcasts and newsletter, and join us at our meet-ups and live events. Let's explore the future of AI together.

www.deloitte.com/us/AIInstitute

Foreword

Artificial intelligence (AI) continues to advance by leaps and bounds, delivering breathtaking capabilities once thought to be far off in the future. With a remarkable capacity to understand complex inputs and generate valuable outputs—and the rapidly emerging ability to execute real-world actions through intelligent agents and physical AI—AI is opening the door to innovations and new ways of working that were almost unthinkable just a few years ago.

As the AI landscape evolves, so does this compendium. Our latest edition features 139 of the most compelling use cases for AI across six major industries and the private equity sector:

- **Consumer**
- **Energy, Resources & Industrials**
- **Financial Services**
- **Government & Public Services**
- **Life Sciences & Health Care**
- **Technology, Media & Telecommunications**
- **Private Equity**

For each of these industries, we explore innovative uses for AI that can address enterprise challenges in new ways, expand and improve capabilities in every business function, and deliver advantages in efficiency, speed, scale, and capacity. To further provide context and clarity, each case specifies the primary business function it supports and whether agentic and/or physical AI is used. These labels are presented for informational purposes, helping you quickly grasp the intention and scope of each case.

Of course, every powerful tool presents potential risks, and AI is no exception. To help you better understand and manage the risks associated with AI, we use Deloitte's Trustworthy AI™ framework throughout this compendium to illuminate factors that contribute to trust and ethics in AI deployments, and to offer practical steps for strengthening governance and risk mitigation. The specific objective of our Trustworthy AI™ framework is to help organizations create AI systems that are (1) fair and impartial, (2) robust and reliable, (3) transparent and explainable, (4) safe and secure, (5) responsible and accountable, and (6) private.

Given AI's rapidly expanding scope and reach, this compendium offers just a glimpse of what the technology can do. Our goal is to convey what AI is currently capable of, and even more important, to inspire the next wave of AI-driven innovation. As AI technology continues to improve and organizations increasingly embrace it, we anticipate even more impressive and compelling use cases in the future—including those that have yet to be imagined.

We hope the use cases highlighted here will spark new ideas, provide a foundation for successful deployments, and set organizations on a path to harness the maximum value from this powerful new technology.

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The Private Equity AI Dossier

Private equity is a business built on information advantage and analytical rigor. Firms that source opportunities earlier, build more differentiated investment theses, and manage portfolio companies more precisely than competitors are the ones that generate better returns. Historically, those advantages have relied on the judgment of skilled investment professionals—and on significant human effort to gather, synthesize, and act on information across the deal lifecycle. Now, AI is changing the calculus.

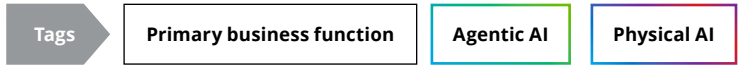
Recent advances in large language models, agentic systems, and natural language generation are well-suited to the PE context. These technologies can synthesize large volumes of unstructured information—filings, transcripts, management presentations, portfolio company financials—into structured outputs that support faster, more consistent deal analysis and portfolio oversight. Beyond synthesis, AI can run scenario models, stress-test financial assumptions, and generate starting-point projections at a speed and scale that manual approaches cannot achieve. Similarly, agentic systems can monitor markets, track competitors, and flag emerging portfolio risks at a continuous, scaled cadence to deliver levels of analytical insight between deal cycles that manual coverage can't sustain.

These capabilities are arriving at a moment when deal processes are compressing, LP reporting expectations are rising, and portfolio complexity is growing in ways that traditional approaches struggle with. In this environment, the potential returns from adopting AI are high for PE firms willing to invest in the right infrastructure and governance.

Capturing that value, however, requires discipline. AI-generated errors can carry real consequences in investment contexts, and effective adoption demands human-in-the-loop review, traceable outputs, and rigorous data governance. The use cases that follow illustrate how PE firms are starting to apply AI across the full deal lifecycle. Done well, AI will become not just a tool for operational efficiency in private equity, but a durable source of competitive differentiation—one that sharpens judgment rather than replacing it.

In this environment, the potential returns from adopting AI are high for PE firms willing to invest in the right infrastructure and governance.

Note: *The tags below each use case indicate its primary business function and whether Agentic AI is used.*



AI agents for competitor and market intelligence

Turning fragmented market signals into investment insight

Agentic AI can help private equity firms continuously monitor competitors, markets, and M&A activity, turning fragmented public information into structured insights.

ISSUE/OPPORTUNITY

Private equity firms operate in an environment where speed and conviction matter enormously. Identifying attractive sectors, tracking competitor strategy, and understanding M&A activity are essential. However, assembling that intelligence manually is resource-intensive and slow.

The challenge is particularly acute during early-stage sourcing and diligence, when teams must quickly develop a view on market structure, competitive dynamics, recent transactions, and risk factors—often under significant time pressure. Without an AI-based infrastructure for market intelligence, deal teams risk missing early signals of sector dislocation and market shifts.

Tags: Finance | Agentic AI

HOW AI CAN HELP

Competitor monitoring and summarization
Agents can continuously scan public filings, earnings call transcripts, press releases, analyst commentary, and news sources to track competitor strategy, product moves, performance trends, and market positioning.

M&A activity tracking
Agents can identify and summarize available information for publicly disclosed transactions, such as deal details, strategic rationale, valuation multiples, reported synergy expectations, and post-deal performance indicators.

Benchmarking and risk assessment
Agents can compare target companies against public peers using filings, earnings data, industry reports, and other available sources to assess relative margin structure, growth trajectory, competitive positioning, and risk exposure. Where operating benchmarks are not readily available, AI outputs can provide a starting framework for deeper diligence.

Strategic insight and signal generation
By connecting signals across filings, commentary, transaction history, and market news, agents can help deal teams form and pressure-test investment hypotheses. This may include identifying consolidation themes, spotting signs of competitive disruption, flagging management changes or product launches, or identifying inconsistencies between public commentary and reported financials.

Deal team workflow support
Agents can prepare sector overviews, competitor profiles, filing summaries, diligence red-flag reports, and market maps. This allows deal teams to focus on developing the investment thesis and exercising judgment instead of gathering and organizing information.

AI agents for competitor and market intelligence

MANAGING RISK AND PROMOTING TRUST

Robust and reliable

Because PE decisions involve large capital commitments, AI outputs should be traceable to verified source documents. Hallucination risk is a particular concern in investment contexts where an inaccurate figure in a diligence memo can have material consequences.

Transparent and explainable

Investment teams need to understand the basis for AI-generated market insights. Systems should link conclusions directly to underlying evidence so professionals can validate and build on outputs rather than treating them as black-box recommendations.

Responsible and accountable

Human-in-the-loop review is essential. AI agents should gather, organize, and synthesize information, while trained investment professionals interpret findings, validate outputs, and retain ultimate responsibility for all recommendations and actions.

POTENTIAL BENEFITS

Faster initial market assessment

Deal teams can develop a structured view of competitive dynamics and recent M&A activity faster, accelerating the path from target identification to investment committee discussion.

Greater consistency across deal teams

Systematic, agent-driven research reduces variability in how competitive intelligence is gathered and synthesized, raising the baseline quality of analysis regardless of individual analyst experience.

Improved M&A decision quality

Access to structured data on comparable transactions, valuation signals, strategic rationale, and reported synergy expectations supports more grounded deal evaluation and more realistic value creation hypotheses.

More proactive sourcing

Continuous monitoring can uncover early signals of sector dislocation, competitor strategy shifts, or consolidation activity between deal cycles—not just during active diligence.

Sharper focus on investment judgment

By compressing the time spent on information gathering, senior professionals can start focusing earlier on thesis development, commercial diligence, and value creation planning, which is where differentiated returns are rooted.

AI-assisted company valuation

Pricing with confidence in a compressed deal environment

Agentic AI can help PE deal teams build more rigorous company valuations faster by extracting financial data, expanding the relevant benchmark set, and stress-testing assumptions across multiple scenarios.

ISSUE/OPPORTUNITY

Accurate company valuation drives deal pricing, anchors the investment thesis, and shapes return expectations across the holding period. However, building a credible valuation is analytically demanding. Deal teams must assemble and normalize financial data, identify relevant comparable companies and precedent transactions, construct projection scenarios, and document assumptions for investment committee review—all under the intense time pressure of competitive deal processes.

The data-gathering burden is particularly acute for private company targets, where publicly available financial data is limited and historical financials often require significant normalization. Also, valuation methodology and judgment can vary widely across analysts and deal teams, creating inconsistency in how assumptions are applied. These challenges compound as deal teams scale and operate across multiple sectors.

Tags: **Finance** | **Agentic AI**

HOW AI CAN HELP

Financial data aggregation and normalization

AI agents can extract and normalize financial data from confidential information memoranda (CIMs), management accounts, audited statements, and industry databases, reducing time spent on manual data gathering and formatting. This is especially valuable for platform acquisitions or add-on analyses, where historical financials across multiple entities must be consolidated.

Comparable company and transaction screening

Agents can efficiently screen a broad universe of comparable companies and precedent transactions, applying deal-specific criteria to identify relevant benchmarks. Investment professionals can then assess whether those benchmarks are truly comparable.

Financial projection and scenario modeling

AI-assisted tools can generate starting-point projections grounded in historical performance, management inputs, and sector trends. Agents can then develop a variety of scenarios for revenue growth, margin expansion, working capital, capital expenditure, financing costs, and exit multiples.

Valuation benchmarking

Agents can compare key valuation metrics—including revenue and EBITDA multiples, growth-adjusted ratios, leverage levels, and capital structure assumptions—against relevant peer sets and transaction precedents. This helps uncover pricing signals and informs negotiations.

Risk factor flagging

By analyzing management commentary, financials, and third-party data against deal model assumptions, agents can identify inconsistencies that warrant diligence attention, such as concentration risks, margin sustainability concerns, or growth projections that appear inconsistent with sector trends.

AI-assisted company valuation

MANAGING RISK AND PROMOTING TRUST

Robust and reliable

Valuation is among the highest-stakes applications of AI in investment contexts. As such, outputs must be traceable to verified source data, and AI-generated figures should not be incorporated into deal models without human verification. Hallucinations are of particular concern here, since a fabricated figure in a deal model can have direct pricing consequences.

Transparent and explainable

Investment committees must be able to interrogate valuation assumptions. AI-generated analyses should make the underlying logic visible and auditable, explicitly linking outputs to source documents, model assumptions, comparable selection criteria, and sensitivity ranges.

Private

Valuation work involves highly sensitive information—including target financials, deal pricing, return expectations, debt assumptions, and investment committee materials—so strict data isolation is essential.

Responsible and accountable

AI tools should support valuation analysis, not replace investment judgment. Deal teams must retain full responsibility for the assumptions, conclusions, and recommendations presented to investment committees, even when AI helped generate the analysis.

POTENTIAL BENEFITS

Faster model construction

Automating data gathering, normalization, and initial model building reduces the time required to build a working valuation model.

Broader analytical foundation

AI-assisted screening can uncover a wider range of comparable companies and precedent transactions, providing a more comprehensive foundation for market-based valuation approaches.

Greater consistency across deal teams

Standardized approaches to data normalization, comparable selection, and sensitivity analysis reduce variability in how valuations are built, raising baseline analytical quality across the firm.

More robust scenario analysis

Rapid iteration across different operating assumptions allows deal teams to stress-test return models more thoroughly, strengthening investment committee submissions and negotiation preparation.

Earlier risk identification

AI-flagged inconsistencies between deal model assumptions and available market and operating data help deal teams focus their diligence resources on the questions that matter most to valuation.

AI-assisted pre-diligence and discovery

Forming a sharper view before full diligence

AI is enabling deal teams to consolidate and synthesize signals across customer, market, financial, and organizational dimensions faster, which enables a more complete picture of an opportunity before committing to full diligence.

ISSUE/OPPORTUNITY

The period between initial target identification and the decision to proceed to full diligence is one of the most consequential—and least systematized—stages of the deal process. Deal teams must rapidly form a view across multiple workstreams simultaneously: market position, customer relationships, financial health, organizational dynamics, and competitive risk. This work is typically compressed into days or a few weeks, drawing on incomplete information and requiring significant analytical judgment.

The speed-versus-completeness tension is particularly acute in competitive processes, where moving too slowly risks losing the deal, and moving too quickly risks committing diligence resources to targets with fundamental flaws. Junior team members handling initial discovery may lack the pattern recognition to flag early warning signals, while senior professionals rarely have bandwidth to conduct deep first-pass analysis across every workstream simultaneously.

The result is inconsistency in pre-diligence quality—and occasional surprises in full diligence that might have been visible earlier with more systematic analysis.

Tags: Finance | Agentic AI

HOW AI CAN HELP

CIM and document synthesis
AI can rapidly process confidential information memoranda, management presentations, and supporting financial exhibits to extract key facts, identify gaps, and flag assertions that warrant further scrutiny—allowing deal teams to move from document receipt to a structured analytical framework in hours rather than days.

Customer and market signal analysis
Agents can aggregate and analyze publicly available signals about a target's customer relationships and market position—including review data, customer concentration indicators, disclosed contract renewal patterns, and third-party market assessments—providing an early read on revenue quality and competitive standing before formal diligence begins.

Financial health and red flag screening
AI tools can perform a first-pass financial review—assessing growth consistency, margin trends, working capital dynamics, and cash conversion patterns—identifying anomalies or inconsistencies that may warrant deeper investigation before full diligence resources are committed.

Organizational and talent signals
Agents can analyze publicly available data on management team tenure, organizational changes, hiring patterns, and employee sentiment to uncover early signals about leadership stability, culture, and execution capability—dimensions that are often underweighted at the pre-diligence stage.

Cross-workstream pattern synthesis
A synthesis layer can connect signals across financial, market, customer, and organizational workstreams—identifying patterns that strengthen early conviction or raise concerns. This integrated view is difficult to achieve quickly through manual analysis alone.

AI-assisted pre-diligence and discovery

MANAGING RISK AND PROMOTING TRUST

Robust and reliable	Pre-diligence findings can have an outsized influence on whether a deal proceeds, making AI accuracy especially important. Hallucination risk is particularly high when available data on private targets is limited.
Transparent and explainable	Early-stage conviction is inherently conditional, so the basis for AI-generated observations must be clearly visible. Outputs that identify patterns without linking to underlying evidence can entrench analytical assumptions prematurely.
Private	Pre-diligence work involves highly sensitive target information, typically received under NDA. Strict access controls, data segregation across deal workstreams, and clear vendor data handling protocols are essential to protect both target confidentiality and firm reputation.
Responsible and accountable	AI-generated pre-diligence synthesis should support, not replace, experienced deal team judgment. Go/no-go decisions and the framing of early investment hypotheses remain the deal team's responsibility.

POTENTIAL BENEFITS

Faster initial screening
AI-assisted document synthesis and signal analysis compress the time from target identification to a structured first view of the opportunity, enabling faster and more confident go/no-go decisions.

More complete early-stage picture
Systematic analysis across customer, market, financial, and organizational workstreams helps reduce the risk of blind spots, catching issues earlier when course corrections are less costly.

Better allocation of senior attention
By handling first-pass analysis across workstreams, AI frees senior deal professionals to focus on interpreting findings and making judgment calls rather than assembling information.

Improved pattern recognition across the pipeline
AI tools applied consistently across pre-diligence workstreams can uncover cross-deal patterns—such as recurring risk factors and sector-specific signals—that strengthen institutional knowledge over time.

Reduced full-diligence write-offs
Earlier identification of deal-breakers or material risks can reduce the likelihood of committing significant resources to opportunities that fail late in the process.

AI-assisted capital optimization

Deploying capital with greater precision across the portfolio

AI is enabling PE firms to model capital allocation decisions with greater speed and analytical depth—helping them optimize capital structures, accelerate working capital performance, and improve returns across the portfolio.

ISSUE/OPPORTUNITY

Capital allocation decisions—whether to inject additional equity, pursue debt refinancing, fund a bolt-on acquisition, or return capital to LPs—are among the highest-consequence choices a PE firm makes during the hold period. These decisions require synthesizing financial performance data, market conditions, portfolio company-specific factors, and fund-level constraints simultaneously.

In practice, this analysis is often built manually, relying on standalone models for individual portfolio companies rather than an integrated view across the portfolio. Capital structure decisions may lag changing market conditions. Also, working capital improvement opportunities frequently go unquantified until a formal value creation review forces the issue.

As portfolio complexity increases—more companies, more geographies, more varied capital structures—the limitations of company-by-company manual analysis become more pronounced. Firms that can analyze capital allocation decisions at the portfolio level, with rapid scenario testing, are better positioned to optimize returns across the fund.

Tags: Finance | Agentic AI

HOW AI CAN HELP

Portfolio-level capital modeling
AI tools can aggregate financial data across portfolio companies to generate an integrated view of capital deployment, liquidity needs, and return projections—enabling fund-level capital allocation decisions to be informed by a real-time picture of portfolio performance rather than periodic snapshots.

Capital structure analysis and optimization
AI can model alternative capital structures for individual portfolio companies—analyzing debt capacity, refinancing options, and leverage levels against current market conditions and projected cash flows—helping deal and treasury teams identify structural improvements that enhance returns.

Working capital diagnostics
Agents can analyze working capital performance across portfolio companies—benchmarking inventory, receivables, and payables dynamics against sector peers—identifying improvement opportunities and quantifying the cash flow impact of targeted operational changes.

Scenario modeling and stress testing
AI-assisted tools can rapidly generate and evaluate multiple capital deployment scenarios—including bolt-on acquisitions, dividend recaps, and partial monetizations—stress-testing assumptions under varying market and operating conditions to support more informed capital decisions.

AI-assisted capital optimization

MANAGING RISK AND PROMOTING TRUST

Transparent and explainable
Investment committees, portfolio company management teams, and LPs all have legitimate interests in understanding the basis for capital allocation decisions. AI-generated analyses should show their logic and assumptions clearly enough to support productive discussions with these stakeholders.

Private
Capital optimization analyses involve fund-level financial data, LP agreements, portfolio company financials, and internal return targets—among the most sensitive information a PE firm holds. Strict data governance and access controls are essential, particularly where AI tools aggregate information across multiple portfolio companies simultaneously.

Responsible and accountable
AI tools should inform capital decisions, not make them. Investment professionals and firm leadership must retain full responsibility for capital allocation choices, with AI outputs serving as analytical inputs subject to human review and judgment.

POTENTIAL BENEFITS

More informed capital allocation
An integrated view across portfolio companies—rather than company-by-company snapshots—supports capital decisions grounded in a complete picture of fund-level dynamics and relative return opportunities.

Faster structural improvements
AI-assisted capital structure and working capital analysis can identify improvement opportunities more quickly, turning insight into action and value creation.

More rigorous scenario planning
Rapid multi-scenario modeling strengthens the analytical foundation for key decisions such as bolt-on timing, refinancing execution, and dividend recapitalization.

Better deployment discipline
AI-assisted pacing models help fund managers balance capital commitments against portfolio needs and market conditions, reducing the risk of suboptimal timing on calls and distributions.

Stronger LP transparency
Cleaner portfolio-level capital analytics can support more structured and credible reporting to LPs on deployment, liquidity positioning, and return trajectory.

AI-assisted portfolio financial forecasting and analysis

From data consolidation to forward-looking portfolio insight

AI can help PE portfolio management teams consolidate financial data across portfolio companies faster and more reliably, shifting analyst time from manual data assembly to forward-looking analysis that supports value creation decisions.

ISSUE/OPPORTUNITY

Maintaining timely, accurate financial visibility across a portfolio is a persistent operational challenge for PE firms. Companies within a portfolio often run on different ERP systems, use varied chart-of-accounts structures, define KPIs differently, and report on different cadences. As a result, consolidation can be manual, error-prone, and slow.

By the time financial data is assembled and normalized, it is often already stale. Budget-versus-actual variance analysis, KPI tracking, and forward-looking projections—all of which directly inform portfolio management decisions—are frequently delayed by the heavy data preparation burden.

As portfolio complexity increases through add-on activity and platform builds, the problem compounds. Firms managing larger or more complex portfolios need scalable approaches that improve visibility without proportional increases in headcount or reporting lag.

Tags: Finance | Agentic AI

HOW AI CAN HELP

Financial data aggregation and normalization

AI tools can extract and consolidate financial data from disparate ERP systems, applying consistent chart-of-accounts mapping and normalization logic across portfolio companies. This can reduce the manual burden of financial close consolidation and improve the timeliness and consistency of portfolio-level reporting.

Variance and performance analysis

Once data is consolidated, AI can automate budget-versus-actual and period-over-period comparisons across portfolio companies—flagging significant variances, identifying performance trends, and highlighting the companies or cost categories that most warrant management attention.

Financial forecasting

AI-assisted tools can generate forward-looking projections grounded in historical performance, management inputs, and sector trends—giving portfolio management teams a starting point for full-year forecasts and enabling faster iteration as operating conditions change throughout the year.

KPI monitoring and exception alerting

Agents can monitor key performance indicators across the portfolio on a continuous basis, flagging deviations from plan or prior-period performance that may signal emerging operational issues or value creation opportunities.

Scenario and sensitivity modeling

AI tools can rapidly model the financial implications of alternative operating assumptions—volume, pricing, cost structure, working capital—across individual portfolio companies or at the fund level, supporting capital allocation and value creation planning discussions.

AI-assisted portfolio financial forecasting and analysis

MANAGING RISK AND PROMOTING TRUST

Robust and reliable

Financial forecasting outputs are only as reliable as the data that feeds them. AI consolidation and normalization tools must handle inconsistencies in source data—different chart-of-accounts structures, varying reporting conventions, missing periods—without producing misleading outputs.

Transparent and explainable

Portfolio company management teams, operating partners, and investment committees need to understand what drives AI-generated forecasts and variance flags. AI should document its assumptions and logic clearly enough to support productive reviews and challenges, rather than presenting conclusions without visible reasoning.

Private

Portfolio company financial data, budgets, forecasts, and KPI performance are highly confidential. Access controls should be tailored to specific roles and workstreams, with clear data handling protocols for AI tools that aggregate information across companies.

Responsible and accountable

AI-generated forecasts and variance analyses should be treated as starting points for human judgment. Portfolio management teams and operating partners must retain responsibility for validating assumptions, interpreting outputs, and making decisions based on AI-assisted analysis.

POTENTIAL BENEFITS

Faster financial close and consolidation

Automating data aggregation and normalization across portfolio companies can reduce the time and effort required to produce consolidated reporting.

More reliable performance tracking

Consistent, automated variance analysis and KPI monitoring can reduce the risk of manual errors and help ensure that performance signals reach the right stakeholders in a timely manner.

Stronger forward-looking analysis

AI-assisted forecasting provides portfolio management teams with more current, multi-scenario projections, improving the quality of full-year estimates and capital allocation decisions.

Greater analyst leverage

By reducing time spent on data assembly and routine variance reporting, AI enables portfolio teams to focus their analytical resources on higher value activities and exception management.

More proactive portfolio management

Continuous KPI monitoring and exception alerting supports earlier identification of operational issues and emerging risks, enabling intervention before problems compound.

AI readiness of portfolio products

Using AI to assess if a portfolio company's products are AI-ready

AI tools can help PE firms systematically evaluate their portfolio companies' products for AI enhancement opportunities and competitive disruption risks—turning a technically demanding assessment into a strategic planning input.

ISSUE/OPPORTUNITY

For PE firms focused on value creation, understanding whether a portfolio company's products are positioned to compete effectively in an increasingly AI-enabled world has become a critical strategic question. The risk is two-sided: companies that fail to embed AI capabilities into their products risk underinvesting and losing ground to AI-focused competitors, while those that misread where disruption is coming from risk focusing their AI investments in the wrong areas.

Conducting meaningful product AI readiness assessments is technically demanding and often falls outside the core competency of deal teams and operating partners. Without a systematic framework, such assessments tend to be ad hoc, inconsistent across the portfolio, and heavily reliant on management self-reporting—which can be inaccurate and reflect management's blind spots as much as genuine insight into a product's competitive position.

Tags: R&D/Product development | Agentic AI

HOW AI CAN HELP

Product capability and architecture review
AI tools can analyze product documentation, technical specifications, user feedback, and available performance data to assess current capabilities against AI readiness criteria—including data infrastructure maturity, integration flexibility, and product features where AI could be meaningfully embedded.

Competitive landscape and disruption monitoring
Agents can scan competitor product announcements, patent filings, developer documentation, app store updates, and market commentary to identify where AI-native capabilities are emerging in the market and how quickly the competitive landscape is shifting around a portfolio company's core products.

AI opportunity mapping
By combining product capability data with competitive signals and sector trend analysis, AI tools can identify specific areas within a product where AI enhancement is most feasible and most likely to drive measurable outcomes—from core functionality improvements to user experience enhancements to back-end operational efficiency gains.

Technical infrastructure evaluation
Agents can assess a portfolio company's underlying data infrastructure, data quality, and integration architecture against the prerequisites for AI implementation—identifying gaps that need to be addressed before high-priority AI enhancements can be realized.

Implementation prioritization support
AI tools can help teams rank identified opportunities by value potential, implementation complexity, data readiness, and competitive urgency—providing a structured starting point for AI roadmap development and related capital allocation discussions.

AI readiness of portfolio products

MANAGING RISK AND PROMOTING TRUST

Robust and reliable

Product AI readiness assessments are only as useful as the quality and completeness of the underlying data. AI tools should explicitly identify information gaps, and conclusions should be qualified where inputs are limited or based on management self-reporting rather than objective technical evidence.

Transparent and explainable

Readiness conclusions and enhancement recommendations must be linked to specific evidence— product features, infrastructure findings, competitive observations—so that management teams, operating partners, and investment committees can interrogate and build on the analysis rather than accepting it at face value.

Responsible and accountable

AI readiness assessments should inform strategic product and investment decisions, not make those decisions. Operating partners, management teams, and investment professionals must retain full responsibility for product strategy, capital allocation, and plan execution.

POTENTIAL BENEFITS

Faster readiness assessment

AI-assisted analysis can help reduce the time required to form a structured view of a portfolio company's AI positioning, enabling operating partners to incorporate readiness findings into their planning earlier in the hold period.

More systematic opportunity identification

A consistent assessment framework can reveal AI enhancement opportunities that ad hoc reviews might miss, raising the quality and completeness of product strategy discussions across the portfolio.

Earlier disruption risk visibility

Ongoing competitive scanning can identify signals of AI-enabled threats before they become fully visible in financial performance, enabling more proactive product and investment strategies.

Stronger AI roadmap development

Structured prioritization of AI enhancement opportunities—grounded in product capability data, competitive signals, and implementation complexity—produces more credible and actionable roadmaps than those built on management intuition alone.

Improved exit positioning

Portfolio companies that can demonstrate a clear AI strategy, documented readiness progress, and measurable AI-driven product improvements may be better positioned to command premium valuations at exit.

AI-assisted financial reporting and visual analytics

From manual assembly to investor-ready insight

AI can help PE firms automate portions of financial reporting production, variance commentary, and data visualization—reducing the time between data availability and review-ready output for LP communications, portfolio company reporting, and investment committee materials.

ISSUE/OPPORTUNITY

PE firms operate multiple reporting cycles simultaneously—portfolio company management reporting, fund-level performance packages, and LP communications—each requiring accurate financial data, written commentary, and visual presentation. Producing these packages manually is labor-intensive, relying on analyst capacity that could be directed toward higher-value analytical work.

Variance commentary and driver analysis are particularly time-consuming. Writing clear, accurate explanations of financial performance across a portfolio—what drove revenue growth, why margins shrank, how the quarter compared to plan—requires both analytical effort and writing skill. When done manually, quality and consistency vary across analysts and reporting periods, creating risk in materials that reach LPs and portfolio company boards.

The demand for more frequent, more granular reporting is also growing. LPs and portfolio company boards increasingly expect timely visibility into performance, and the volume of underlying data continues to expand. Manual reporting processes have limited ability to scale with these expectations without proportional increases in headcount.

Tags: **Finance** | **Agentic AI**

HOW AI CAN HELP

Automated variance and driver commentary

Natural language generation tools can produce structured written commentary explaining financial performance—budget-versus-actual variances, period-over-period changes, and key driver analysis—directly from underlying financial data. Commentary can be generated at the portfolio company, fund, or aggregate level and adjusted to provide the appropriate amount of detail for each audience.

Report and presentation assembly

AI tools can automate the assembly of standardized reporting packages—pulling financial data, applying formatting templates, generating visualizations, and incorporating AI-drafted commentary—reducing the manual effort required for each reporting cycle.

Data visualization and dashboard generation

AI-assisted tools can generate financial charts, performance dashboards, and data visualizations from structured data inputs, enabling consistent, audience-appropriate visual presentation of portfolio performance without requiring manual design effort for each report.

Conversational data access

Emerging natural language query capabilities allow investment professionals and portfolio company management to interrogate financial data conversationally—asking questions through smart dashboards instead of navigating static reports—improving access to financial insight between formal reporting cycles.

Reporting consistency and standardization

AI tools can enforce consistent analytical frameworks, formatting standards, and commentary structures across reporting periods and portfolio companies, reducing variability in how performance is presented and interpreted across the firm.

AI-assisted financial reporting and visual analytics

MANAGING RISK AND PROMOTING TRUST

Robust and reliable

Financial commentary generated by AI tools must accurately reflect underlying data. Errors in AI-generated variance commentary—including factually incorrect descriptions of financial performance—could mislead LPs, investment committees, or portfolio company boards. Strict review protocols are essential before AI-generated content is incorporated into any externally distributed materials.

Transparent and explainable

AI-generated commentary should be traceable to the underlying data and calculations that drove it. Readers of LP reports or board packages need confidence that the commentary accurately reflects reported financials rather than AI-generated conjecture about performance.

Responsible and accountable

AI-generated financial commentary and reporting materials require human review and sign-off before distribution. Senior professionals retain full responsibility for the accuracy and completeness of LP communications, investment committee materials, and portfolio company board reports.

POTENTIAL BENEFITS

Faster reporting cycles

Automating portions of data assembly, visualization generation, and variance commentary can reduce the time required to produce recurring reporting packages, improving the timeliness of financial communications to LPs, boards, and investment committees.

Greater consistency in financial commentary

AI-generated commentary applied systematically across reporting periods and portfolio companies can reduce variability in analytical quality and helps ensure performance drivers are identified and explained consistently.

Reduced analyst reporting burden

By reducing time spent on routine reporting tasks, AI enables analysts to focus more time on performance interpretation, value creation analysis, and exception management.

More easily accessible performance insight

Conversational data access and dynamic dashboards can make financial performance information more readily available between formal reporting cycles.

Scalable reporting infrastructure

AI-assisted reporting tools can help firms manage increased portfolio complexity and stakeholder reporting demands without proportional increases in reporting headcount.

Predictive risk and scenario modeling

From manual assembly to investor-ready insight

AI can help PE deal teams identify, quantify, and stress-test investment risks across multiple scenarios, giving investment committees a more dynamic view of value creation potential and downside exposure.

ISSUE/OPPORTUNITY

Private equity investment decisions are based on a variety of critical assumptions, including revenue growth, margin expansion, customer retention, financing costs, exit multiples, and the timing of value creation initiatives. Traditional deal models test these assumptions through a limited set of base, upside, and downside cases that often fail to fully capture how risks interact across the investment thesis.

The challenge is especially acute in competitive deal environments, where teams must assess a target's risk profile quickly (often with incomplete information) and where large amounts of capital are competing for a limited pool of premium assets, elevating valuations and increasing the cost of mispriced risk. A modest change in pricing, volume, churn, interest rates, input costs, or exit timing can materially affect projected returns; yet traditionally many risk factors are analyzed separately, obscuring compound effects.

As AI adoption expands across M&A workflows—and AI-driven disruption reshapes some sectors—firms need more dynamic ways to test downside exposure and resilience before committing capital.

Tags: **Compliance & Risk** | **Agentic AI**

HOW AI CAN HELP

Multi-scenario risk modeling

AI tools can generate and compare a broader range of operating and market scenarios than manual modeling typically allows, testing changes in demand, pricing, margin structure, working capital, financing costs, and exit timing to reveal which variables most affect returns.

Predictive risk identification

Agents can analyze historical financials, management commentary, industry data, available customer data, and macroeconomic indicators to flag patterns that point to elevated risks, such as margin compression, customer concentration, cyclicality, refinancing exposure, or execution risk.

Sensitivity and downside analysis

AI-assisted tools can rapidly analyze sensitivities across a wide range of assumptions related to revenue growth, EBITDA margin, leverage, covenant headroom, cash conversion, and exit multiples, helping teams evaluate how resilient the investment case is under adverse conditions (and where the thesis is most vulnerable).

Investment thesis pressure-testing

Agents can compare deal model assumptions against external benchmarks, sector trends, and peer data to flag assumptions that seem aggressive or inconsistent with market evidence, helping teams refine the base case and prepare sharper diligence questions.

Risk monitoring after close

The same models can be adapted for the hold period, tracking portfolio company performance against underlying assumptions and triggering alerts when early indicators suggest the investment case is drifting from plan.

Predictive risk and scenario modeling

MANAGING RISK AND PROMOTING TRUST

Robust and reliable

Because risk models influence pricing, diligence scope, and investment committee decisions, outputs should be grounded in reliable data and clearly linked to source inputs. AI-generated scenarios should be treated as analytical insights, not hard forecasts, especially where target data is incomplete or provided by management.

Transparent and explainable

Investment professionals need to understand which assumptions drive each scenario. Models should show the variables, data sources, weighting logic, and sensitivity ranges behind outputs so teams can challenge the analysis rather than relying on black-box risk scores.

Responsible and accountable

AI can expand the range of risks and scenarios considered, but it should not make investment decisions. Deal teams remain responsible for validating assumptions and deciding how the AI's risk analysis affects valuation, diligence scope, and go/no-go recommendations.

POTENTIAL BENEFITS

Smarter visibility into downside scenarios

AI-assisted modeling helps teams see how multiple risks interact, giving investment committees a clearer view of potential downside cases before capital is committed.

More disciplined, evidence-based underwriting

Systematic pressure-testing reduces overreliance on management case assumptions and helps teams develop a more defensible view of value creation potential.

Faster sensitivity analysis at scale

Automating scenario generation and sensitivity testing allows deal teams to evaluate more assumptions in less time, supporting faster and better-informed diligence decisions.

Better prioritization of diligence resources

Risk flags help teams focus diligence on the variables most likely to affect returns, such as customer concentration, margin sustainability, leverage capacity, or exit timing.

Cash and liquidity optimization

Turning cash visibility into value creation

AI can help PE firms and portfolio company finance teams improve cash forecasting, identify trapped liquidity, and optimize short-term cash deployment—boosting operating resilience and value realization during the hold period.

ISSUE/OPPORTUNITY

Cash and liquidity management are central to PE value creation. Portfolio companies need sufficient liquidity to fund operations, service debt, invest in growth, integrate add-ons, and withstand market volatility. However, excess cash sitting idle can dilute returns, while weak cash visibility can delay operational interventions or limit flexibility at critical moments.

The challenge is that cash forecasting is often fragmented. Portfolio companies face a variety of obstacles, including inconsistent ERP data, delayed bank reporting, manual spreadsheets, and finance processes that vary among business units, geographies, or recent acquisitions—making it difficult for CFOs, operating partners, and deal teams to maintain a current view of cash availability, covenant exposure, and working capital opportunities.

Improved cash visibility helps firms preserve optionality, fund value creation initiatives, support refinancing discussions, and improve readiness for sale or recapitalization.

Tags: **Finance** | **Agentic AI**

HOW AI CAN HELP

Cash flow forecasting
AI tools can analyze historical cash flows, receivables, payables, sales pipeline data, seasonality, and macroeconomic indicators to generate more dynamic short- and medium-term forecasts, helping finance teams anticipate liquidity needs earlier and update assumptions as conditions change.

Working capital opportunity detection
AI agents can identify cash trapped in receivables, inventory, payables, or fragmented treasury processes, comparing trends across business units, suppliers, and portfolio companies to uncover opportunities to accelerate collections, reduce excess inventory, or improve payment timing.

Liquidity scenario modeling
AI-assisted tools can model how changes in demand, margin, input costs, customer payments, debt service, or add-on integration costs are likely to affect cash availability, helping teams assess whether a company can withstand downside conditions while continuing to fund priority initiatives.

Cash deployment and yield optimization
For portfolio companies with surplus operational cash, AI can evaluate upcoming working capital requirements, policy constraints, and short-term market instruments to help finance teams safely deploy excess cash into approved, low-risk yield opportunities.

Portfolio-level liquidity monitoring
At the sponsor level, AI can dynamically model LP capital call schedules and GP operational cash demands based on historical drawdowns, expense patterns, and active deal pipelines. This enables treasury teams to maximize returns on dry powder by shifting capital into yield-bearing vehicles while actively managing immediate deal-funding requirements.

Cash and liquidity optimization

MANAGING RISK AND PROMOTING TRUST

Robust and reliable

Because liquidity decisions can affect debt service, covenant compliance, and value creation plans, AI outputs should be grounded in accurate, current data. Forecasts should identify the source data used and flag missing, stale, or inconsistent inputs that could limit reliability.

Private

Cash balances, debt schedules, bank account data, customer payment behavior, and liquidity forecasts are highly sensitive—and treasury is a primary target for increasingly sophisticated payment fraud. Access controls, data segregation, and clear vendor data handling protocols should be used when AI tools aggregate treasury information across portfolio companies.

Responsible and accountable

AI can support liquidity analysis, but finance leaders should retain control over cash movement, investment decisions, debt actions, and communications with lenders or sponsors. AI outputs should inform human-reviewed decisions rather than automatically initiating transfers or capital actions.

POTENTIAL BENEFITS

Stronger visibility into portfolio liquidity

AI-assisted forecasting can give portfolio company CFOs and PE operating partners a more current view of cash availability, liquidity needs, and near-term risk exposure.

Faster release of trapped working capital

By identifying cash trapped in receivables, inventory, payables, or fragmented processes, AI can help teams prioritize actions that release liquidity and improve cash conversion.

More disciplined deployment of surplus cash

AI-supported analysis can help companies balance operating liquidity needs with opportunities to earn appropriate returns on surplus cash within approved risk parameters.

Improved readiness for exit processes

Cleaner cash forecasting, stronger working capital discipline, and clearer liquidity reporting can support lender discussions, buyer diligence, and value realization planning during the exit process.

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