

Expert Insights from 10 Senior Technology Leaders

Elevating Technology Due
Diligence in Private Equity



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Introduction

Market volatility, AI-led disruption narratives, and uneven deal outcomes have widened the trust gap. The market signals that the rules are shifting in real time, leaving investors questioning the path to clear returns.

It is a market where conviction requires deeper proof. Value creation plans must be precise. Current diligence often fails to surface what operators already know, particularly within the 6–12 month horizons where private equity (PE) firms need to demonstrate early momentum.

To move beyond general market sentiment, we conducted in-depth discussions with 10 technology leaders to capture a practitioner-led perspective on what's missing from diligence.

The group comprised CEOs and senior operators running businesses across the UK, Europe and North America. Interviewees were drawn from a mix of vertical SaaS, security, data infrastructure, fintech, AI-native, deep tech, and enterprise sales-led models, including founders with direct PE backing and exit experience.

Diligence shortcomings, in one form or another, were the strongest point of consensus across all interviews.

This report:

- ▶ Exposes the diligence deficit: by revealing execution risks, hidden signals, and structural flags that current processes fail to surface.
 - ▶ Outlines how to stress-test AI claims vs reality: examining how AI efficiency and margin expansion claims hold up, and whether a talent shortage could derail execution plans.
 - ▶ Demonstrates how to rewrite the value-creation playbook: with a seven-step action plan to support future returns.
- We sourced and interviewed 10 technology founders and leaders across Europe and North America, spanning SaaS, security, fintech, AI, and deep tech, with PE backing and exit experience, to explore how PE firms can unlock greater value through their due diligence.
 - We uncovered that modern value creation playbooks treat diligence as continuous, proactive, and closely aligned with operational realities.
 - From our interviews, we've developed a practical value creation playbook and due diligence checklist to help PE firms act decisively and accelerate growth.

Part 1: Close the diligence deficit

What PE firms are consistently missing

Our interviews identified that due diligence on technology businesses is structurally skewed toward financial analysis, with clear gaps in assessing technology risks, product strength, and transformation potential.

“There is not enough technical due diligence done. I am always surprised at how light it is...I once raised £8 million from investors, and they never asked to see the product.” – CEO, Fintech firm

An emphasis on financial engineering, and the culture surrounding investment committees, are causing a gap in thinking from an operator and customer perspective, according to our panel. But there is added nuance: while larger investors may have dedicated technical teams, smaller and mid-market PE firms are where gaps in technology are most acute.

Asking tougher questions during diligence

Acquirers may only hear from the senior hierarchy during an evaluation process. While the top table may offer honesty, “they also might be out of touch and disconnected from the reality of the running of the business.”

Going further down in the business under NDA would unearth a more vivid reality beyond the financials. Some of the questions suggested include:

- ▶ *“Tell me why, in 12 months’ time, it would not be possible for five people in a basement to use AI to create a tool that does 80 or 90 percent of what you do.” – CPO, SaaS firm*
- ▶ Ask the CEO to name their top three people outside the executive team, before asking them directly: “If you were CEO, what would you change?”
- ▶ Flip the vision of future success into what failure looks like: *“Three years from now you’re selling the business for pennies on the dollar or you’re facing liquidation. What happened?” – CEO, biotech scale-up*

- Due diligence on technology businesses is often heavily skewed toward financial analysis.
- Acquirers typically hear only from senior leadership during the evaluation process.
- It’s important to ask deeper questions that explore the business’s operational realities.

- ▶ *“Could somebody equally smart or less smart than you rebuild the whole business from scratch in two years or shorter, with a fraction of the resources?”*
– Group CEO, SaaS firm

Three signals that don't show up in diligence data

Customer adoption and usage rates:

A common scenario, described by a SaaS CPO, is where a customer has bought hundreds of thousands of software licenses but deployed only 20%, using a fraction of the modules: “The top line and the message look good, but the risk line beneath it will tell you many different stories where it concerns adoption, usage, time to value realization.”

Technical debt:

Companies will present their roadmap and recent successes but may not surface critical issues. High technical debt can cause value creation to stall down the road. “They will very rarely talk about technical debt during the diligence process.” – CPO, SaaS firm

Culture as a hidden indicator:

A data-driven culture is highly undervalued because “changing a culture within the company might not be possible or can take a very long time.” – Partner, AI consulting and software firm

For more questions that get missed in diligence, [download](#) our Due Diligence Checklist: 30 Questions PE Firms Are Not Asking.

Part 2: Stress test AI claims vs reality

Separating AI signal from noise

Technology is simultaneously the biggest value-creation opportunity and the greatest source of misinformation in deal processes. PE firms must distinguish genuine capability from surface-level narratives.

One CEO warns that generative AI tools produce polished outputs that previously implied substance. In an hour, ChatGPT can generate a plan that might have taken ten industry analysts to produce. However: "It can be complete noise and just complete garbage. This is a problem for investors."

Where AI claims unravel

When companies indiscriminately position themselves as technology-driven, diligence teams must dig deeper.

A SaaS CPO provides a technically specific account: AI deployed in enterprise environments often requires steep learning curves when encountering real-world variables. "Once it is installed and you go beyond a controlled demo with controlled datasets, novel issues emerge," they explained. "AI needs time to learn. The learning curve can be steep and long."

The market has shifted from cost-saving (now a baseline expectation) to revenue generation as the real test. "The question you will now ask is how much revenue AI will generate," according to one co-founder.

- PE firms must distinguish genuine AI capability from surface-level narratives.
- The key question now is how much revenue AI will generate, not just how much it can reduce costs.
- PE firms should beware the false notion that technology can simply replace headcount, it's not that simple.



The talent crisis widens the AI gap

In a market saturated with AI claims and scarce technical capability, the leadership appointed by a PE investor determines whether the firm can distinguish hype from reality.

A software CEO gave a stark picture of current talent supply constraints: 80–90 percent of the best AI specialists are in the US and China, with the going rate for a senior hire ranging from \$500,000 to \$1 million per year.

One SaaS CEO explicitly inverts the traditional PE hiring assumption: technical and product leadership now matter more for deal success than commercial leadership.

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Part 3: Rewrite the value creation playbook in seven steps

The first 90 days: speed matters more than ever

Given the speed of disruption, PE firms must make an immediate impact, acting decisively to drive change.

However, a biotech CEO warns of misalignment between PE investors and management teams: “Do not assume that because they decided to come on board, they understand what you do... a lot of the time, they do not.”

The sequence of events matters: evaluate quickly, then act quickly. The honeymoon period is a luxury investors can no longer afford, but uninformed urgency is equally risky.

“The typical playbook almost doesn’t exist anymore.” – Group CEO, SaaS firm

Our interviews underline that PE needs a new approach to value creation, with a revised process that treats diligence as a continuous discipline.

Step 1: Stress test defendability before committing capital

Start with the question PE firms almost never ask. It is not “how big can this get?” but “will this still exist?”

Ask: “If you keep doing what you have been doing, are you still here in three years from now, and do your customers want you?” – Group CEO, SaaS firm

- The honeymoon period is a luxury investors can no longer afford, but uninformed urgency is equally risky.
- Our interviews underline that PE needs a new approach to value creation, with a revised process that treats diligence as a continuous discipline.

Step 2: Widen the diligence circle

Go beyond the top table to expand the diligence process. This includes speaking with:

- The last 10 deals the business lost
- Three to five people who left the company in the last three months
- Competitors
- Frontline employees

Step 3: Close the AI literacy gap

In a market where every company claims to be AI-powered, the inability to see past superficial AI claims is an investment risk. Technical expertise must be embedded in diligence teams as standard.

"How many experts do you have out there that can do AI diligence? Not many, I'm telling you right now." – CEO, big data firm

Step 4: Identify the data asset and map the transformation potential

Before closing, map unmined value and the resources required to unlock it. A department-by-department assessment can evaluate the potential for AI agents from both cost-saving and revenue-generation perspectives.

"If I deployed 15 agents, I could improve EBITDA by X per cent. And to do these 15 agents is going to cost me Y dollars." – CEO, software firm

Step 5: Lock in key people before the transaction closes

Secure the individuals who understand the USP, customer relationships, market direction, and technical foundations (including technical leadership and those with deep experience in customer and domain challenges).

"If tomorrow everyone leaves, and there's a new set of people running the company, it's going to be very difficult for a PE company to make sure they're cash flow positive in the next three, four years." – Co-founder, AI firm

***Widen your diligence circle
beyond the top table,
"That gives insight you
can't get in any due
diligence."
– CEO, Software firm***

Step 6: Act decisively in the first 90 days and communicate relentlessly

Pre-acquisition, draft a clear plan with milestones for the first 90 days, along with the main narrative you will need to communicate consistently.

"You don't want the company to die the death of a thousand cuts. Do as much as you can in the first 90 days." But: "You can never communicate enough when you're making changes...failure happens when you don't bring people along." – CEO, software firm

- Pre-acquisition, draft a clear plan with milestones for the first 90 days.
- Map customer health before-building: adoption-to-entitlement ratios, module usage, customer engagement frequency are indicators of renewal risk that top-line numbers will not reveal.

Step 7: Map customer health and fix the base before building

Test the signals: adoption-to-entitlement ratios, module usage, customer engagement frequency. All are leading indicators of renewal risk that top-line numbers will not reveal.

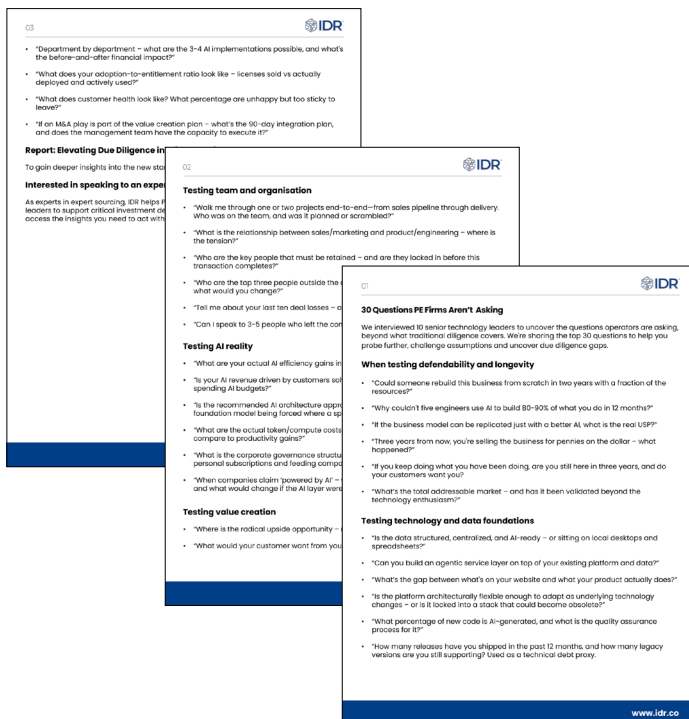
"What we found out was that about 7% of our customers were quite unhappy. And because we were so sticky, they couldn't leave. But they were never going to buy anything from us, and they were never going to be referenceable." – CEO, software firm

Conclusion: Closing the gap with a new diligence standard

As AI compresses the timeline for replicating business models, technology now underpins value creation across most sectors. Current diligence models are not built for this shift and must evolve to continuously stress-test deals through a defendability lens.

PE firms need to rebalance toward deeper technical and operational assessment, supported by in-house expertise or independent advisors. Those that adapt their value creation approach will make sharper decisions, mitigate overlooked risks, and deliver value at the pace the market demands.

Download our Due Diligence Checklist: 30 Questions PE Firms Are Not Asking – to start posing the right questions today.



- As AI accelerates business model replication, technology drives value creation, requiring diligence models to evolve for continuous, defendable deal assessment.

- PE firms need to focus on deeper technical and operational assessment.

How IDR can help

As experts in expert sourcing, IDR helps PE firms connect with senior industry leaders to support critical investment decisions. **Get in touch** to see how we can help you access the insights you need to act with confidence.