LUMO INSIGHTS

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AI’s ROI reality check: navigating the gap between hype and value

Executive Summary

A wave of new evidence reveals a disconnect between surging AI investments and tangible business returns. Recent surveys show most companies haven’t yet seen significant financial benefits from AI (www.pwc.com [1]) (aimagazine.com [2]), even as they continue pouring money into these technologies. This briefing highlights counterintuitive findings on where AI is - and isn’t - delivering, why costs and expectations are skyrocketing, and how a small minority of companies is actually capturing value.

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The Great AI ROI Gap

Beneath the buzz, fresh data reveals a massive gap between AI spending and actual returns. A new survey of healthcare organisations found that while 85% have experimented with generative AI, only 19% report any highly successful use case (such as in radiology) to date (www.talyx.ai [1]). And in PwC’s latest Global CEO Survey, 56% of chief executives said their AI initiatives haven’t yet delivered increased revenue or lower costs over the past year, with only 12% achieving both top-line and bottom-line benefits (www.pwc.com [2]).

One recent Boston Consulting Group study likewise finds that only about 5% of companies worldwide are truly 'future-built' AI leaders consistently generating substantial value from AI, while roughly 60% have little or nothing to show for their AI investments so far (www.prnewswire.com [3]) (www.prnewswire.com [4]). Similarly, MIT’s "Gen AI Divide" research indicates a staggering 95% of large-company generative AI projects have failed to deliver any measurable ROI in initial deployments (aimagazine.com [5]). Even in core IT operations, a late-2025 Gartner survey found just 28% of AI use cases met their ROI targets (and 20% were outright failures) (www.gartner.com [6]) - underscoring how rare clearly successful AI outcomes still are.

Paradoxically, these sobering results haven’t deterred the spending spree - at least not yet. One Deloitte study found 91% of organisations plan to boost AI investment in 2026 (www.forbes.com [7]). Most CEOs acknowledge returns take time (84% of large-cap CEOs told Teneo they expect new AI initiatives will take more than six months to pay off (www.prnewswire.com [8])), but fear of missing out on AI’s potential is still driving aggressive budgets. This leaves leaders under mounting pressure to bridge the widening chasm between AI’s promise and its actual business value before stakeholder patience runs out.

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The high cost of AI ambition

Amid these uncertain returns, the costs of pursuing AI are very real - and rising fast. Gartner projects worldwide IT spending will reach $6.3 trillion in 2026, up 13.5% from 2025, largely due to surging cloud and AI investments (www.forbes.com [1]). In fact, for the first time, some companies are now pouring more into computing power for AI than they spend on their human workforce (www.forbes.com [2]) - an extraordinary rebalancing of budgets.

These skyrocketing expenses are prompting new scrutiny from finance chiefs. One industry survey reports that enterprise cloud costs jumped ~30% in the past year, with roughly half of that surge driven by generative AI deployments (www.ciodive.com [3]). Nearly three-quarters of companies said the generative AI boom has made their cloud bills 'unmanageable' (www.ciodive.com [4]) - a stark reminder that hidden compute and storage costs can quietly drain value from AI initiatives. CFOs are growing wary as ballooning spending on model training and inference begins to squeeze margins, threatening to undermine any hoped-for ROI.

The economics of AI are now front and centre. Early adopters have enjoyed first-mover advantages, but they’re also encountering a new challenge: some major AI providers are raising prices as demand explodes (www.forbes.com [5]). Analysts warn this pattern could eventually tip projects into the red if model costs start to outweigh the benefits they produce (www.forbes.com [6]). In response, many firms are exploring open-source or self-hosted AI models that promise near-frontier performance at a fraction of the cost. This 'cost shock' from cheaper alternatives like the new DeepSeek V4 model is pressuring traditional vendors and forcing CIOs to reconsider build-vs-buy decisions to keep AI efforts economically sustainable.

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Boardrooms demand tangible results

In the boardroom, patience for intangible AI promises is wearing thin. Directors and investors who were once dazzled by futuristic demos now insist on concrete results and measurable value (www.forbes.com [1]). A recent Gartner poll found 57% of board members rank AI as a top-3 enterprise priority (www.europeanbusinessreview.com [2]) - and with that elevated priority comes a mandate for rigorous oversight. Simply put, AI projects must show real business impact or risk being scaled back.

Top executives are also feeling the heat directly. In a new BCG survey, fully half of CEOs said their own jobs could be on the line if their AI investments don't deliver returns (www.bcg.com [3]). Meanwhile, investors remain impatient: 53% expect to see ROI from AI within six months, even though 84% of large-cap CEOs say new AI initiatives will take longer than that to pay off (www.prnewswire.com [4]). This expectation gap is ratcheting up pressure on management teams to accelerate value delivery.

Despite this scrutiny, few leaders are hitting the brakes on AI spending. Nearly 90% of CEOs plan to continue or increase AI budgets over the next year - even if returns remain a longer-term proposition (www.bcg.com [5]). However, 2026 is shaping up to be a reckoning; with boards and shareholders watching closely, any AI initiative that cannot demonstrate tangible ROI may face tough questions or funding cuts.

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From hype to real value: what works

If there's a silver lining, it's that a minority of organisations are starting to crack the code for AI ROI. Their advantage? They focus on execution and change management, rather than exclusive access to technology. These leaders treat AI as a core business transformation, not just an experiment, and they invest in the capabilities - and culture - needed to realise AI's potential.

One major differentiator is a relentless focus on value-driving applications. Top performers zero in on a single high-impact process and reinvent it end-to-end with AI integration. Crucially, they use AI to enable new revenue streams, better customer experiences, or other strategic wins, instead of settling for small efficiency tweaks that don't clearly show up on the bottom line.

Leading companies also re-engineer roles and governance to maximise AI's impact. They don't just bolt AI onto existing workflows - they redesign how work gets done, leveraging AI to dramatically boost productivity (one top bank's customer support team achieved 5× output by pairing agents with AI copilots). These organisations also ensure IT and business leaders jointly own AI projects from day one, aligning technical development with business goals and managing the change across the enterprise.

Finally, successful AI adopters hold themselves accountable through robust metrics. Rather than counting models or pilots, they measure success via tangible business outcomes - for example, revenue from AI-driven products, margin improvement in AI-enhanced operations, or customer retention gains from personalisation. They foster a culture of experimentation and learning (to avoid the “automation trap” of simply speeding up old processes) (www.forbes.com [1]), allowing teams to iterate and discover what truly moves the needle. In short, the organisations that combine strategic focus, process transformation, disciplined measurement and a learning culture are the ones starting to see real, repeatable returns from AI.

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Key Statistics

- 12% - One-in-eight CEOs who report AI delivered both revenue and cost benefits for their business (56% saw no financial gains) ([www.pwc.com](https://www.pwc.com/gx/en/news-room/press-releases/2026/pwc-2026-global-ceo-survey.html#:~:text=%28both%2029,a%20growing%20divide%20between%20companies))
- 5% - Companies globally that are 'future-built' AI leaders systematically generating substantial value from AI, versus 60% with minimal or no value from AI so far ([www.prnewswire.com](https://www.prnewswire.com/news-releases/ai-leaders-outpace-laggards-with-double-the-revenue-growth-and-40-more-cost-savings-302570218.html#:~:text=shaping%20future,are%20scaling%20up%20their)) ([www.prnewswire.com](https://www.prnewswire.com/news-releases/ai-leaders-outpace-laggards-with-double-the-revenue-growth-and-40-more-cost-savings-302570218.html#:~:text=roadmap%20that%20the%20other%2095,The))
- 28% - Share of AI use cases in IT infrastructure & operations that fully met ROI targets (20% failed outright), according to a late-2025 Gartner survey ([www.gartner.com](https://www.gartner.com/en/newsroom/press-releases/2026-04-07-gartner-says-artificial-intelligence-projects-in-infrastructure-and-operations-stall-ahead-of-meaningful-roi-returns#:~:text=Melanie%20Freeze%20Director%20Research%2C%20Gartner,I%26O%20leaders%20should%20connect%20AI))
- 30% - Average increase in enterprise cloud costs in the last year, with ~50% of the spike driven by AI and nearly 75% of firms calling AI-fuelled cloud bills 'unmanageable' ([www.ciodive.com](https://www.ciodive.com/news/generative-ai-drives-unmanageable-cloud-cost-finops/729126/#:~:text=responsible%20for%20enterprise%20cloud%20cost,Dive%20Insight%3A%20Hyperscalers%20spurred))
- 90% - CEOs who plan to maintain or raise AI investment in 2026 even if ROI takes over a year to materialise ([www.bcg.com](https://www.bcg.com/publications/2026/as-ai-investments-surge-ceos-take-the-lead#:~:text=90,everyday%20tasks%20to%20reshaping%20critical))

KEY TAKEAWAY

Senior leaders must pivot from a hype-driven to an ROI-driven AI strategy. Scrutinise your AI initiatives - double down on projects with clear business impact, enforce cost discipline, and hold teams accountable for real results. The era of experimental, unaccountable spending is over.

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