LUMO INSIGHTS

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Trillions spent, minimal returns: The AI ROI paradox

Executive Summary

A wave of new data reveals that despite a massive surge in AI spending, most enterprises are struggling to see meaningful financial returns. Boards and investors are growing impatient, forcing executives to confront hard truths about the business value of AI. A small set of leading companies, however, is demonstrating that with discipline and strategic focus, real ROI from AI is achievable.

The ROI reality check

Multiple fresh analyses are underscoring how elusive AI-driven ROI remains for most organisations. MIT's comprehensive study of enterprise AI initiatives found a staggering **95% of generative AI pilots in 2025 produced no measurable impact on the bottom line**. Likewise, PwC's latest global CEO survey shows *56% of companies achieved neither new revenue nor cost reductions* from their AI investments over the past 12 months (almcorp.com [1]). Only about **12% of CEOs - a vanguard of AI "winners" - reported seeing both higher revenues and lower costs from AI** in that period (almcorp.com [2]). The rest are struggling to justify the dollars spent with tangible business outcomes.

This gulf between investment and results is prompting a fundamental re-think of AI business cases. **Worldwide AI spending is projected to reach $2.59 trillion in 2026, up 47% from last year (www.beri.net [3])**, reflecting unabated enthusiasm. Yet *returns remain scarce*. Morgan Stanley analysts found that only **21% of S&P 500 companies can cite any measurable business benefit from AI to date** (www.beri.net [4]). In other words, nearly four out of five big firms pouring resources into AI have *no hard ROI numbers* to report to their boards. The contrast between money spent and value realised is becoming harder to ignore.

Even more paradoxically, many companies see evidence of AI-driven efficiency without seeing bottom-line impact. In McKinsey's new global AI survey, **80% of employees say AI has improved their individual productivity (www.mckinsey.com [5])**, and half report better decision-making. Yet at the enterprise level, the share of organisations attributing any increase in earnings to AI remains stuck at *just 37%, about the same as last year* (www.mckinsey.com [6]). This "productivity paradox" suggests that while employees are using AI tools and getting faster at tasks, most companies have not reaped significant financial gains from those efficiency improvements.

References:

[1] almcorp.com — https://almcorp.com/blog/ai-roi-crisis-56-percent-ceos-no-revenue-gains-pwc-survey-2026/#:~:text=comprehensive%20new%20survey%20from%20PwC,the%20data%20arrives%20as%20CEO
[2] almcorp.com — https://almcorp.com/blog/ai-roi-crisis-56-percent-ceos-no-revenue-gains-pwc-survey-2026/#:~:text=for%20enterprises%20that%20have%20made,Vanguard%20from%20the%20Majority%3F%20The
[3] www.beri.net — https://www.beri.net/article/ai-spending-roi-crisis-governance-2026#:~:text=Gartner%20%20puts%20global%20enterprise,The%20%2012%3F%20Mostly%20missing
[4] www.beri.net — https://www.beri.net/article/ai-spending-roi-crisis-

governance-2026#:~:text=number%20of%20AI%20initiatives%20delivering,measurable%20AI%20benefit%20at%20all
[5] www.mckinsey.com — https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai#:~:text=about%206%20percent%20of%20all,year%2C%20compared%20with%2032%20percent
[6] www.mckinsey.com — https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai#:~:text=majority%20plan%20to%20increase%20their,report%20that%20AI%20helps%20them

Investors and boards turn up the heat

With these sobering statistics emerging, **boardrooms and investors are losing patience with unproven AI bets**. Surveys show that **61% of senior executives feel more pressure today to show ROI on AI investments than a year ago (www.cio.com [1])**. And expectations can be unrealistic: while **84% of CEOs believe new AI initiatives will take more than six months to deliver returns (www.cio.com [2])**, some **53% of investors expect results in half that time (www.cio.com [3])**. This mismatch puts CEOs in a bind, intensifying the demand for rapid, demonstrable wins even though truly transformative ROI often requires longer lead times.

In response to this pressure, CFOs and finance chiefs are asserting greater control over AI spending. **In August, CFOs were named as the approving authority for 43% of all AI project investments - up sharply from 33% earlier in the summer (openfutureforum.com [4])**. Many CFOs are instituting stricter oversight and kill-switches for underperforming projects. In fact, **68% of CFOs now refuse to green-light new AI initiatives without clear ROI, and 42% have already cut pilot programmes that didn’t deliver measurable results**. This marks a shift from the open-ended experimentation of prior years to a more hard-nosed insistence on accountability. The message from the top is clear: AI must quickly prove its value or risk being scaled back.

These new guardrails are already reshaping budgets and strategy. **Analysts report that enterprises are postponing roughly a quarter of planned AI spending into 2027 as they apply more scrutiny to ROI (www.beri.net [5])**. Projects stuck in “pilot purgatory” are being wound down if they can’t justify themselves. In one recent survey, **74% of companies that deployed customer-facing AI (like chatbots) ended up rolling back at least some of those systems**, often because the anticipated benefits never materialised. For boards and investors, the era of blank-check AI experimentation is over - they now expect AI projects to come with clear success metrics, shorter payback periods, and credible value delivery plans.

References:

[1] www.cio.com — https://www.cio.com/article/4114010/2026-the-year-ai-roi-gets-real.html#:~:text=demonstrable%20ROI%20on%20AI%20initiatives,Survey%2C%20from%20global%20CEO%20advisory
[2] www.cio.com — https://www.cio.com/article/4114010/2026-the-year-ai-roi-gets-real.html#:~:text=%E2%80%94%20or%20at%20least%20ROI,for%20many%20reasons%2C%20say%20researchers
[3] www.cio.com — https://www.cio.com/article/4114010/2026-the-year-ai-roi-gets-real.html#:~:text=noting%20that%2053,managing%20partner%20at%20IBM%20Consulting
[4] openfutureforum.com — https://openfutureforum.com/research/cfo-ai-leverage-report-september-2026#:~:text=2026%20%C2%B7%20Published%20September%206%2C,twelve%20months%20rose
[5] www.beri.net — https://www.beri.net/article/ai-spending-roi-crisis-governance-2026#:~:text=Forrester%20research%20found%20that%20enterprises,item%20under%20active%20CFO%20review

The high cost of unchecked AI

Another factor forcing realism is the **ballooning cost of AI initiatives**, especially those leveraging large language models and other compute-hungry systems. *The cost of AI itself is becoming a constraint*: about 20% of companies in a global survey say that ongoing AI operating expenses (like cloud usage and model inference costs) are already limiting broader adoption (www.mckinsey.com [1]). The prevailing "pay per use" pricing of many AI services means that heavy usage can lead to budget shock. In one headline example, an enterprise was blindsided with a **$500 /million cloud AI bill for a single month of usage (www.beri.net [2])** - a result of unlimited access to an expensive generative AI model with no spending caps in place. This extreme case, first revealed in an Axios

investigation, underlines how quickly costs can spiral when AI tools scale up without governance.

Even tech-forward companies are learning hard lessons about cost control. **Uber, after giving 5,000 developers access to an AI coding assistant, saw usage explode to 80% and burned through its entire annual AI budget in just four months**. The company's finance leaders admitted that the link between those costs and tangible business benefit was initially unclear. In response, **Uber's management imposed per-employee AI usage caps** to rein in spending and better align costs with real value. **Others are similarly rethinking "unlimited" AI deployments and renegotiating contracts** - a mid-2026 survey found many firms quietly pulling back on broad AI rollouts that weren't delivering returns.

These experiences are prompting a closer look at the *build vs. buy* calculus for AI. Some organisations are opting to develop AI-driven applications in-house using new code-generation and agent tools, rather than pay rising license and cloud fees. In fact, nearly **32% of companies say they have *avoided buying* third-party software because they can now build similar capabilities internally with AI coding tools (www.mckinsey.com [3])**. The rationale is clear: if off-the-shelf AI solutions are expensive and their ROI uncertain, businesses would rather invest in their own tailored systems - where they can control costs and tune the technology directly to measurable outcomes.

References:
[1] www.mckinsey.com — https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai#:~:text=against%20buying%20one%20or%20more,EBIT%20to%20their%20use%20of
[2] www.beri.net — https://www.beri.net/article/ai-spending-roi-crisis-governance-2026#:~:text=noticed%20until%20the%20invoice%20arrived,happening%20more%20than%20anyone%20is
[3] www.mckinsey.com — https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai#:~:text=organizations%20are%20already%20scaling%20software,But%20the

Bridging the gap to real value

Why are so many AI projects failing to translate into business value? Analysts suggest the core challenges are less about the algorithms and more about management practices. **In many organisations, AI has been deployed without rethinking the underlying processes and metrics**. As one major study noted, *technology choice is secondary; the single biggest predictor of ROI is whether a company fully redesigns at least one high-volume workflow around AI*. Without that kind of end-to-end process reengineering, *even best-in-class AI platforms often end up among the 25% of projects that miss their ROI targets*. In short, simply layering AI onto inefficient or unchanged processes yields limited gains.

Another hidden obstacle is the inability to measure success. Companies often tout time or labour saved by AI, but **"time saved is not money saved until the organisation does something with the freed capacity," as experts point out (openfutureforum.com [1])**. If AI helps an employee finish a task faster but the extra time isn't redirected to value-adding work (or costs aren't removed), the financial impact is effectively zero. Moreover, many firms lack unified tracking of AI costs and benefits. Recent research found **62% of companies can't even fully quantify their total AI spending, as those expenses are scattered across cloud bills, IT budgets, and vendor contracts (globaltransformforum.com [2]) (globaltransformforum.com [3])**. When you don't know your true investment, calculating return becomes almost impossible, leading some "successful" AI projects to be less profitable than assumed once hidden costs are accounted for (globaltransformforum.com [4]).

The good news is a handful of organisations are showing how to crack the code and *realise genuine value from AI*. These **AI high-performers - roughly 5% of companies by some estimates - are achieving 3× to 5× ROI on select initiatives**. Their approach differs markedly from the norm. They treat AI projects as business transformations, not science experiments. They insist on *defining

success metrics and baseline measurements up front*, and they invest in the often arduous work of integrating AI into core workflows and training employees to use it effectively. Crucially, these leaders **“measure the right things,” such as cost-per-outcome instead of raw token consumption**, and set hard budget limits on AI usage to prevent overrun costs. By combining domain-specific focus, robust governance, and diligent measurement, this elite group is beginning to convert AI’s promise into material business outcomes. Their playbook offers a path for others: narrow the focus to high-impact use cases, re-engineer processes to capture AI-driven efficiency, and rigorously track both the costs and the concrete benefits. In an era when boards demand tangible results, *only the AI initiatives grounded in economic reality will survive and thrive*.

References:

[1] openfutureforum.com — https://openfutureforum.com/blog/why-companies-cant-prove-ai-roi-2026#:~:text=handoff%20from%20workflow%20to%20operating,realized%20is%20close%20to%20zero
[2] globaltransformforum.com — https://globaltransformforum.com/the-roi-gap-why-62-of-ai-investments-still-cant-prove-business-value/#:~:text=Transformation%20Forum%20The%20ROI%20Gap%3A,are%20not
[3] globaltransformforum.com — https://globaltransformforum.com/the-roi-gap-why-62-of-ai-investments-still-cant-prove-business-value/#:~:text=Comviva%27s%202026%20research%20on%20AI,claims%20circulating%20in%20boardrooms%20today
[4] globaltransformforum.com — https://globaltransformforum.com/the-roi-gap-why-62-of-ai-investments-still-cant-prove-business-value/#:~:text=downstream%20consequence%20is%20structural%3A%20when,4%2C454%20CEOs

Key Statistics

- 56% of CEOs report no revenue growth or cost reduction from AI in the past year ([almcorp.com](https://almcorp.com/blog/ai-roi-crisis-56-percent-ceos-no-revenue-gains-pwc-survey-2026/#:~:text=comprehensive%20new%20survey%20from%20PwC,the%20data%20arrives%20as%20CEO)).
- Only ~21% of S&P 500 companies can cite a tangible business benefit from AI so far ([www.beri.net](https://www.beri.net/article/ai-spending-roi-crisis-governance-2026#:~:text=number%20of%20AI%20initiatives%20delivering,measurable%20AI%20benefit%20at%20all)).
- Global AI spending is forecast to reach $2.59 trillion in 2026 (47% year-over-year growth) ([www.beri.net](https://www.beri.net/article/ai-spending-roi-crisis-governance-2026#:~:text=Gartner%20%20puts%20global%20enterprise,The%20%2012%3F%20Mostly%20missing)).
- 62% of organisations cannot fully quantify their total AI spending, underestimating costs by 30 - 50% ([globaltransformforum.com](https://globaltransformforum.com/the-roi-gap-why-62-of-ai-investments-still-cant-prove-business-value/#:~:text=Comviva%27s%202026%20research%20on%20AI,claims%20circulating%20in%20boardrooms%20today)).

KEY TAKEAWAY

It’s time to treat AI like any other investment: demand clear ROI metrics and accountability. Senior leaders should focus on high-impact, measurable use cases, enforce cost discipline, and require workflow changes that turn AI’s promise into tangible results.

Sources

56% of CEOs Report No Revenue Gains from AI Investments: The Data Behind the AI ROI Crisis – ALM Corp (Jan 23, 2026)
https://almcorp.com/blog/ai-roi-crisis-56-percent-ceos-no-revenue-gains-pwc-survey-2026/
$500M AI Bill, Zero ROI: Why Enterprises Are Flying Blind – The D’AI’LY BRIEF (July 7, 2026)
https://www.beri.net/article/ai-spending-roi-crisis-governance-2026
The ROI Gap: Why 62% of AI Investments Still Can’t Prove Business Value – Global Transformation Forum (July 2026)
https://globaltransformforum.com/the-roi-gap-why-62-of-ai-investments-still-cant-prove-business-value/
Why Most Companies Still Can’t Prove AI ROI in 2026 – Open Future Forum (Aug 19, 2026)

https://openfutureforum.com/blog/why-companies-cant-prove-ai-roi-2026

CFO AI Leverage Report, September 2026 – Open Future Forum (Sept 6, 2026)
https://openfutureforum.com/research/cfo-ai-leverage-report-september-2026

The State of AI in 2026: On the road to ROI – McKinsey (Aug 25, 2026)
https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai