AI ROI Research

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Sources

Academic

MIT: "The GenAI Divide"

Consultant

Deloitte: "Now decides next: Generating a new future"
EY: "AI survey shows investment boosts ROI..."
BCG: "How to Get ROI from AI in the Finance Function"
Accenture: "The front-runners' guide to scaling AI"
KPMG: "AI in finance report"

Vendor

Google Cloud: "ROI of AI 2025"
IDC: "The Business Value of Google Cloud Generative AI"
Snowflake: "The Radical ROI of Gen AI"
IBM: "AI in Action 2024"
Multiverse: "The ROI of AI"

Content

1. Introduction - the AI hype, pressure to be an early adopter and show financial returns, contrast data published by AI providers vs research orgs
2. Evidence of high ROI - Google, IBM, Snowflake, EY
3. Reality check - MIT, BCG, Multiverse
4. Drivers of success - data, infrastructure, skills, having clear execution plan, C-level engagement and support
5. Barriers and risks - integration, compliance, soft vs hard ROI, employee fatigue, energy costs
6. ROI by sector
   Note: ROI by workflows

1. Introduction

- Pressure to be an early adopter
- The AI hype bubble is real
    - Optimistic vendor/early-adopter surveys show widespread positive ROI;
    - independent/finance-specific takes are more cautious, and often find modest or unproven P&L impact at scale.

2. Evidence of high ROI (of GenAI)

- Snowflake opens their global research report with “Enterprises are winning big with generative AI.”
- Positive ROI in common among early adopter, especially those who have implemented agentic AI workflows -> Google Cloud customers report a 727% ROI over three years with an 8-month payback
- IBM finds two-thirds of “AI Leaders” have more than 25% revenue growth uplift, between 27% and 38% report big gains in productivity
- “Paid for itself already” is a common claim -> Snowflake shows 92% of 1900 early adopters say their generative AI investments have already paid for themselves
- EY finds 95% of organizations are investing in AI and are increasingly reporting positive ROI across cost savings and innovation
- KPMG reports that among leading adopters in finance, 57% say ROI exceeds expectations
- Multiverse 2024 report shows that 4 in 5 leaders have reported revenue gains, 98% say benefits meet or exceed expectations, but the lack of skill and gaps in adoption delay full ROI
- Deloitte Q4 2024 report finds significant ROI being achieved in advanced GenAI

3. Reality check

- MIT's GenAI Divide study finds 95% of organizations have no measurable P&L impact, despite heavy investment. Adoption is high but disruption is low, only the tech and media industries show signs of disruption
- BCG reports median finance-function ROI of only ~10%, well below expectations
- Multiverse finds that lack of workforce skills and low adoption delay ROI
- Takeaway: In a lot of vendor reports positive ROI is often soft ROI. Hard ROI is rarer and harder to measure (BCG and MIT make the distinction explicit). However, some of these soft ROIs can precede the P&L impact.

Why the difference:

- Corporate studies tend to survey their own customers or highly engaged adopters, while academics and consultants typically sample the full market, including pilots and laggards. That selection difference alone can double or triple reported ROI.
- Vendor white papers have a business interest in highlighting success to drive cloud or platform adoption.
- Consulting studies often use ROI caution to reinforce the need for their services (governance, change management, data engineering).
- Academic teams tend to focus on proper methodologies, since they are not usually driven by commercial incentives (e.g., MIT requiring hard P&L evidence)

Myths about GenAI (MIT report)

- AI Will Replace Most Jobs in the Next Few Years → Research found limited layoffs from GenAI, and only in industries that are already affected significantly by AI. There is no consensus among executives as to hiring levels over the next 3-5 years.
- Generative AI is Transforming Business → Adoption is high, but transformation is rare. Only 5% of enterprises have AI tools integrated in workflows at scale and 7 of 9 sectors show no real structural change.
- Enterprises are slow in adopting new tech → Enterprises are extremely eager to adopt AI and 90% have seriously explored buying an AI solution.
- The biggest thing holding back AI is model quality, legal, data, risk → What's really holding it back is that most AI tools don't learn and don't integrate well into workflows.
- The best enterprises are building their own tools → Internal builds fail twice as often.

The Shadow AI Economy (MIT Report)

- AI is transforming work, just not through official channels. Our research uncovered a thriving "shadow AI economy" where employees use personal ChatGPT accounts, Claude subscriptions, and other consumer tools to automate significant portions of their jobs, often without IT knowledge or approval.

Soft vs Hard ROI (IBM report)
Financial analysts divide ROI into two categories: hard and soft.

- Hard ROI covers tangible effects directly related to profitability. As an example, using AI to automate IT can lead to fewer outages and quicker response times, increasing operational efficiency such as reduction in resource consumption, labour cost reduction (hours saved) due to enterprise automation, increased traffic and conversion rates
- Soft ROI includes other benefits that, while not immediately linked to profits, are still good for the organization. These can include increases in employee morale, improved customer experience, better decision-making.

4. Drivers of success

- Start with business value and measurable KPIs not “AI for the sake of AI”
- Identify related workflows that are independent enough for AI agents to handle individually. Later on they can be combined into a larger process where the agents collaborate, rather than selecting processes at random across the organization.
- Embed human-in-the-loop mechanisms to sanity check the AI outputs and the process around it
- Choose a type of AI solution that can easily adapt to your organization’s existing processes, instead of the other way around
- Invest in data infrastructure and governance - 83% of the EY respondents said AI adoption would be faster if they had a stronger data infrastructure, and 67% say they could move faster on AI adoption, but the lack of data infrastructure is holding them back.
- Upskill the workforce
- Organizations that cross the GenAI Divide discover that ROI is often highest in ignored functions like operations and finance. Real gains come from replacing outsourcing and external agencies, not cutting internal staff. Front-office tools get attention, but back-office tools deliver savings. Organizations have reported the BRO elimination has resulted in reduction of $2-10M annually in customer service and document processing, as well as 30% decrease in creative and content costs from external agencies => their use of AI did not result in workforce reduction, rather it reduced external spend. (MIT report)
- Finance and risk functions (e.g., risk checks) save about $1 M annually
- Front-office examples with measurable but smaller dollar impact include lead-qualification speed (≈40 % faster) and 10 % improvements in customer retention through AI-powered follow-ups
- There needs to be a strong support and alignment from the C-level executives

- Use a vendor, don’t try to build in-house

5. Common barriers and risks

- Data quality and integration - “unstructured data is AI enemy #1” (Snowflake)
- Measurement gaps - less than half of finance executives can even quantify ROI (BCG).
- Skill and adoption - employees receive minimal formal AI training which reduces productivity gains (Multiverse) and also report experiencing AI fatigue from having too many tools available (EY)
- Organizational drag - change management, risk management, talent shortage (Deloitte, EY, Multiverse)

Where ROI is weak or pilots most often stall

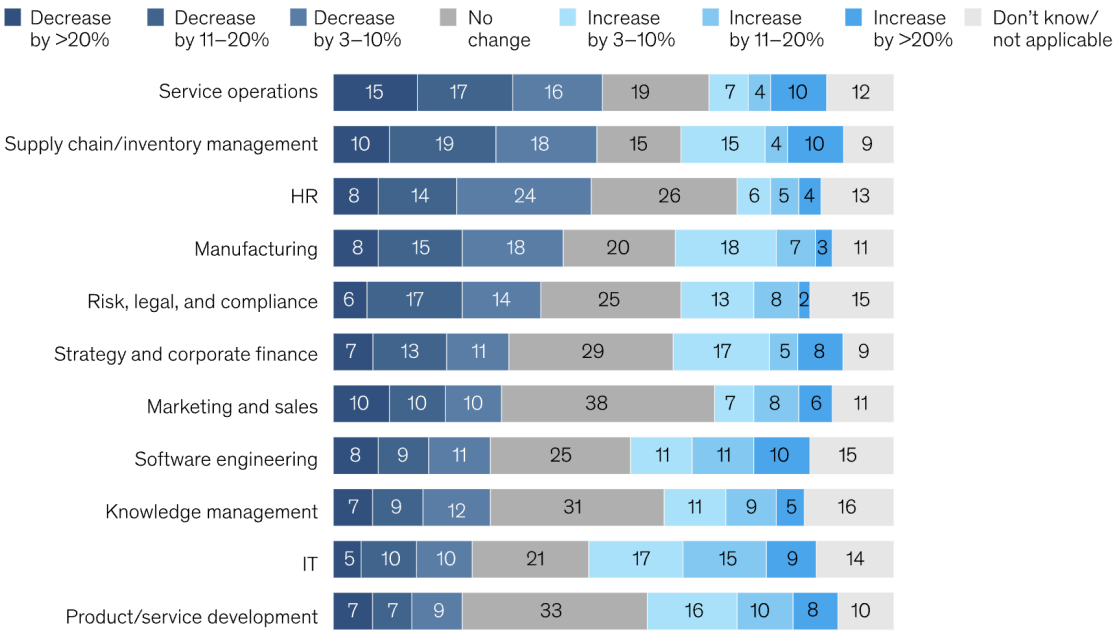
- Sales and marketing absorb about half of GenAI budgets, but the report warns this reflects “visibility and easy metrics, not actual value,” and that these front-office tools are often “less transformative”
- Complex, deeply customized internal logic (e.g., full procurement orchestration or opaque decision-support systems) frequently “hit adoption friction” and fail to scale
- Generic or static tools that don’t learn or adapt to workflows are cited as the dominant reason 95 % of enterprise pilots produce “zero return”

Contradictions:

- McKenzie claims that : “companies that report capturing value from gen AI are “rewiring” their business processes to effectively embed gen AI solutions”. The MIT report, on the other hand, says that successful organizations use AI tools that easily adapt to and learn from the existing workflows.
- MIT claims that what is holding back success the most is that most AI tools don't learn and don’t integrate well into workflows. Most of the other reports cite data quality and lack of talent as the biggest drawback.
- McKenzie’s report states that organizations are experiencing headcount decrease, MIT states that layoffs due to AI is limited and only in industries that are already significantly affected by AI

Respondents most often predict that gen AI use will lead to decreased head count in service operations and supply chain management.

Expected change in business function's number of employees as a result of gen AI use, next 3 years,[1]
% of respondents reporting gen AI use in the given function



6. ROI by sector

Industry	Reported ROI range	Sources / Notes
Financial services	5 - 15% median ROI in the first 12-24 months, up to 25 % for orgs that fully integrate AI into forecastings, risk, customer analysis	BCG reports 10% median, KPMG reports more than 20% when scaling AI. Data quality and compliance are the main reasons for lower early ROI
Technology	20 - 40% + ROI when scaled, many adopters see payback within 12 months.	Snowflake reports highest ROI, Google Cloud reports ROI because of high adoption of agentic workflows. Snowflake also talks about how the tech leaders face a unique challenge where they have more use cases to pursue than their budget, and it's hard for them to identify the right uses cases based on business impact.
Retail / Consumer goods and E-commerce	10 - 25% ROI for customer-facing uses like personalization	Snowflake and EY reports. Snowflake claims that GenAI adopters in retail are least likely to report trouble with unstructured data quality. They also have an untapped opportunity to affect change in procurement and supply chain.
Healthcare and Life sciences	10 - 20 % ROI over 18-36 months because of savings in scheduling, claims and drug discovery	Deloitte (provider case studies), IBM (clinical and back-office gains).
Manufacturing and Supply chain	15 - 30 % ROI due to predictive maintenance, quality control and demand planning	Deloitte & EY cite early measurable cost and downtime reductions. Snowflake claims that among

		manufacturers there is apparent lag on GenAI adoption compared to the other industries. McKenzie's report also shows the lowest adoption of GenAI is in Manufacturing, followed by Supply chain/inventory management
Professional and Business services	15-35% ROI from document automation, contract analytics, and reduction in outsourcing costs	MIT report points out back-office savings without reduction in headcount, Multiverse report
Public sector / Government	Often below 10% ROI in the first 2 years due to procurement and privacy constraints	Deloitte

Conclusion

- Positive ROI is achievable but not guaranteed
- Structured clean data, data infrastructure, skilled labour and support from C-level are crucial
- (My own conclusion) Real ROI will come from detailed mapping of business processes / workflows, and finding specific steps where AI automation can:
    - Reduce customer churn
    - Reduce labor/maintenance costs
    - Drive revenue growth through marketing personalizations/recommendation systems.