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AI investments under the microscope: ROI reality check

Executive Summary

A wave of new analysis over the past 48 hours reveals a hard truth: while companies are spending more than ever on AI, most are struggling to see meaningful returns (www.forbes.com [1]). Ballooning costs - including a one-month $500 /million AI bill at one firm (finance.yahoo.com [2]) - coupled with meager gains have executives questioning the business case for AI. This briefing highlights the most significant (and often counterintuitive) recent findings on AI ROI, costs, and value gaps, to help leaders pressure-test their own AI investment strategies.

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The ROI gap: big investment, little return

Despite pouring billions into AI, organisations are finding that promised returns are largely failing to materialise. New research shows the majority of enterprises have yet to see significant financial benefits from their AI initiatives. For example, a global CEO survey by PwC found 56% of chief executives reported no meaningful cost savings or revenue increases from AI in the past year (www.forbes.com [1]), and only 12% saw both revenue and cost improvements. Similarly, a synthesis of recent enterprise case studies concluded that only about 5% of companies achieve substantial ROI at scale, while roughly 60% report minimal gains so far (www.bcg.com [2]).

For years, businesses enthusiastically launched AI pilots, but few of these experiments have translated into bottom-line impact. MIT researchers, for instance, observed a staggering 95% failure rate for corporate generative AI projects to deliver any financial returns within six months (www.cio.com [3]). Part of the problem is a mismatch in expectations: unlike traditional IT projects with predictable payback periods under a year, most AI deployments require 2 - 4 years to yield meaningful results (only about 6% of organisations see payback from AI in under 12 months) (masterofcode.com [4]). Early wins are typically modest efficiency improvements; larger financial impacts tend to emerge only after AI systems are refined, processes are reworked, and adoption becomes widespread.

Another major challenge is measurement. Many companies still struggle to quantify the value their AI initiatives are (or aren’t) delivering. An IBM study found only 29% of organisations can measure AI ROI with confidence, even though 79% are seeing productivity gains from AI in their operations (www.ibm.com [5]). The difficulty of translating internal efficiency or quality improvements into tangible financial outcomes leaves plenty of room for doubt. If hours saved or error reductions don’t clearly boost the bottom line, senior executives remain unconvinced that their AI investments are truly paying

off.

These struggles are creating clear winners and losers. A recent PwC analysis found nearly 74% of AI's economic value is being captured by just 20% of companies (www.pwc.com [6]). These leading organisations treat AI not as a one-off experiment, but as a core part of their business reinvention strategy: they aim AI at new revenue opportunities and competitive advantages while redesigning key workflows and strengthening data governance to ensure solutions can scale and deliver real results (www.pwc.com [7]). In contrast, the majority remain stuck in "pilot purgatory," with scattered AI projects and isolated wins that have yet to add up to a meaningful business impact.

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Ballooning costs, uncertain payoffs

The other harsh reality is the skyrocketing cost of AI initiatives. The computing power and vendor fees for modern AI models have soared, catching many companies off guard. One AI leader at Nvidia notes that for his team "the cost of compute is far beyond the cost of the employees," underscoring how machine costs are overtaking human labour budgets in some cases (www.techspot.com [1]). Uber, for example, found its heavy use of AI coding tools caused it to exhaust its entire 2026 AI budget by April - burning through a year's allocation in just four months (finance.yahoo.com [2]). And in a shocking case, an unnamed enterprise reportedly incurred a $500 /million AI bill in a single month after failing to put usage caps on employees' AI tool access (finance.yahoo.com [3]). Not surprisingly, such huge outlays have yet to yield commensurate benefits - Uber's leadership, for instance, has admitted they haven't yet seen a clear link between their surge in AI "token" usage and any increase in useful new product features for customers (finance.yahoo.com [4]).

These eye-opening bills are prompting a sober re-evaluation of AI economics. Unlike traditional software, many advanced AI services use consumption-based pricing (per API call or token) rather than fixed licenses, meaning costs scale directly with usage (www.techspot.com [5]). It's easy for enthusiastic teams to overuse AI tools and drive up expenses. Some AI providers have even raised prices amid spiking demand, making cost-per-output efficiency a new criterion for choosing AI platforms (www.techspot.com [6]). The result: CFOs are increasingly treating AI expenditures as variable operating costs that require the same scrutiny and cost controls as any other major expense.

With budgets under strain, financial leaders are pulling back on unproven projects. A recent analysis found that enterprises have postponed roughly 25% of planned AI spending to 2027 as CFOs and boards demand clearer ROI before green-lighting the next round of investments. This marks a shift from the early "blank cheque" approach to AI, when fear of missing out drove many to pour money into pilots without a solid business case. Now companies are imposing strict usage limits and even switching providers where costs outpace demonstrated value (www.techspot.com [7]).

The assumptions behind AI business cases are also coming under fire. Bain's survey of large firms found that 44% were funding new AI projects with anticipated savings from prior automation initiatives - savings that often failed to fully materialise (www.bain.com [8]). In other words, many AI investments have been built on promised returns that never showed up. Year after year, boards kept approving bigger AI budgets, and year after year the returns quietly underwhelmed - by a margin that "should be making executives uncomfortable," as Bain notes (www.bain.com [9]). The firm warned that continuing to "self-fund the next wave from past returns" amounts to a risky "circular bet with a structural leak" in the business case - a cycle that is no longer sustainable under today's performance pressures.

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From hype to accountability: board & investor pressure

The pendulum has swung from exuberance to scrutiny. In recent days, new reports highlight that boards and investors are no longer satisfied with AI experiments that sound exciting but lack hard results. A global IDC survey indicates 70% of organisations leapt into AI for its potential or out of fear of falling behind competitors (www.expereo.com [1]) (with 20% conceding they did little due diligence on ROI). Now the honeymoon is over: 61% of senior business leaders say they feel more pressure to prove AI's ROI today than they did a year ago (www.cio.com [2]).

Investors have likewise lost patience for intangible AI promises. In one recent poll, 53% of investors expected to see concrete returns from AI initiatives in six months or less (www.cio.com [3]) - an astonishingly short timeframe for any transformative technology. On earnings calls, roughly 90% of all AI-related questions from analysts now focus on financial impact and returns, rather than product roadmaps or technical potential (finance.yahoo.com [4]). The message from the market is clear: show measurable value from AI, quickly, or risk losing stakeholder support.

Even some of AI's biggest champions are tempering their rhetoric. Not long ago, tech leaders were touting almost boundless upside; Nvidia's CEO Jensen Huang recently argued that only "crazy" people would question AI's ROI, which he touted as "insanely" high (www.taipeitimes.com [5]). But scepticism is on the rise. Analysts warn that the current AI gold rush - including multiple AI firms eyeing trillion-dollar valuations - could prove to be a bubble if real profitability doesn't catch up to the hype (www.bloomberg.com [6]).

All of this means directors are taking a harder line on AI business cases. Board members who once feared missing out on AI now insist on knowing exactly how these initiatives translate to business outcomes. More than a third of organisations report their boards are concerned about losing track of

AI-related costs and ROI as the technology becomes pervasive (www.expereo.com [7]). In short, C-suites and boards are shifting from a mindset of "invest first, ask questions later" to one of demanding accountability and evidence of value.

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Making AI Investments Pay Off

So what does it take to realise real ROI from AI? The evidence shows that success comes to those who combine ambition with discipline. High-ROI enterprises zero in on AI use cases that directly impact revenue growth, cost savings, or risk reduction, and they integrate AI deeply into core operations rather than confining it to side projects (www.forbes.com [1]). This often means rethinking processes - PwC finds top AI performers are about twice as likely as others to redesign workflows for AI and pursue new revenue opportunities, not just cost cuts (www.pwc.com [2]).

Concrete success stories underscore this approach. In one 2026 case study, a top-10 European bank’s finance team used AI to automate its month-end close, cutting the process from seven days to three and saving roughly €2.7 /million per year in labour costs while reducing errors by 80%. Likewise, a major retailer reports that an AI-driven returns management system now automates 85% of routine returns, slashing return-related losses by 22% and reducing manual workloads by 70%. These kinds of wins are possible when AI is applied to well-defined, measurable problems at the core of the business.

Successful adopters also demand hard metrics. Simply rolling out AI tools and counting users is not a strategy. Leading firms insist on concrete performance indicators - e.g. faster processing times, higher accuracy, increased sales - and they constantly monitor whether AI is truly moving those dials. As one expert bluntly put it, "AI spend does not become ROI simply because usage goes up… value capture requires workflow redesign, not just license distribution" (www.forbes.com [3]). In practice, this means establishing clear KPIs for each AI project and translating any efficiency gains into financial outcomes that the CFO and board can verify.

Getting the fundamentals right is another prerequisite. Many failed initiatives share common flaws: poor data quality, misaligned processes, and unprepared teams. Indeed, 51% of organisations that fell short of their AI goals blame inadequate or low-quality data as a major factor (www.expereo.com [4]), and Bain identifies data access and integration issues as the number one barrier to realising AI value at scale (www.bain.com [5]). Successful programmes invest in cleaning up data, modernising IT infrastructure, and training employees to effectively use AI tools. Addressing technical debt is also crucial - IBM analysts estimate that paying down legacy systems can improve AI project ROI by up to 29% by cutting friction and rework (www.ibm.com [6]).

Finally, companies must be strategic about the classic "build vs. buy" decision in AI. While third-party AI platforms offer speed to market, relying solely on external models means accepting ongoing costs and less control. It’s notable that even tech giants are hedging against this: Microsoft just unveiled a suite of homegrown AI models and custom AI chips to reduce its dependence on outside providers like OpenAI (www.forbes.com [7]). The takeaway for others is to invest in proprietary AI capabilities when it aligns with your unique competitive or cost advantages - and use vendors for the rest. In the end, realising ROI from AI demands treating it as a long-term business transformation, not a one-off experiment.

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Key Statistics

- 56% of CEOs report no cost or revenue gains from AI in the past year; only 12% saw both ([www.forbes.com](https://www.forbes.com/sites/guneyyildiz/2026/01/28/56-of-ceos-see-zero-roi-from-ai-heres-what-the-12-who-profit-do-differently/#:~:text=disconnect%20is%20glaring%3A%20investment%20surges%2C,They%20haven%27t%20just))
- Only ~5% of companies see significant AI ROI at scale, while ~60% report minimal benefits ([www.bcg.com](https://www.bcg.com/publications/2025/are-you-generating-value-from-ai-the-widening-gap#:~:text=5,cost%20gains%20despite%20substantial%20investment))
- Nearly 74% of AI’s economic value is captured by just 20% of companies ([www.pwc.com](https://www.pwc.com/gx/en/news-room/press-releases/2026/pwc-2026-ai-performance-study.html#:~:text=they%20are%20seeing%20from%20AI,%E2%80%9CMany%20companies))
- 40% of large firms saw under 10% cost savings from AI (vs 10 - 20% expected), and only 4% achieved over 30% savings ([www.bloomberg.com](https://www.bloomberg.com/news/newsletters/2026-06-01/bain-survey-ai-delivers-less-cost-reduction-than-many-firms-predicted#:~:text=survey%20of%20951%20respondents%20from,found%20the%20most%20troubling%3A%2044))
- 90% of AI adopters with underwhelming results still plan to increase their AI spending next year ([finance.yahoo.com](https://finance.yahoo.com/sectors/technology/articles/40-executives-thought-ai-could-002154815.html#:~:text=Bain%E2%80%99s%20Automation%20and%20AI%20Pathfinder,dramatically%2C%20executives%20and%20shareholders%20are))
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KEY TAKEAWAY

Stop chasing hype. Re-examine your AI projects with a hard ROI lens and be ready to pull back where business value isn’t proven. Tie AI initiatives to specific financial outcomes,

shore up data foundations, and enforce cost discipline to ensure real returns.

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